EAST OAK RECYCLING AND DISPOSAL FACILITY
OKLAHOMA COUNTY, OKLAHOMA
ODEQ PERMIT NO. 3555036

TIER III PERMIT MODIFICATION
LANDFILL EXPANSION

VOLUME 3 OF 4

Prepared for

Waste Management of Oklahoma, Inc.

June 2015
Revised January 2016

Revised May 2016

LICENSED PROFESSIONAL ENGINEER
JONATHAN V. QUEEN
24456
OKLAHOMA

5/31/16

Prepared by

Weaver Consultants Group, LLC
CA 3804 PE 06/30/2017
6420 Southwest Boulevard, Suite 206
Fort Worth, Texas 76109
817-735-9770

WCG Project No. 0086-356-11-42-04

EAST OAK RECYCLING AND DISPOSAL FACILITY
OKLAHOMA COUNTY, OKLAHOMA
ODEQ PERMIT NO. 3555036

TIER III PERMIT MODIFICATION
LANDFILL EXPANSION

VOLUME 3 OF 4

CONTENTS

EAST OAK RECYCLING AND DISPOSAL FACILITY
OKLAHOMA COUNTY, OKLAHOMA
ODEQ PERMIT NO. 3555036

APPENDIX G

LANDFILL GAS MANAGEMENT PLAN

Prepared for

Waste Management of Oklahoma, Inc.

June 2015
Revised January 2016

Revised May 2016

REGISTERED PROFESSIONAL ENGINEER
MATT K. STUTZ
22011
OKLAHOMA

5/31/16

Prepared by

Weaver Consultants Group, LLC
CA 3804 PE 6/30/2017
6420 Southwest Boulevard, Suite 206
Fort Worth, Texas 76109
817-735-9770

WCG Project No. 0086-356-11-42-07

CONTENTS

REGISTERED PROFESSIONAL ENGINEER
MATT K. STUTZ
22011
OKLAHOMA

6/5/15

1 INTRODUCTION

This Landfill Gas (LFG) Management Plan has been prepared consistent with Oklahoma Administrative Code (OAC) 252:515-15 requirements pertaining to the control of explosive gases from the East Oak Recycling and Disposal Facility (RDF). The site currently has an approved LFG monitoring system which includes 19 LFG monitoring probes. The approved LFG monitoring system in this document refers to gas monitoring probes installed along the permit boundaries of the East Oak RDF and Mosley Road Sanitary Landfill. As a result of the proposed landfill expansion, 9 of the existing LFG monitoring probes will be abandoned, ~~21~~ 22 new probes will be installed, and 10 existing probes will remain in-place.

Section 2 of this plan describes the perimeter LFG monitoring system, and general practices and procedures for performing monitoring and maintenance of the landfill's perimeter LFG monitoring system. This section also includes as an overview of the monitoring and maintenance procedures for the landfill's onsite structures. Finally, Section 2 includes an overview of the recordkeeping and reporting requirements contained within OAC 252:515-15.

Section 3 describes an action plan for the East Oak RDF if explosive gases are detected above Oklahoma Department of Environmental Quality (ODEQ) compliance levels at either the perimeter LFG monitoring probes or within on-site structures.

Section 4 describes the landfill gas collection and control system (GCCS).

2 METHANE GAS MONITORING

Compliance with OAC 252:515-15 requires landfills to implement a routine methane monitoring program to verify that (1) methane concentrations do not exceed 25 percent of the lower explosive limit (LEL), or 1.25% methane by volume in air, in all structures within permit boundary (excluding gas control or recovery system components) and (2) the concentration of methane does not exceed the LEL, or 5% methane by volume in air for methane at the facility permit boundary.

The purpose of this section is to provide guidelines for the evaluation of LFG migration at the points of compliance. This will be verified by monitoring LFG concentrations at the facility permit boundary and within the onsite structures.

2.1 Perimeter Monitoring

2.1.1 Perimeter LFG Monitoring Network

The current ODEQ approved LFG monitoring probe network includes a total of 19 LFG monitoring probes located along the existing permit boundary as shown on Figure G-1-1 in Appendix G-1. As a result of the proposed landfill expansion, 9 of the existing LFG monitoring probes will be abandoned, 10 of the existing LFG monitoring probes will remain, and ~~21~~ 22 new LFG monitoring probes will be installed. At landfill completion, the monitoring network will consist of ~~31~~ 32 monitoring probes as shown on Figure G-1-2 in Appendix G-1. The 9 existing probes will be abandoned and replaced as needed to allow for future filling and site operations. Given that there will not be significant changes to the permit boundary or the waste placement near GP-1 through GP-6, GP-13 through GP-15, and GP-19 (previously known as GP-5), these 10 existing LFG monitoring probes will remain in-place. Table 1 summarizes the LFG monitoring probes that will remain in-place, probes that will be abandoned, and the probes that will be added as a result of the proposed landfill expansion. The interprobe spacing of the proposed probes will be approximately 500 feet. ~~with the exception of the spacing between GP-7R and GP-19. However, given that (1) there will not be any changes to the permit boundary or the waste placement along the area between GP-7R and GP-19, (2) GP-7R and GP-19 are part of the approved Mosley Road Landfill probe system, (3) the operation of the GCCS, and (4) the natural barrier of the Crutcho Creek to the east, a variance of 500 feet is being requested between these two probes in accordance with OAC 252:515-15-4(b)(2) and as described in Section 1.15 of the introduction text in Volume 1.~~

The ~~21~~ 22 new LFG monitoring probes will be installed prior to the development of Phases XVI, XVII, and XIII through XV. Information on the proposed LFG monitoring probes is summarized in Table 2-2 in Appendix G-2.

Table 1
List of Existing and Proposed LFG Monitoring Probes

Existing Probes To Remain In-Place	Existing Probes To Be Abandoned	New Probes To Be Added
GP-1	G-7 (East Oak)	GP-7R
GP-2	GP-8R	GP-8
GP-3	GP-12	GP-9R
GP-4	GP-16	GP-10R
GP-5	GP-17	GP-11
GP-6	GP-4 (Mosley Road)	GP-12R
GP-13	GP-7 (Mosley Road)	GP-16R
GP-14	GP-9	GP-17R
GP-15	GP-10	GP-18
GP-19*		GP-20
		GP-21
		GP-22
		GP-23
		GP-24
		GP-25
		GP-26
		GP-27
		GP-28
		GP-29
		GP-30
		GP-31
		GP-32

* Existing Mosley Road Sanitary Landfill gas probe, GP-5 is being renamed as GP-19 to avoid confusion with East Oak RDF gas probe.

2.1.2 Existing LFG Monitoring Probes

The site currently has 19 existing LFG monitoring probes. Locations of the existing ODEQ approved LFG monitoring probes are shown on Figure G-1-1 in Appendix G-1. The as-built boring logs that were available for the existing LFG monitoring probes are included in Appendix G-2, and their as-built information is summarized on Table 2-1 in Appendix G-2.

As part of the landfill expansion and as listed in Table 1 above, 9 of the existing LFG monitoring probes will be abandoned to allow for future filling and site operations. The abandonment will include removing the surface completion material, attempting to pull the probe casing materials, and grouting the boreholes with bentonite grout from the total depth to surface. The probes will be abandoned and plugged in accordance with applicable rules in 252:515-7-3. Existing 10 probes as listed in Table 1 will remain in-place as these probes are currently approved and no significant changes to the site are proposed for this area.

2.1.3 Proposed LFG Monitoring Probes

As part of the proposed landfill expansion, ~~21~~ 22 new LFG monitoring probes, as listed in Table 1, will be installed around the proposed permit boundary prior to the development of Phases XVI, XVII, and XIII through XV. The proposed probes will be installed in accordance with applicable rules in OAC 252:515-7-3. After evaluating the site's soil, hydrogeologic, and hydraulic conditions surrounding the facility, the new LFG monitoring probes are designed to be single-completion probes. At a minimum the probes will extend from ground surface down to the lowest bottom of waste elevation.

The single-completion probe design was chosen since it assures that all soils are monitored, preventing the possibility of undetected gas monitoring through an unsaturated zone. In the event that LFG migration is detected, and knowledge of the specific zone of migration is needed for development of the remediation plan, additional probes may be installed next to the original probe and within the suspected zones of migration.

The proposed probes will be installed by an Oklahoma-licensed monitoring well installer. The proposed boreholes will be logged by a geologist or engineer. Within 90 days of installation, detailed as-built drawings of the probes will be submitted to the ODEQ. Please refer to Figure G-1-3 for the proposed LFG monitoring probe detail.

2.1.4 Monitoring Procedures

Methane concentrations will be measured using a portable gas detection device pre-calibrated against reference methane and oxygen standards. The portable gas detection device will be equipped with a suction sampling line equipped with an air tight fitting. This fitting will match with a corresponding air tight fitting installed at the top of each probe to enable gas samples to be drawn directly into the monitoring instrument without diluting the sample. The instrument is designed to give a direct reading of the methane concentration in two scales, either percent of the LEL or percent methane by volume. A qualified landfill representative or a qualified consultant will conduct compliance monitoring. The monitoring equipment used will be maintained and calibrated in accordance with the manufacturer's recommended procedures prior to use.

Monitoring data will be recorded on the Landfill Gas Monitoring Report (LGMR) form in Appendix G-3, or a similar form, and maintained in the Site Operating Record.

If LFG monitoring determines that methane has been detected in concentrations exceeding the regulatory limit, notification procedures, as described in Section 3.2, and remediation procedures, as described in Section 3.3, will be implemented and followed.

2.1.5 Maintenance Procedures

During the LFG monitoring events, the sampler will inspect the integrity of the monitoring probes. The sampler will record pertinent information on the LGMR form (Appendix G-3) or similar form.

If damage or excessive wear to the monitoring probe is observed, it will be reported to the landfill manager and the monitoring probe will be repaired. If it is not possible to repair the monitoring probe and the damage could potentially affect the accuracy of future monitoring results, the monitoring probe may need to be abandoned and replaced with a new monitoring probe, with approval from the ODEQ.

2.2 Facility Structure Monitoring

2.2.1 Monitoring Procedures

Onsite enclosed structures used for human occupation will be equipped with a continuous LFG monitor/alarm that provides an audible alarm if methane concentrations exceed 25 percent of the LEL for methane (or 1.25 percent methane by volume). During each quarterly sampling event, the continuous monitors will be checked by verifying that they respond to combustible gas in air. The verification will be documented on the LGMR form.

If methane concentrations exceeding 25 percent of the LEL are detected within a structure, the building will be immediately evacuated and ventilated by opening doors and windows. Notification procedures, which are described in Section 3.2, and remediation procedures, as described in Section 3.3, will be implemented and followed. If existing enclosed structures are removed from the site to allow for the continued development of the landfill, the monitors/alarms installed in these structures will be decommissioned.

2.2.2 Maintenance Procedures

The continuous LFG monitors/alarms will be maintained in accordance with the manufacturer's recommendations and specifications. In addition, on a quarterly basis the monitors/alarms will be inspected to ensure they are properly installed and connected to power.

2.3 Recordkeeping/Reporting

Records of LFG monitoring, whether for routine monitoring, verification, or remediation purposes, will be maintained and placed in the Site Operating Record. The LFG monitoring probes and alarms will be monitored at a minimum of quarterly, and the results will be placed in the Site Operating Record.

3 METHANE GAS EXCEEDANCE ACTION PLAN

3.1 Exceedance Response Measures

This action plan has been prepared consistent with OAC 252:515-15-5 in order to protect human health in the event that concentrations of methane exceed ODEQ compliance thresholds either in facility structures within the permit boundary or at the LFG monitoring probe. The appropriate emergency response is different for each situation; therefore, the plan will address the situations for buildings and probes separately.

This action plans will be implemented upon the initial exceedance of a perimeter monitoring probe or enclosed structure monitor.

3.1.1 Initial Action

The initial action in the event methane is detected at levels above regulatory limits is to immediately take necessary steps to protect human health. The specific response depends on the circumstances of the situation.

Building/Structures. If a monitoring device in a facility within the permit boundary is triggered or if continuous LFG monitor/alarm equipment indicates that 25 percent of the LEL (1.25 percent methane by volume) has been exceeded, the building is to be immediately evacuated of all personnel and the Landfill Manager will be notified. Personnel (except for qualified monitoring personnel) will not be allowed to reenter the affected structure until additional measures are taken. Notification procedures will be implemented as described in Section 3.2.

Perimeter Monitoring Probes. If an exceedance of allowable limits of methane is detected at the permit boundary in one of the monitoring probes, the Landfill Manager will be notified immediately. The initial action will also include an immediate re-calibration of the monitoring equipment and re-monitoring of the affected probe(s). The immediate emergency response measure will be for the Landfill Manager to determine if any nearby buildings (including off site structures) are at risk and if evacuation of the building(s) should be requested. Notification procedures will be implemented as described in Section 3.2.

3.2 Notification Procedures

When methane levels above the regulatory limit have been detected, notification will be made to ODEQ by the Landfill Manager after initial detection. The notification will be made by telephone, fax, or e-mail. The site will also submit a written report to ODEQ describing the methane gas levels detected and the steps taken to protect human health. This report will be submitted to ODEQ within seven days following the detection.

3.3 Remediation Plan

Once the methane levels are above regulatory limits have been detected in the facility buildings/structures or in one or more LFG monitoring probes, a specific remediation plan will be submitted to the ODEQ within 30 days of detection, describing the nature and extent of the problem and the proposed remedy. The remediation plan will then be implemented within 60 days of detection or as approved by the ODEQ. The ODEQ will be promptly notified in writing that the remediation plan has been implemented and a copy placed in the site operating record. However, the ODEQ may establish an alternate schedule for demonstrating compliance.

The initial remediation action will be an investigation of the cause of the methane levels. The remediation plan may include some or all of the following elements, depending on the circumstances:

- Bar-hole probe or hydropunch testing in the vicinity of the impacted monitoring probe
- Sampling and laboratory analysis of gas samples collected from the monitoring probe to determine the source of the gas and the concentration of methane and other compounds
- A gas analysis to determine the source
- Additional LFG monitoring
- Adjustments to nearby LFG extraction wells

Using accumulated data, an assessment will be made to determine an appropriate course of action to mitigate the LFG migration, if needed. Such action may vary with the specific incident, but may include (and are not limited to) increasing the vacuum or re-tuning the existing LFG collection and control system (GCCS) and/or installation of the following:

- Passive vents
- Cut-off trenches
- Expansion to the existing GCCS

4 LFG CONTROL

4.1 Existing LFG Collection and Control System

The existing GCCS consists of vertical LFG extraction wells, horizontal LFG collectors, a piping network, condensate management system, and flare facility as shown in Figure G-1-1 on Appendix G-1. The gas collection piping system conveys the extracted LFG from the collection points (i.e., vertical wells and horizontal collectors) to the flare facilities.

The existing GCCS will be expanded as needed to control LFG and in accordance with 40 CFR Part 60, Subpart WWW, New Source Performance Standards for Municipal Solid Waste Landfill (NSPS) requirements. The installation of future GCCS components is addressed in the site's approved NSPS GCCS Design Plan; as such, construction notifications of future GCCS expansions will be made to the ODEQ prior to each GCCS construction event.

APPENDIX G-1

LANDFILL GAS MONITORING PROBE LOCATIONS AND DETAIL

0 300 600
SCALE IN FEET

LEGEND

Symbol	Description
	PROPERTY BOUNDARY
	EXISTING PERMIT BOUNDARY
	PROPOSED PERMIT BOUNDARY
	PERMITTED LIMITS OF WASTE
	PROPOSED LIMITS OF WASTE
	MOSLEY ROAD LANDFILL LIMITS OF WASTE
N 183000	STATE PLANE GRID COORDINATE
1180	EXISTING CONTOUR
GP-15	EXISTING LANDFILL GAS PROBE (TO REMAIN)
GP-16	EXISTING LANDFILL GAS PROBE (TO BE ABANDONED)
W-10	EXISTING LFG EXTRACTION WELL
	EXISTING LFG COLLECTION PIPING
PS-3	EXISTING CONDENSATE SUMP
	EXISTING SIDE SLOPE SUMP
	EXISTING LFG ISOLATION VALVE
W-36	EXISTING REMOTE WELLHEAD
LCS-3	EXISTING LCR CONNECTION
DL-1	EXISTING U-TRAP TO LCR CONNECTION
	EXISTING HEADER ACCESS RISER
	EXISTING BLIND FLANGE
	EXISTING ROAD CROSSING
HW-A	EXISTING HORIZONTAL COLLECTOR
HW-B	EXISTING ACTIVE VENT TRENCH
	EXISTING LFG TRENCH
	EXISTING AIR SUPPLY LINE
	EXISTING CONDENSATE FORCEMAIN
	EXISTING LEACHATE COLLECTION TRENCH
	EXISTING FORCEMAIN ISOLATION VALVE/AIR STUB
	EXISTING AIR ISOLATION VALVE
	IN-PLACE FINAL COVER

NOTES:

1. EXISTING CONTOURS AND ELEVATIONS PROVIDED BY DALLAS AERIAL SURVEYS, INC. FROM AERIAL PHOTOGRAPHY FLOWN JANUARY 19, 2014.
2. PERMIT BOUNDARY WAS REPRODUCED FROM LEGAL DESCRIPTION PREPARED BY LEMKE LAND SURVEYING, INC.
3. PERMITTED LIMITS OF WASTE AND MOSLEY ROAD LANDFILL (CLOSED LANDFILL) LIMITS OF WASTE PROVIDED BY WASTE MANAGEMENT OF OKLAHOMA, INC.
4. IN-PLACE FINAL COVER AREA REPRODUCED FROM LEMKE LAND SURVEYING, INC. VERIFICATION SURVEY DATED JULY 2013 (FINAL COVER AREA 1).
5. EXISTING MOSLEY ROAD LANDFILL GAS MONITORING PROBE GP-5 TO BE RENAMED AS GP-19 TO AVOID CONFUSION WITH EAST OAK RDF PROBE.

☐ DRAFT
☒ FOR PERMITTING PURPOSES ONLY
☐ ISSUED FOR CONSTRUCTION

DATE: 06/2015
FILE: 0086-356-11
CAD: FIG G-1-1-GCCS LAYOUT.DWG

DRAWN BY: VRS
DESIGN BY: RSF
REVIEWED BY: JVQ

Weaver Consultants Group
CA 3804 PE – 06/30/2015

PREPARED FOR
WASTE MANAGEMENT OF OKLAHOMA, INC.

REVISIONS

NO.	DATE	DESCRIPTION

TIER III PERMIT MODIFICATION
EXISTING GCCS AND LFG PROBE LAYOUT

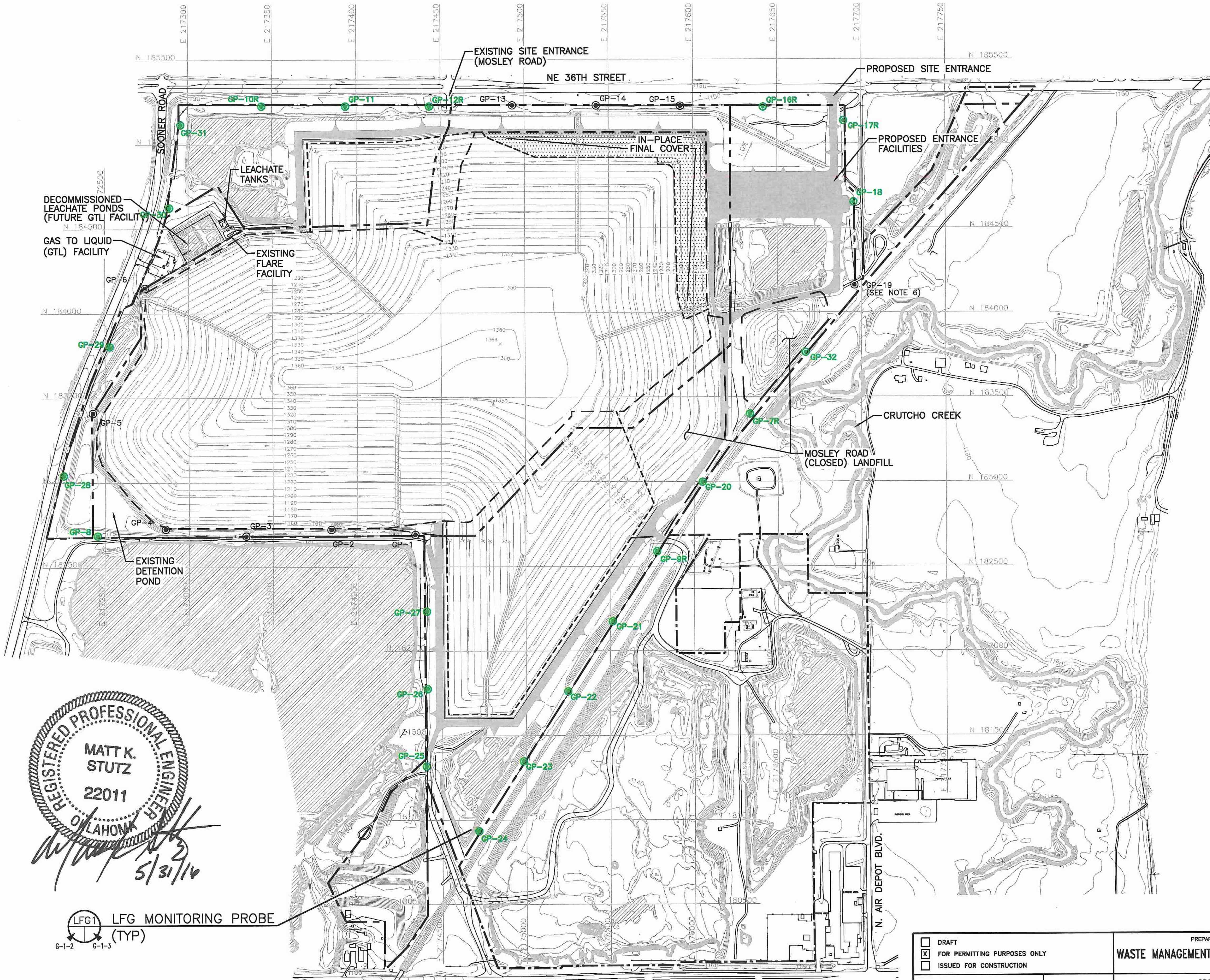
EAST OAK RDF
OKLAHOMA COUNTY, OKLAHOMA

WWW.WCGRP.COM

FIGURE G-1-1

O:\0086\356\EXPANSION 2013\APPENDIX G\FIG G-1-1-EXISTING GCCS PLAN.dwg, 5/21/2015 2:11:04 PM, rsellers, 1:2

O:\0086\356\EXPANSION 2013\APPENDIX G\FIG G-1-2-PROPOSED PROBE LAYOUT.dwg, rmorris, 1:2



0 300 600
SCALE IN FEET

LEGEND

—·—·—	PROPERTY BOUNDARY
— · —	EXISTING PERMIT BOUNDARY
— — · —	PROPOSED PERMIT BOUNDARY
— — —	PERMITTED LIMITS OF WASTE
- - - -	PROPOSED LIMITS OF WASTE
— — —	MOSLEY ROAD LANDFILL LIMITS OF WASTE
N 183000	STATE PLANE GRID COORDINATE
1180	EXISTING CONTOUR
1280	PROPOSED FINAL COVER CONTOUR
	PROPOSED DRAINAGE CHANNEL
	PROPOSED DRAINAGE SWALE
	PROPOSED DRAINAGE CHUTE
	IN-PLACE FINAL COVER
GP-15	EXISTING LANDFILL GAS PROBE (TO REMAIN)
GP-18	PROPOSED LANDFILL GAS PROBE

NOTES:

1. EXISTING CONTOURS AND ELEVATIONS PROVIDED BY DALLAS AERIAL SURVEYS, INC. FROM AERIAL PHOTOGRAPHY FLOWN JANUARY 19, 2014.
2. PERMIT BOUNDARY WAS REPRODUCED FROM LEGAL DESCRIPTION PREPARED BY LEMKE LAND SURVEYING, INC.
3. PERMITTED LIMITS OF WASTE AND MOSLEY ROAD LANDFILL (CLOSED LANDFILL) LIMITS OF WASTE PROVIDED BY WASTE MANAGEMENT OF OKLAHOMA, INC.
4. IN-PLACE FINAL COVER AREA REPRODUCED FROM LEMKE LAND SURVEYING, INC. VERIFICATION SURVEY DATED JULY 2013 (FINAL COVER AREA 1).
5. LOCATIONS OF PROPOSED LFG MONITORING PROBES ARE APPROXIMATE. ACTUAL LOCATIONS MAY VARY BASED ON FIELD CONDITIONS AT THE TIME OF INSTALLATION.
6. EXISTING MOSLEY ROAD LANDFILL GAS MONITORING PROBE GP-5 IS RENAMED AS GP-19 TO AVOID CONFUSION WITH EAST OAK RDF PROBE.

☐ DRAFT
☒ FOR PERMITTING PURPOSES ONLY
☐ ISSUED FOR CONSTRUCTION

DATE: 06/2015
FILE: 0086-356-11
CAD: FIG G-1-2-PROBE LAYOUT.DWG

DRAWN BY: VRS
DESIGN BY: RSF
REVIEWED BY: JVQ

PREPARED FOR
WASTE MANAGEMENT OF OKLAHOMA, INC.

REVISIONS

NO.	DATE	DESCRIPTION
1	01/2016	REVISED PROBE/WELL LAYOUT
2	05/2016	REVISED PROBE/WELL LAYOUT

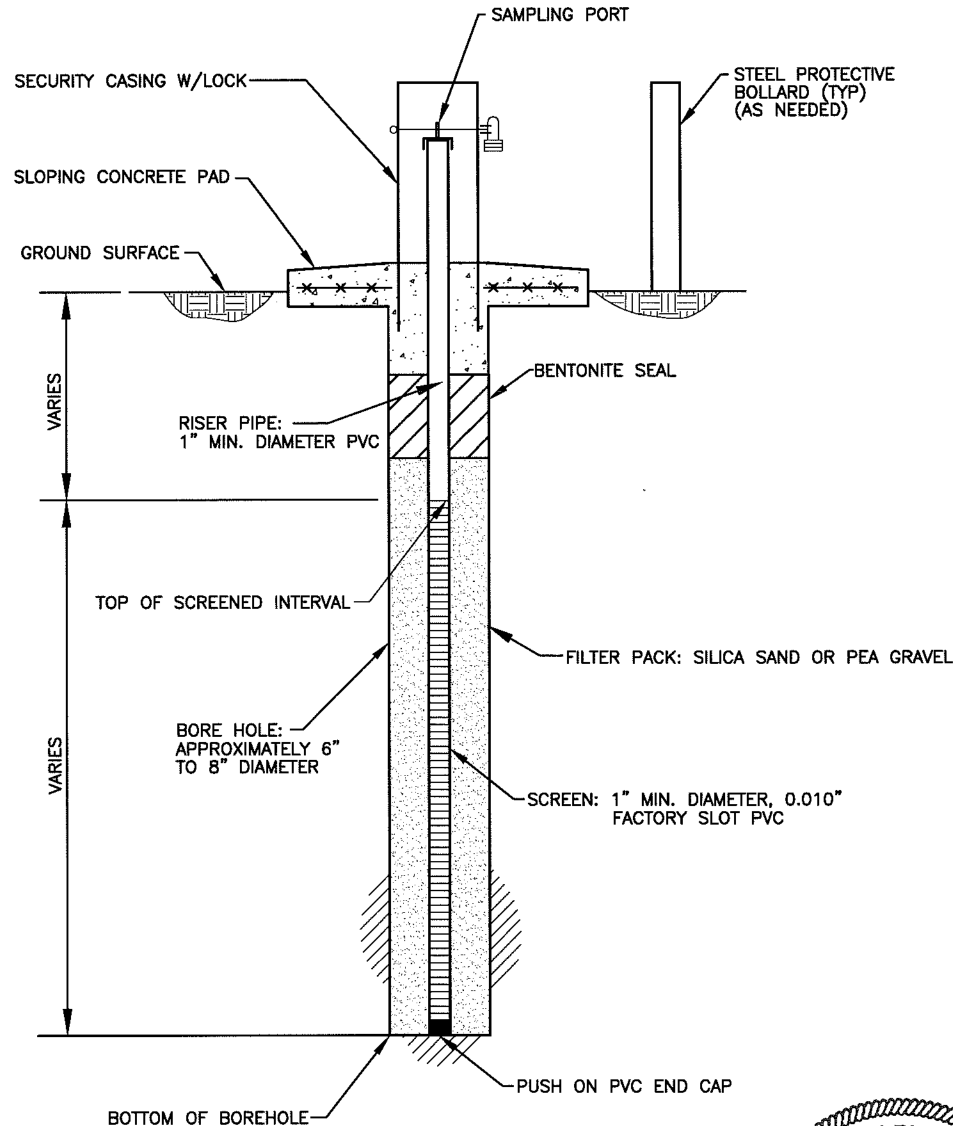
Weaver Consultants Group
CA 3804 PE – 06/30/2017

TIER III PERMIT MODIFICATION PROPOSED LFG PROBE LAYOUT

EAST OAK RDF
OKLAHOMA COUNTY, OKLAHOMA

WWW.WCGRP.COM

FIGURE G-1-2



LFG MONITORING PROBE (LFG1, G-1-2, G-1-3)
NTS

REGISTERED PROFESSIONAL ENGINEER
MATT K. STUTZ
22011
OKLAHOMA
6/5/15

NOTES:

1. ALL SIZES AND DIMENSIONS ARE APPROXIMATE.
2. ACTUAL LOCATION AND DESIGN OF LFG MONITORING PROBE WILL BE DETERMINED BASED ON FIELD CONDITIONS AT THE TIME OF INSTALLATION.

TIER III PERMIT MODIFICATION
LFG PROBE DETAIL

EAST OAK RDF
OKLAHOMA COUNTY, OKLAHOMA

Weaver Consultants Group
CA 3804 PE – 06/30/2015

DRAWN BY: VRS	DATE: 06/2015	FILE: 0086-356-11
REVIEWED BY: JVQ	CAD: G-1-3 PROBE DET.dwg	FIGURE G-1-3

O:\0086\356\EXPANSION 2013\APPENDIX G\FIG G-1-3-GAS PROBE DETAIL.dwg, 5/21/2015 2:14:47 PM, rsellers, 1:2

APPENDIX G-2

PROPOSED AND EXISTING LFG MONITORING PROBES INFORMATION

Table 2-1
Existing LFG Monitoring Probe Information
East Oak Recycling and Disposal Facility
Oklahoma County, Oklahoma

Probe I.D.	Probe Ground Surface Elevation (ft-msl)	Lowest Bottom of Waste Elevation (ft-msl)[2]	Probe Bottom Elevation (ft-msl)	Probe Boring Depth (ft-bsg)
GP-01	1157.58	1144	1143.58	14.0
GP-02	1156.06	1144	1142.50	13.5
GP-03	1153.39	1144	1143.39	10.0
GP-04	1155.90	1144	1143.90	12.0
GP-05	1155.74	1144	1142.24	13.5
GP-06	1158.29	1144	1142.29	16.0
GP-07	1164.56	1144	1142.56	22.0
GP-8R	1156.10	1144	1111.10	45.0
GP-12	1148.07	1144	1136.07	12.0
GP-13	1147.54	1144	1137.54	10.0
GP-14	1149.58	1144	1139.58	10.0
GP-15	1148.96	1144	1138.96	10.0
GP-16	1147.93	1144	1137.93	10.0
GP-17	1146.32	1144	1136.32	10.0

[1] East Oak RDF gas probe information based on as-built boring logs. Mosley Road Sanitary Landfill existing gas probe information was not available.

[2] Lowest bottom of waste elevations based on Drawing 8 – Top of Liner Plan included in Permit Drawings of the proposed Tier III permit modification.

Table 2-2[1]
Proposed LFG Monitoring Probe Information
East Oak Recycling and Disposal Facility
Oklahoma County, Oklahoma

Probe I.D.	Probe Ground Surface Elevation (ft-msl)[2]	Lowest Bottom of Waste Elevation (ft-msl)[3]	Proposed Probe Bottom Elevation (ft-msl)	Proposed Probe Boring Depth (ft-bsg)[4]
GP-7R	1164	1144	1143	21
GP-8	1150	1144	1140	10
GP-9R	1162	1144	1143	19
GP-10R	1147	1144	1137	10
GP-11	1146	1144	1136	10
GP-12R	1146	1144	1136	10
GP-16R	1148	1144	1138	10
GP-17R	1148	1144	1138	10
GP-18	1146	1144	1136	10
GP-20	1164	1144	1143	21
GP-21	1162	1144	1143	19
GP-22	1163	1144	1143	20
GP-23	1164	1144	1143	20
GP-24	1163	1144	1143	20
GP-25	1158	1144	1143	15
GP-26	1153	1144	1143	10
GP-27	1156	1144	1143	13
GP-28	1154	1144	1143	11
GP-29	1161	1144	1143	18
GP-30	1153	1144	1143	10
GP-31	1146	1144	1136	10
GP-32	1164	1144	1143	21

[1] The information presented on this table is approximate. Actual elevations and dimensions will be determined based on site conditions at the time of installation.
[2] Probe ground surface elevations based on January 19, 2014 aerial survey provided by Ark Maps of Arkansas, LLC.
[3] Lowest bottom of waste elevations based on Drawing 8 – Top of Liner Plan included in Permit Drawings of the proposed Tier III permit modification.
[4] Although the bottom of waste is only few feet below the ground surface, a minimum of 10 feet of probe depth will be used and the probe depth is measured in feet below surface grade (ft-bsg).

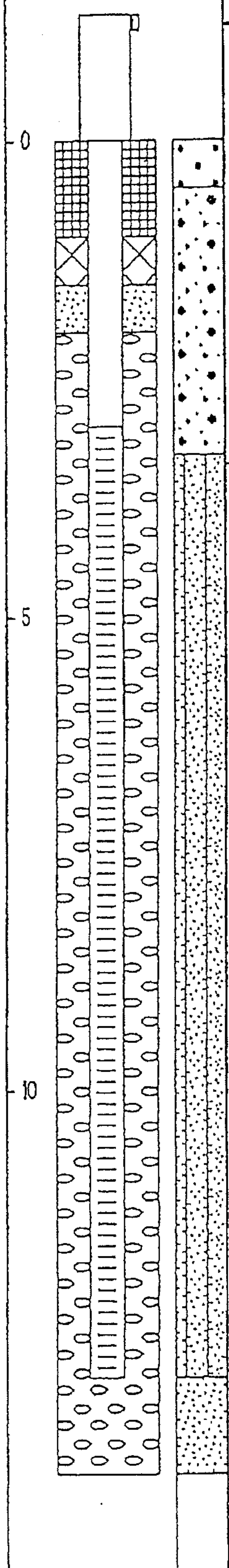
WELL No. GP-01

Boring No X-Ref. EO-01

LANDFILL GAS MONITORING PROBE CONSTRUCTION SUMMARY

Survey Coords N 182689.0348, E 2174343.051 Elevation Ground Level 1157.58

Top of Casing 1160.77



T.D. = 14.0 ft.

Drilling Summary

Total Depth (ft): 14.0
Borehole Diameter (in): 8.25"
Casing Stickup Height (ft): 3.19
Driller: Terracon Consultants, Inc.
Russ Smalley

Rig: CME-75, Truck-mounted
Bit (s): Hollow-Stem Auger

Drilling Fluid: None

Protective Casing: Anodized Aluminium

Construction Time Log

Task	Start Date	Start Time	Finish Date	Finish Time
Drilling HSA:	10/5/94	12:06	10/5/94	12:37
Geophys.Logging:				
Casing:				
C_1 4" Prot.:	10/6/94	8:38	10/6/94	8:50
C_2/S_1:	10/5/94	12:44	10/5/94	12:45
Filter Placement:	10/5/94	12:40	10/5/94	12:57
Sand Seal:	10/5/94	12:57	10/5/94	12:58
Cementing:	10/5/94	13:00	10/5/94	13:01

Probe Design & Specifications

Basis: Geologic Log ☒ Geophysical Log ☐
Casing String (s): C = Casing S = Screen

Depth	String (s)	Elevation
+3.58 - 1.42	C_1	1161.16 - 1156.16
+3.19 - 3.00	C_2	1160.77 - 1154.58
3.00 - 13.00	S_1	1154.58 - 1144.58
-		-
-		-

Casing: C1 4-inch diameter anodized aluminum

Casing: C2 1-inch diameter, Sch. 40 PVC, flush-threaded

Screen: S1 1-inch diameter, Sch. 40 PVC, flush-threaded, .020 inch slots

Filter Pack: 2-14 ft., 3/8-to 5/8-inch diameter gravel

Grout Seal: 0-1.5 ft.; Type I Portland Bentonite Cement (1-1.5'), Cement/Gravel (0-1')

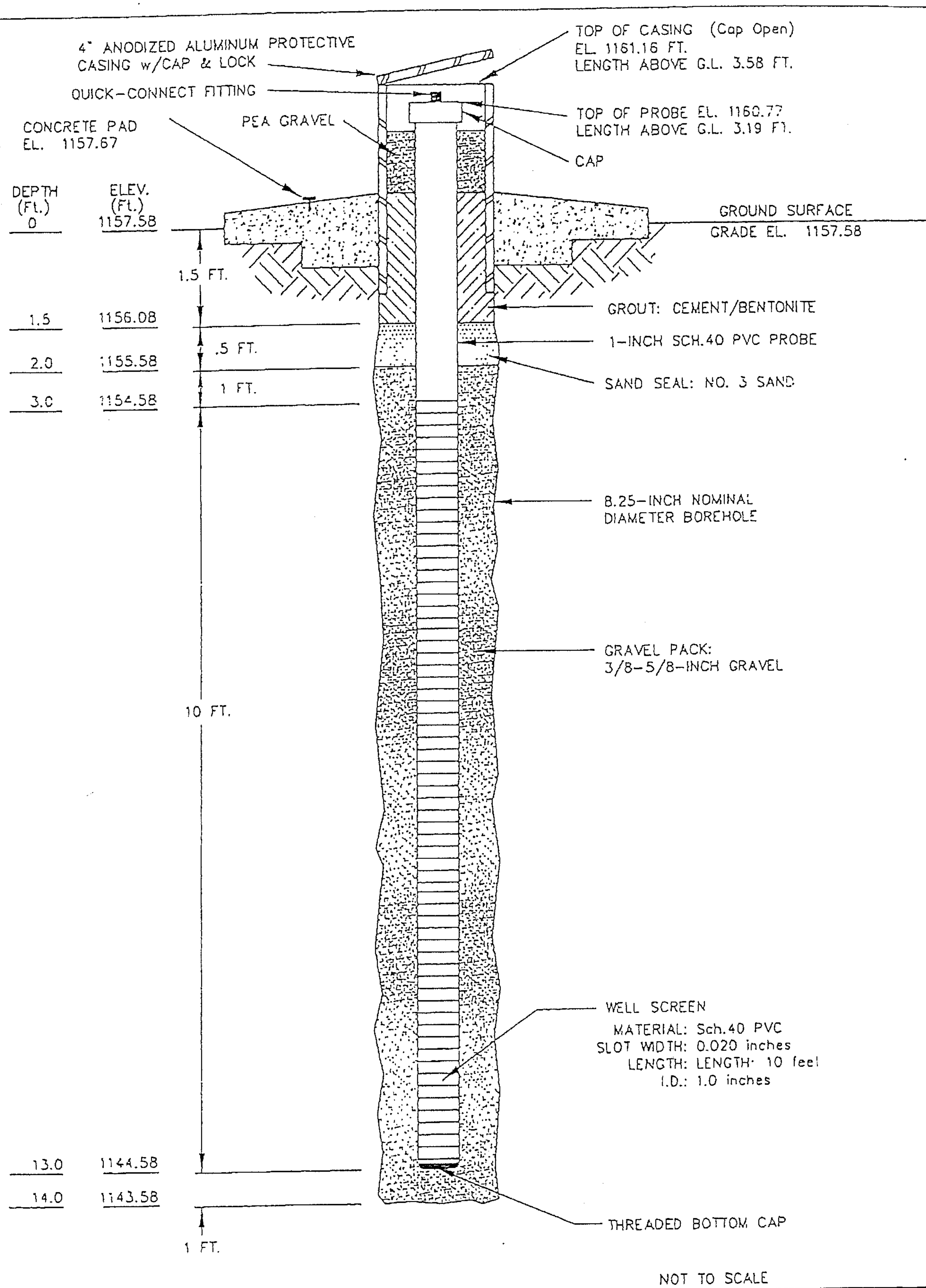
Sand Seal: 1.5-2 ft., No. 3 Sand

Probe Comments

SITE NAME East Oak Landfill & Recycling Center
LOCATION Oklahoma City, Oklahoma

WL 000-1

SUPERVISED BY Karen Gallup CHECKED BY Karen Gallup
DATE 10/06/94



NOT TO SCALE

RUST ENVIRONMENT & INFRASTRUCTURE

NOVEMBER 1994

Project: 32286 100

CADD File: 32286\2286GP01.DWG

EAST OAK LANDFILL & RECYCLING CENTER

Oklahoma City, Oklahoma County, Oklahoma

GAS PROBE - GP-01

WELL No. GP-02

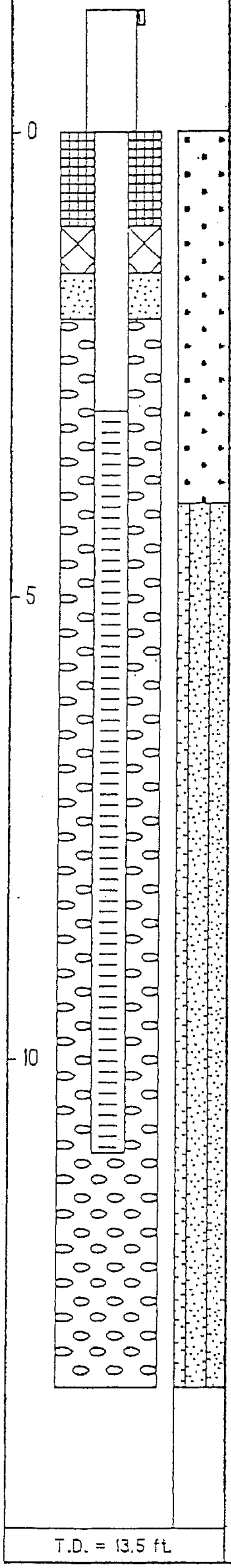
Boring No X-Ref. EO-02

LANDFILL GAS MONITORING PROBE CONSTRUCTION SUMMARY

Survey Coords N 182719.5710, E 2173846.149

Elevation Ground Level 1158.00

Top of Casing 1159.50



Drilling Summary

Total Depth (ft): 13.5

Borehole Diameter (in): 8.25"

Casing Stickup Height (ft): 3.50

Driller: Terracon Consultants, Inc.

Russ Smalley

Rig: CME-75, Truck-mounted

Bit (s): Hollow-Stem Auger

Drilling Fluid: None

Protective Casing: Anodized Aluminium

Construction Time Log

Task	Start Date	Start Time	Finish Date	Finish Time
Drilling HSA:	10/5/94	10:08	10/5/94	10:36
Geophys.Logging:				
Casing:				
C_1 4" Prot.:	10/6/94	9:17	10/6/94	9:23
C_2/S_1:	10/5/94	10:45	10/5/94	10:46
Filter Placement:	10/5/94	10:40	10/5/94	10:51
Sand Seal:	10/5/94	10:52	10/5/94	10:53
Cementing:	10/5/94	11:04	10/5/94	11:05

Probe Design & Specifications

Basis: Geologic Log ☒ Geophysical Log ☐

Casing String (s): C = Casing S = Screen

Depth	String (s)	Elevation
+3.91 - 0.72	C_1	1159.91 - 1155.28
+3.50 - 3.00	C_2	1159.50 - 1153.00
3.00 - 11.00	S_1	1153.00 - 1145.00
-		-
-		-

Casing: C1 4-inch diameter anodized aluminum

Casing: C2 1-inch diameter, Sch. 40 PVC, flush-threaded

Screen: S1 1-inch diameter, Sch. 40 PVC, flush-threaded, .020 inch slots

Filter Pack: 2-13.5 ft., 3/8-to 5/8-inch diameter gravel

Grout Seal: 0-1.5 ft.: Type I Portland Bentonite Cement (1-1.5'), Concrete/Gravel (0-1')

Sand Seal: 1.5-2 ft., No. 3 Sand

Probe Comments

SITE NAME East Oak Landfill & Recycling Center

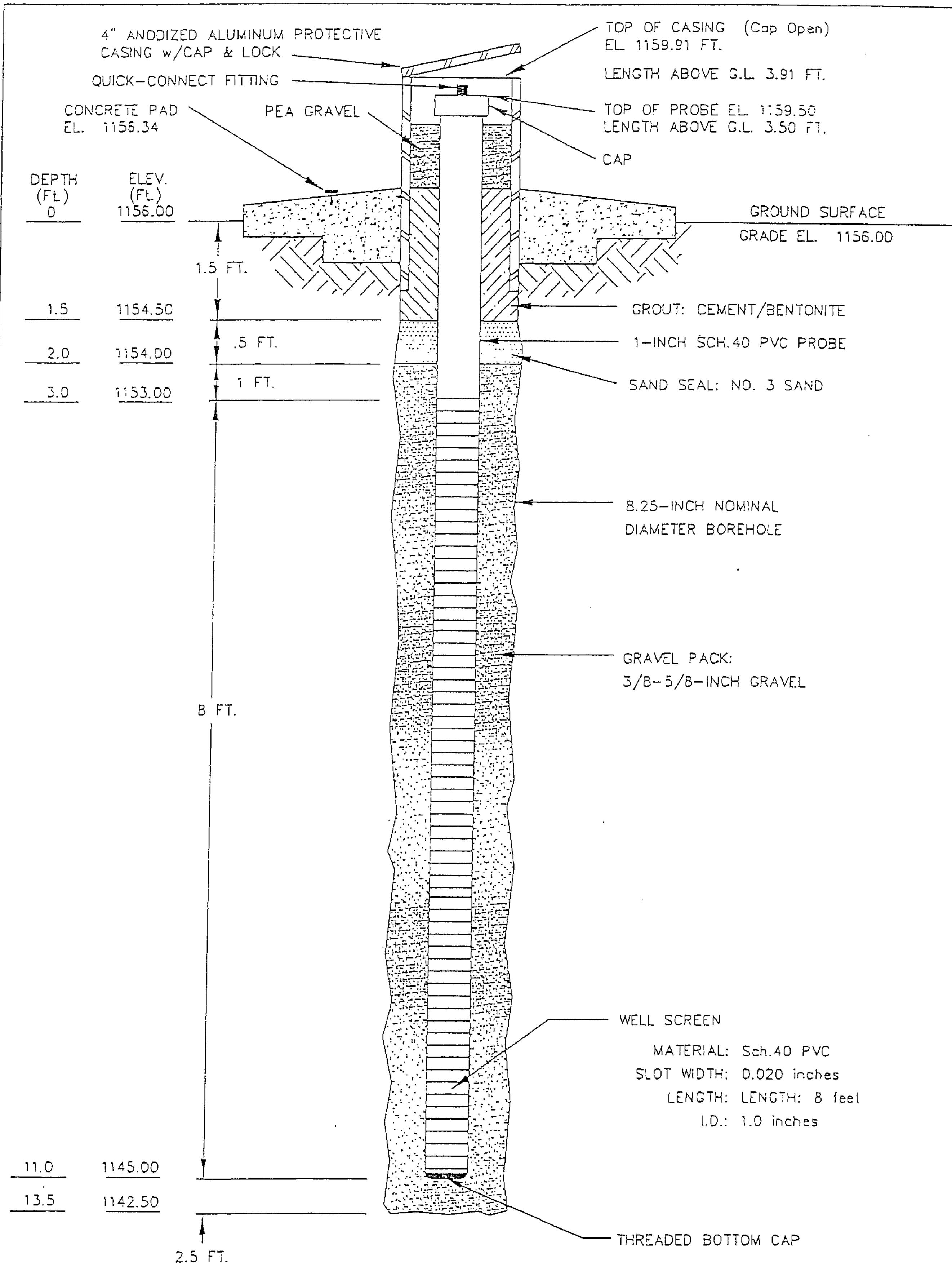
LOCATION Oklahoma City, Oklahoma

WL 000-1

SUPERVISED BY Karen Gallup

CHECKED BY Karen Gallup

DATE 10/06/94



NOT TO SCALE

RUST ENVIRONMENT & INFRASTRUCTURE

NOVEMBER 1994

Project: 32256.100

CADD File: 32256\2256GP02.DWG

EAST OAK LANDFILL & RECYCLING CENTER

Oklahoma City, Oklahoma County, Oklahoma

GAS PROBE - GP-02

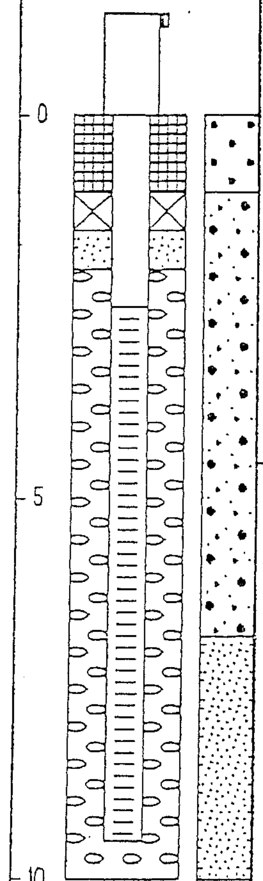
WELL No. GP-03

Boring No X-Ref. EO-03

LANDFILL GAS MONITORING PROBE CONSTRUCTION SUMMARY

Survey Coords N 182682.4983, E 2173340.004 Elevation Ground Level 1153.39

Top of Casing 1156.85



15

T.D. = 10.0 ft.

Drilling Summary

Total Depth (ft): 10.0
Borehole Diameter (in): 8.25"
Casing Stickup Height (ft): 3.46
Driller: Terracon Consultants, Inc.
Russ Smalley

Rig: CME-75, Truck-mounted
Bit (s): Hollow-Stem Auger

Drilling Fluid: None

Protective Casing: Anodized Aluminium

Probe Design & Specifications

Basis: Geologic Log ☒ Geophysical Log ☐
Casing String (s): C = Casing S = Screen

Depth	String (s)	Elevation
+3.71 - 0.92	C_1	1157.10 - 1152.47
+3.46 - 2.50	C_2	1156.85 - 1150.89
2.50 - 9.50	S_1	1150.89 - 1143.89
-		-
-		-

Casing: C1 4-inch diameter anodized aluminum

Casing: C2 1-inch diameter, Sch. 40 PVC, flush-threaded

Screen: S1 1-inch diameter, Sch. 40 PVC, flush-threaded, .020 inch slots

Filter Pack: 2-10 ft., 3/8-to 5/8-inch diameter gravel

Grout Seal: 0-1.5 ft.; Type 1 Portland Bentonite Cement (1-1.5'), Cement/Gravel (0-1')

Sand Seal: 1.5-2 ft., No. 3 Sand

Construction Time Log

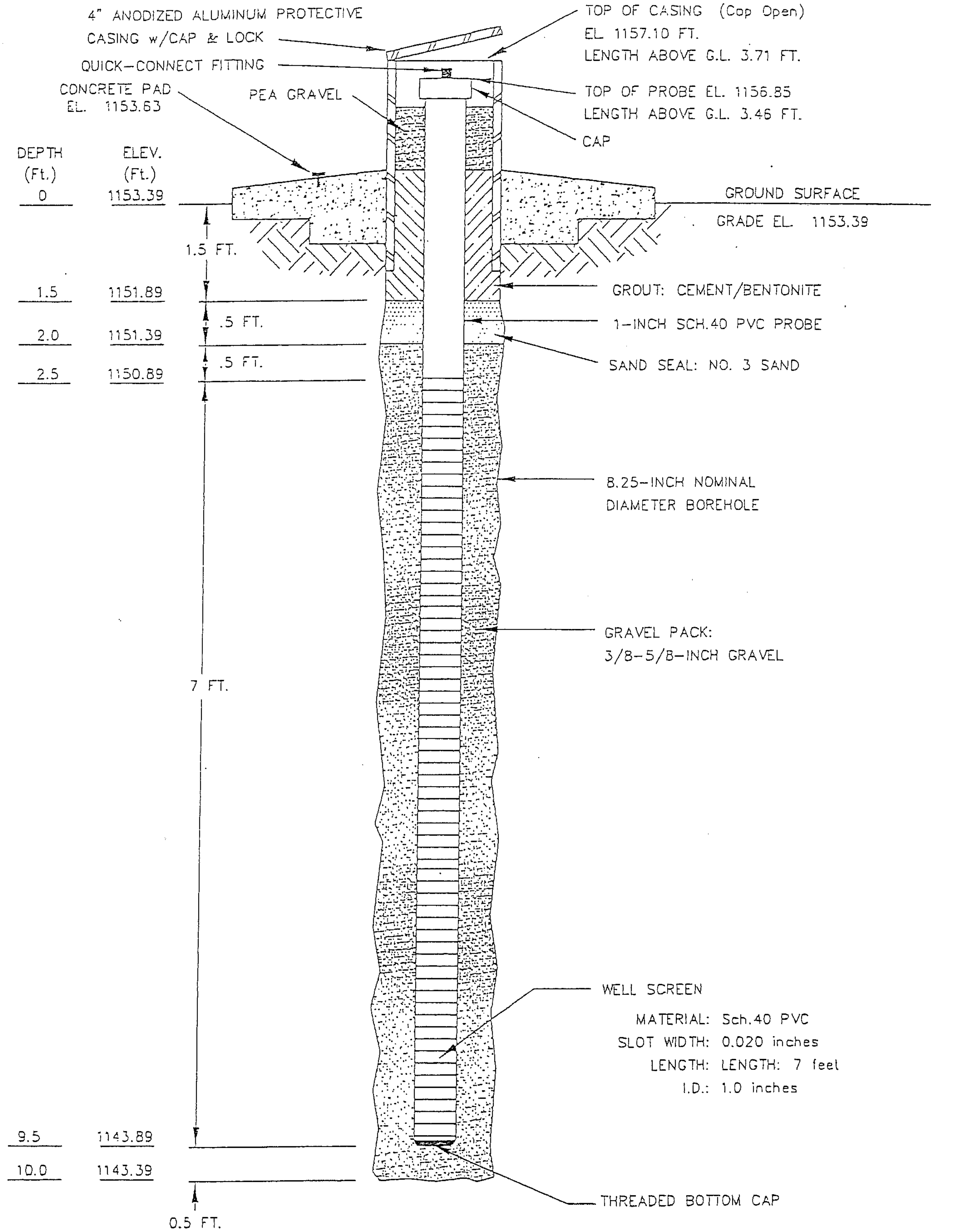
Task	Start Date	Start Time	Finish Date	Finish Time
Drilling HSA:	10/5/94	7:39	10/5/94	7:59
Geophys.Logging:				
Casing:				
C_1 4" Prot.:	10/6/94	10:00	10/6/94	10:08
C_2/S_1:	10/5/94	8:06	10/5/94	8:07
Filter Placement:	10/5/94	8:04	10/5/94	8:12
Sand Seal:	10/5/94	8:12	10/5/94	8:13
Cementing:	10/5/94	8:19	10/5/94	8:20

Probe Comments

SITE NAME East Oak Landfill & Recycling Center
LOCATION Oklahoma City, Oklahoma

WL 000-1

SUPERVISED BY Karen Gallup CHECKED BY Karen Gallup
DATE 10/05/94



NOT TO SCALE

RUST ENVIRONMENT & INFRASTRUCTURE

NOVEMBER 1994

Project: 32286.100

CADD File: 32286\2286GP03.DWG

EAST OAK LANDFILL & RECYCLING CENTER
Oklahoma City, Oklahoma County, Oklahoma

GAS PROBE – GP-03

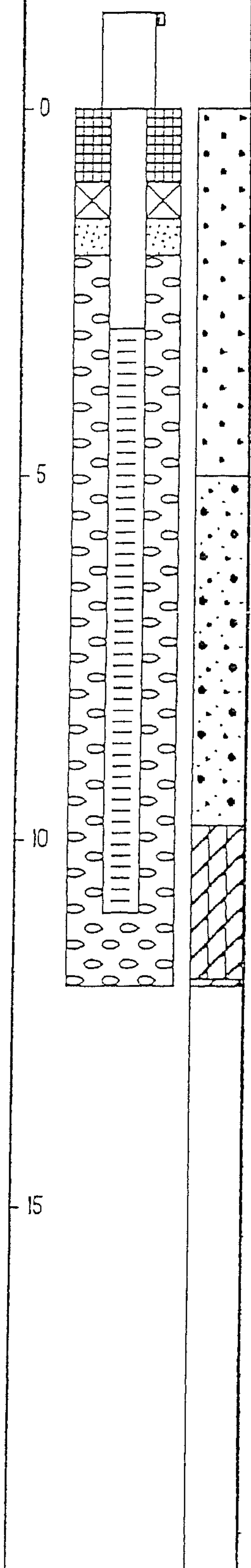
WELL No. GP-04

Boring No X-Ref. E0-04

LANDFILL GAS MONITORING PROBE CONSTRUCTION SUMMARY

Survey Coords N 182724.4525, E 2172858.685 Elevation Ground Level 1155.90

Top of Casing 1159.36



T.D. = 12.0 ft.

Drilling Summary

Total Depth (ft): 12.0

Borehole Diameter (in): 8.25"

Casing Stickup Height (ft): 3.48

Driller: Terracon Consultants, Inc.

Russ Smalley

Rig: CME-75, Truck-mounted

Bit (s): Hollow-Stem Auger

Drilling Fluid: None

Protective Casing: Anodized Aluminium

Construction Time Log

Task	Start Date	Start Time	Finish Date	Finish Time
Drilling HSA:	10/5/94	9: 04	10/5/94	9: 25
Geophys.Logging:				
Casing:				
C_1 4" Prot.:	10/6/94	8: 57	10/6/94	9: 10
C_2/S_1:	10/5/94	9: 32	10/5/94	9: 33
Filter Placement:	10/5/94	9: 25	10/5/94	9: 38
Sand Seal:	10/5/94	9: 39	10/5/94	9: 40
Cementing:	10/5/94	9: 43	10/5/94	9: 44

Probe Design & Specifications

Basis: Geologic Log ☒ Geophysical Log ☐

Casing String (s): C = Casing S = Screen

Depth	String (s)	Elevation
+3.69 - 0.94	C_1	1159.59 - 1154.96
+3.46 - 3.00	C_2	1159.36 - 1152.90
3.00 - 11.00	S_1	1152.90 - 1144.90
-		-
-		-

Casing: C1 4-inch diameter anodized aluminum

Casing: C2 1-inch diameter, Sch. 40 PVC, flush-threaded

Screen: S1 1-inch diameter, Sch. 40 PVC, flush-threaded, .020 inch slots

Filter Pack: 2-12 ft., 3/8-to 5/8-inch diameter gravel

Grout Seal: 0-1.5 ft.: Type I Portland Bentonite Cement (1-1.5'), Cement/Gravel (0-1')

Sand Seal: 1.5-2 ft., No. 3 Sand

Probe Comments

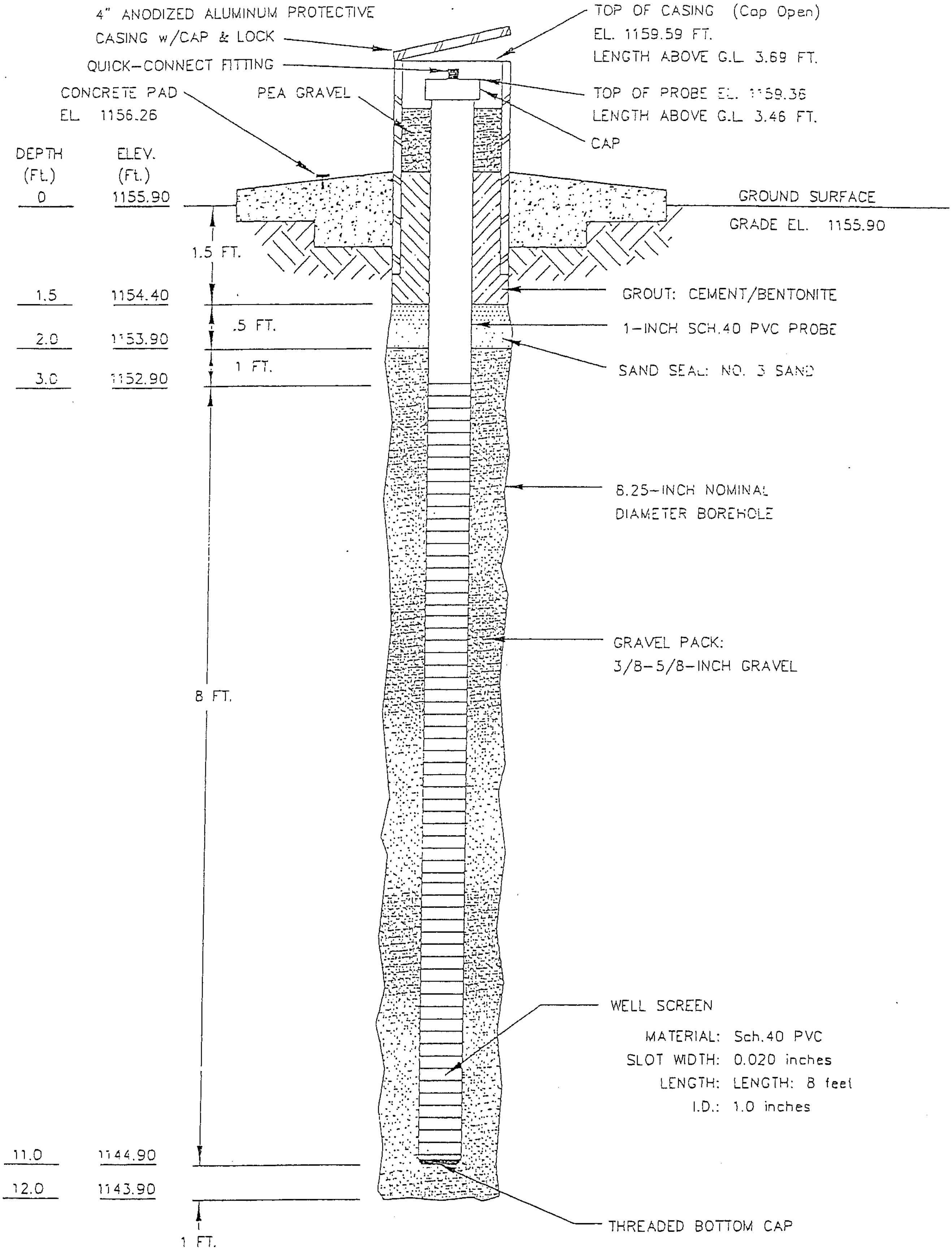
SITE NAME East Oak Landfill & Recycling Center

LOCATION Oklahoma City, Oklahoma

WL 000-1

SUPERVISED BY Karen Gallup CHECKED BY Karen Gallup

DATE 10/06/94



NOT TO SCALE

RUST ENVIRONMENT & INFRASTRUCTURE

NOVEMBER 1994

Project: 32286.100

CADD File: 32286\2286GP04.DWG

EAST OAK LANDFILL & RECYCLING CENTER
Oklahoma City, Oklahoma County, Oklahoma

GAS PROBE - GP-04

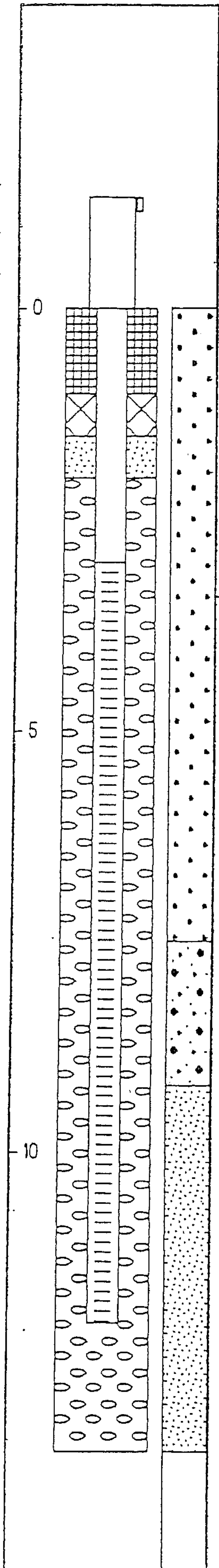
WELL No. GP-05

Boring No X-Ref. E0-05

LANDFILL GAS MONITORING PROBE CONSTRUCTION SUMMARY

Survey Coords N 183411.7531, E 2172427.321 Elevation Ground Level 1155.74

Top of Casing 1159.23



T.D. = 13.5 ft

Drilling Summary

Total Depth (ft): 13.5
Borehole Diameter (in): 8.25"
Casing Stickup Height (ft): 3.49
Driller: Terracon Consultants, Inc.
Russ Smalley

Rig: CME-75, Truck-mounted
Bit (s): Hollow-Stem Auger

Drilling Fluid: None

Protective Casing: Anodized Aluminium

Construction Time Log

Task	Start Date	Start Time	Finish Date	Finish Time
Drilling HSA:	10/4/94	12: 44	10/4/94	13: 09
Geophys.Logging:				
Casing:				
C_1 4" Prot.:	10/6/94	8: 12	10/6/94	8: 23
C_2/S_1:	10/4/94	13: 16	10/4/94	13: 17
Filter Placement:	10/4/94	13: 12	10/4/94	13: 26
Sand Seal:	10/4/94	13: 26	10/4/94	13: 27
Cementing:	10/4/94	13: 34	10/4/94	13: 36

Probe Design & Specifications

Basis: Geologic Log ☒ Geophysical Log ☐
Casing String (s): C = Casing S = Screen

Depth	String (s)	Elevation
+3.90 - 0.73	C_1	1159.64 - 1155.01
+3.49 - 3.00	C_2	1159.23 - 1152.74
3.00 - 12.00	S_1	1152.74 - 1143.74
-		-
-		-

Casing: C1 4-inch diameter anodized aluminum

Casing: C2 1-inch diameter, Sch. 40 PVC, flush-threaded

Screen: S1 1-inch diameter, Sch. 40 PVC, flush-threaded, .020 inch slots

Filter Pack: 2-13.5 ft., 3/8-to 5/8-inch diameter gravel

Grout Seal: 0-1.5 ft.; Type I Portland Bentonite Cement (1-1.5'), Cement/Gravel (0-1')

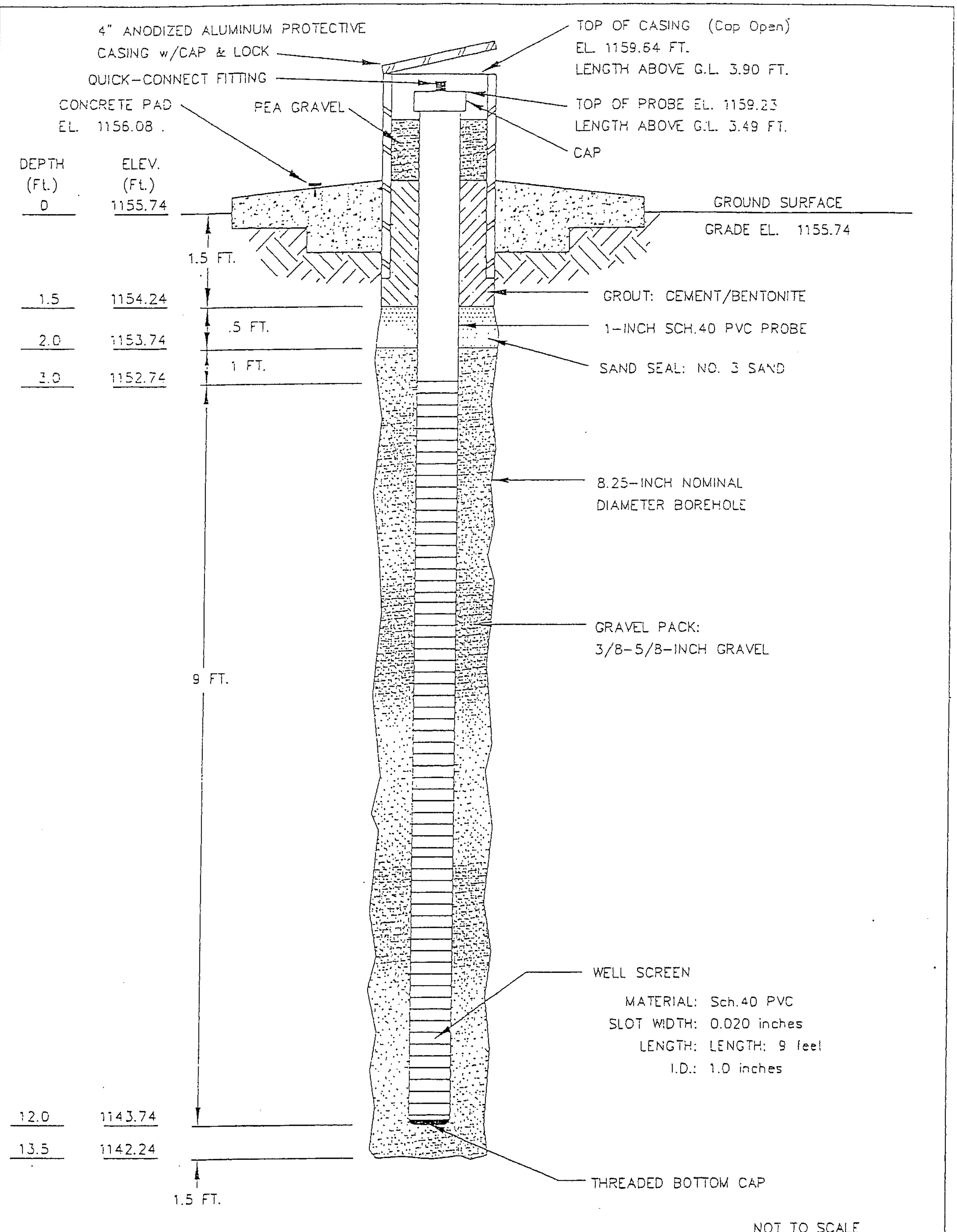
Sand Seal: 1.5-2 ft., No. 3 Sand

Probe Comments

SITE NAME East Oak Landfill & Recycling Center
LOCATION Oklahoma City, Oklahoma

WL 000-1

SUPERVISED BY Karen Gallup CHECKED BY Karen Gallup
DATE 10/04/94



RUST ENVIRONMENT & INFRASTRUCTURE

NOVEMBER 1994

Project: 32286.100

CADD File. 32286\2286GP05.DWG

EAST OAK LANDFILL & RECYCLING CENTER

Oklahoma City, Oklahoma County, Oklahoma

GAS PROBE - GP-05

WELL No. GP-06

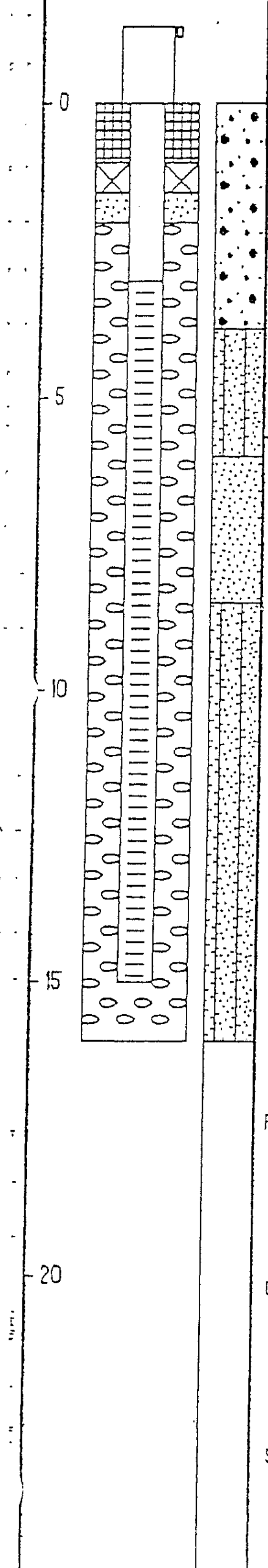
Boring No X-Ref. E0-06

LANDFILL GAS
MONITORING PROBE CONSTRUCTION SUMMARY

Survey Coords N184150.3079, E 2172738.912

Elevation Ground Level 1158.29

Top of Casing 1161.53



T.D. = 16.0 ft.

Drilling Summary

Total Depth (ft): 16.0

Borehole Diameter (in): 8.25"

Casing Stickup Height (ft): 3.24

Driller: Terracon Consultants, Inc.
Russ Smalley

Rig: CME-75, Truck-mounted

Bit (s): Hollow-Stem Auger

Drilling Fluid: None

Protective Casing: Anodized Aluminium

Construction Time Log

Task	Start Date	Start Time	Finish Date	Finish Time
Drilling HSA:	10/4/94	8:35	10/4/94	9:17
Geophys.Logging:				
Casing:				
C_1 4" Prot.:	10/6/94	7:48	10/6/94	8:05
C_2/S_1:	10/4/94	10:38	10/4/94	10:39
Filter Placement:	10/4/94	10:32	10/4/94	10:51
Sand Seal:	10/4/94	10:53	10/4/94	10:54
Cementing:	10/4/94	12:14	10/4/94	12:17

Probe Design & Specifications

Basis: Geologic Log ☒ Geophysical Log ☐

Casing String (s): C = Casing S = Screen

Depth	String (s)	Elevation
+3.59 - 1.04	C_1	1161.88 - 1157.25
+3.24 - 3.00	C_2	1161.53 - 1155.29
3.00 - 15.00	S_1	1155.29 - 1143.29
-		-
-		-

Casing: C1 4-inch diameter anodized aluminum

Casing: C2 1-inch diameter, Sch. 40 PVC, flush-threaded

Screen: S1 1-inch diameter, Sch. 40 PVC, flush-threaded, .020 inch slots

Filter Pack: 2-16 ft., 3/8-to 5/8-inch diameter gravel

Grout Seal: 0-1.5 ft.: Type I Portland Bentonite Cement (1-1.5'), Cement/Gravel (0-1')

Sand Seal: 1.5-2 ft., No. 3 Sand

Probe Comments

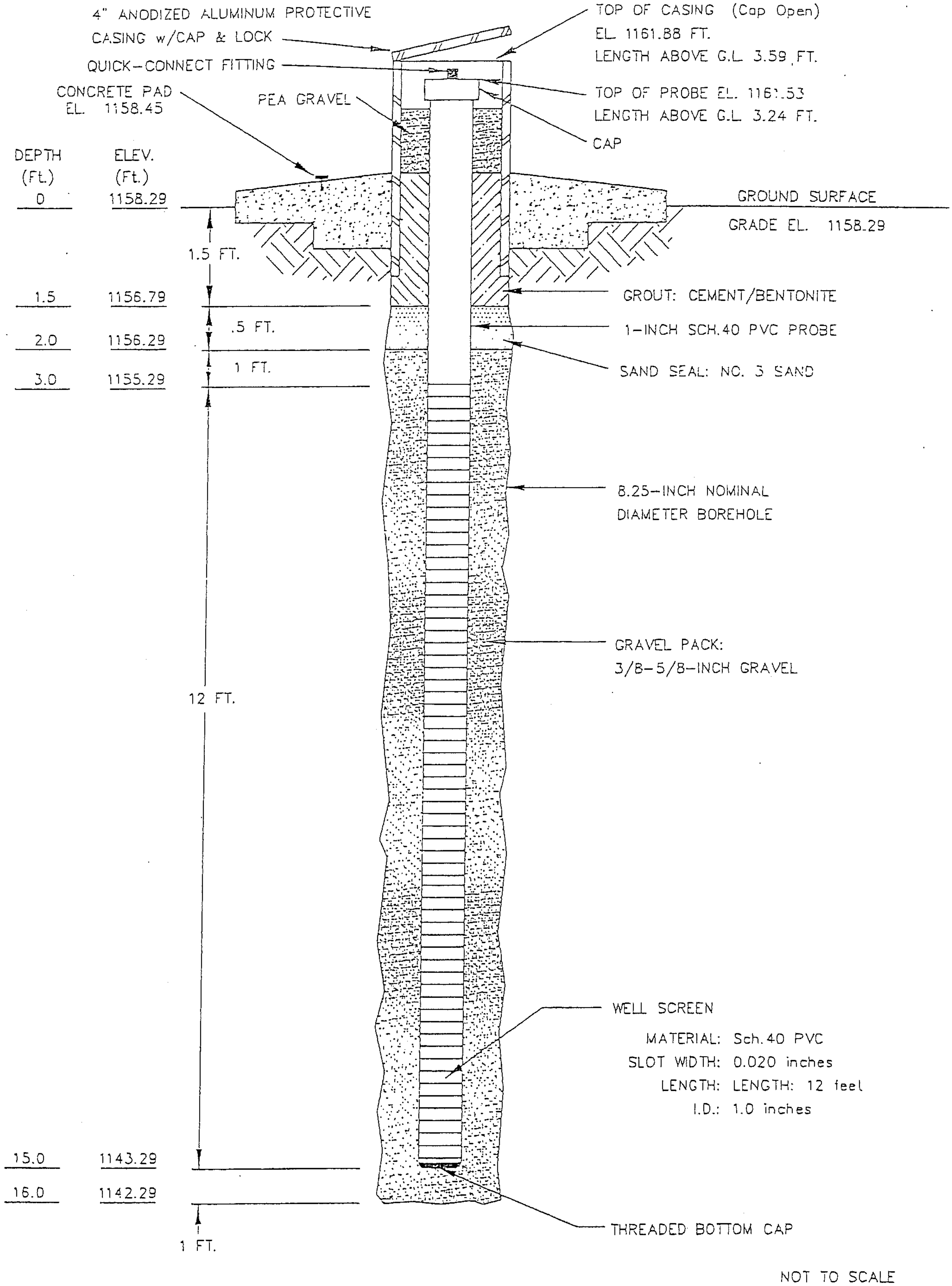
SITE NAME East Oak Landfill & Recycling Center

LOCATION Oklahoma City, Oklahoma

WL 000-1

SUPERVISED BY Karen Gallup CHECKED BY Karen Gallup

DATE 10/04/94



RUST ENVIRONMENT & INFRASTRUCTURE

NOVEMBER 1994

Project: 32286.100

CADD File: 32286\2286GP06.DWG

EAST OAK LANDFILL & RECYCLING CENTER
Oklahoma City, Oklahoma County, Oklahoma

GAS PROBE – GP-06

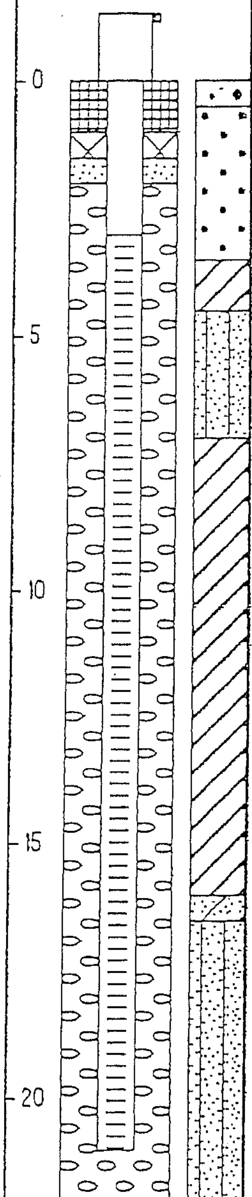
WELL No. GP-07

Boring No X-Ref. E0-07

LANDFILL GAS
MONITORING PROBE CONSTRUCTION SUMMARY

Survey Coords N 184498.4421, E 2173438.841 Elevation Ground Level 1164.56

Top of Casing 1167.65



T.D. = 22.0 ft.

Drilling Summary

Total Depth (ft): 22.0

Borehole Diameter (in): 8.25"

Casing Stickup Height (ft): 3.09

Driller: Terracon Consultants, Inc.

Russ Smalley

Rig: CME-75, Truck-mounted

Bit (s): Hollow-Stem Auger

Drilling Fluid: None

Protective Casing: Anodized Aluminium

Construction Time Log

Task	Start Date	Start Time	Finish Date	Finish Time
Drilling HSA:	10/4/94	14: 26	10/4/94	15: 15
Geophys.Logging:				
Casing:				
C_1 4" Prot.:	10/6/94	10: 31	10/6/94	10: 37
C_2/S_1:	10/4/94	15: 31	10/4/94	15: 32
Filter Placement:	10/4/94	15: 23	10/4/94	15: 40
Sand Seal:	10/4/94	15: 41	10/4/94	15: 42
Cementing:	10/4/94	15: 48	10/4/94	15: 49

Probe Design & Specifications

Basis: Geologic Log ☒ Geophysical Log ☐

Casing String (s): C = Casing S = Screen

Depth	String (s)	Elevation
+3.57 - 1.06	C_1	1168.13 - 1163.50
+3.09 - 3.00	C_2	1167.65 - 1161.56
3.00 - 21.00	S_1	1161.56 - 1143.56
-		-
-		-

Casing: C1 4-inch diameter anodized aluminum

Casing: C2 1-inch diameter, Sch. 40 PVC, flush-threaded

Screen: S1 1-inch diameter, Sch. 40 PVC, flush-threaded, .020 inch slots

Filter Pack: 2-22 ft., 3/8-to 5/8-inch diameter gravel

Grout Seal: 0-1.5 ft.; Type I Portland Bentonite Cement (1-1.5'), Cement/Gravel (0-1')

Sand Seal: 1.5-2 ft., No. 3 Sand

Probe Comments

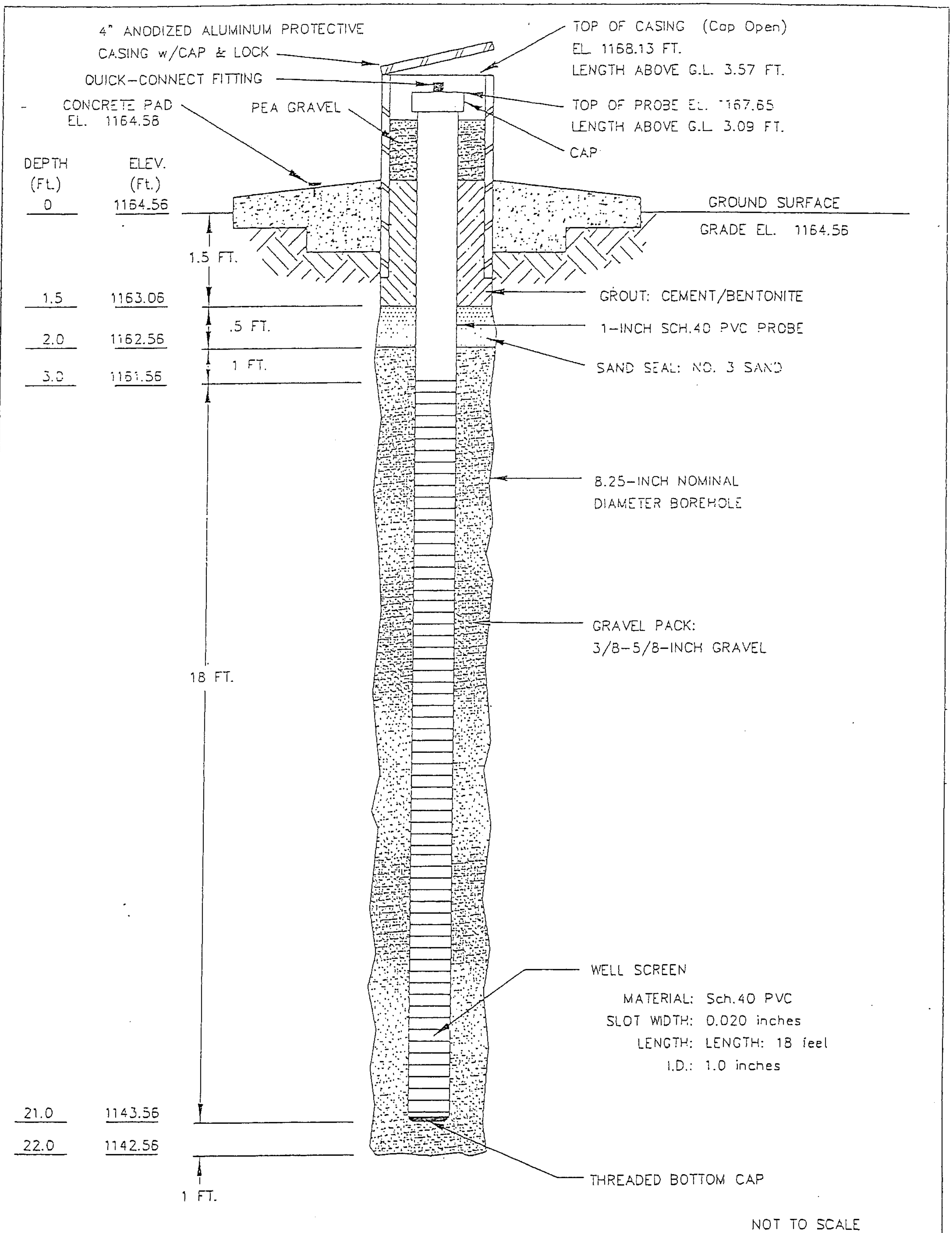
SITE NAME East Oak Landfill & Recycling Center

LOCATION Oklahoma City, Oklahoma

WL 000-1

SUPERVISED BY Karen Gallup CHECKED BY Karen Gallup

DATE 10/04/94



RUST ENVIRONMENT & INFRASTRUCTURE

NOVEMBER 1994

Project: 32286.100

CADD File: 32286\2286GP07.DWG

EAST OAK LANDFILL & RECYCLING CENTER
Oklahoma City, Oklahoma County, Oklahoma

GAS PROBE – GP-07

Waste Management of Oklahoma, Inc.
East Oak Landfill
4041 N. 141st E. Ave.
Tulsa, Oklahoma

SOIL BORING LOG

A & M ENGINEERING AND ENVIRONMENTAL SERVICES, INC.

NAME AND LOCATION t Oak Landfill Oklahoma City, Oklahoma SEC 21 T 12N R 2W	DRILLING METHOD: ROTARY RIG HOLLOW STEM AUGER SAMPLING METHOD: N/A	BORING NUMBER GP-8R SHEET 1 OF 2

WATER LEVEL				
TIME				
DATE				
CASING DEPTH				

DRILLING	
START	FINISH
TIME	TIME
DATE 6/4/03	DATE 6/4/03

WEATHER: SUNNY TEMP: 85 F

G.L. ELEV. 1,156.10 FT.

DATUM: NAVD88 TOC ELEV. 1,159.03 FT.

DRILL RIG: CME | SURFACE CONDITIONS: DRY | CASING DIA: 2" | SCREEN DIA: 2"

ANGLE: VERTICAL BEARING: | TYPE GRAVEL: SILICA SAND 0.45-0.48MM | SLOT SIZE: .010

SAMPLE HAMMER TORQUE FT.-LBS | TYPE BENTONITE: PUREGOLD MEDIUM CHIPS

DEPTH IN FEET (ELEVATION)	BLOWS/ 6 IN ON SAMPLER (RECOVERY)	WELL TYPICAL	SYMBOL	DESCRIPTION OF MATERIAL	SAMPLER AND BIT	CASING TYPE	BLOWS/FOOT ON CASING	WELL CONSTRUCTION NOTES
0-30				0'-45' SILTY SAND				0'-2' CEMENT 2'-3' BENTONITE CHIPS 3'-45' GRAVEL PACK

DRILLING CONTR: Mohawk Drilling

DRILLER: ALAN BRANTLEY

LOGGED BY PETER SCHULTZE

CHK'D BY PLS

DATE 6/4/2003

Waste Management of Oklahoma, Inc.
East Oak Landfill
4041 N. 141st E. Ave.
Tulsa, Oklahoma

SOIL BORING LOG

A & M ENGINEERING AND ENVIRONMENTAL SERVICES, INC.

TE NAME AND LOCATION ast Oak Landfill Oklahoma City, Oklahoma SEC 21 T 12N R 2W	DRILLING METHOD: ROTARY RIG HOLLOW STEM AUGER SAMPLING METHOD: N/A	BORING NUMBER GP-8R SHEET 2 OF 2

WATER LEVEL				
TIME				
DATE				
CASING DEPTH				

DRILLING	START	FINISH
TIME		
DATE	6/4/03	6/4/03

WEATHER: SUNNY TEMP: 85 F

G.L. ELEV. 1,158.70 FT.

DATUM: NAVD88 TOC ELEV. 1,161.52 FT.

DRILL RIG: CME

SURFACE CONDITIONS: DRY

CASING DIA: 2" SCREEN DIA: 2"

ANGLE: VERTICAL BEARING:

TYPE GRAVEL: SILICA SAND 0.45-0.48MM SLOT SIZE: .010

SAMPLE HAMMER TORQUE FT.-LBS

TYPE BENTONITE: PUREGOLD MEDIUM CHIPS

DRILLING CONTR. Mohawk Drilling

DRILLER: ALAN BRANTLEY

DEPTH IN FEET (ELEVATION)	BLOWS/ 6 IN ON SAMPLER (RECOVERY)	WELL TYPICAL	SYMBOL	DESCRIPTION OF MATERIAL	SAMPLER AND BIT	CASING TYPE	BLOWS/FOOT ON CASING	WELL CONSTRUCTION NOTES
35–45		SCREEN		0'-45' SILTY SAND				3'-45' GRAVEL PACK
45				TD @ 45 FT.				
50								
55								
60								

LOGGED BY PETER SCHULTZE CHK'D BY PLS

DATE 5/29/2003

Ten Acres

MULTI-PURPOSE COMPLETION REPORT
MONITORING WELLS

Oklahoma Water Resources Board
3800 North Classen Boulevard
Oklahoma City, OK 73118
Telephone (405) 530-8800

21

One Mile
ease Plot Well Location

Do Not Write In This Space

Well Log ID Number ______

LEGAL DESCRIPTION

Do Not Write In This Space
___ ¼ ___ ¼ ___ ¼

of Sec. 21 Township T12 ☒ N ☐ S Range 2 W ☐ WIM ☐ EIM ☐ ECM

Optional Information

atitude ______ Longitude ______

ber of wells in 10 acre tract ______ Well No. (if applicable) GP8R

ity Oklahoma Variance Request No. (if applicable) ______

Owner WMI, Inc Phone (918) 439-7829

City/State 4041 N 141st E. Ave. Zip 74116

tion Waste Management East Oak Landfill Oklahoma City, OK

E OF WORK
Geotechnical Boring
Monitoring Well
Plugging

USE OF WELL
☐ Site Assessment Observation
☐ Unsaturated Zone Monitoring
☐ Air Sparge
☒ Vapor Extraction
☐ Water Quality
☐ Recovery
☐ Other ______

BORING OR WELL CONSTRUCTION DATA
pplication for a variance must be requested and obtained before any changes are made to the minimum construction standards for any well.

Started 6/4/03 Date Completed 6/5/03

Diameter 8.5 inches From 0 feet to 45 feet

Diameter ______ inches From ______ feet to ______ feet

NG RECORD:
e Pipe (Casing) Diameter ______ inches From ______ feet to ______ feet

Casing Diameter 1 inches From +3 feet to 5 feet

Casing Diameter ______ inches From ______ feet to ______ feet

EN OR PERFORATION RECORD:
nd Slot Size .020 From 5 feet to 45 feet

nd Slot Size ______ From ______ feet to ______ feet

~~[illegible]~~ 6/9 silica From 3 feet to 45 feet

Size ______ From ______ feet to ______ feet

Project: East Oak Landfill
Oklahoma City, Oklahoma

Project Number: 1556

BORING LOG
GP-12

Sheet 1 of 1

Location: See Figure 1
Surface El.: 1148.07
Northing: 1061184956.79
Easting: 2174500.14

Depth, feet	Samples	Symbol / USCS	MATERIAL DESCRIPTION	Elev.	Hand Penetrometer, tsf	Penetration Blows / Foot	Recovery %	RQD	Moisture Content, %	Unit Dry Weight, pcf	Liquid Limit	Plastic Limit	Plasticity Index	% Passing No. 200 Sieve	Unc. Compressive Strength, tsf
			SANDY LEAN CLAY, brown, stiff	1147.07											
			CLAYEY SAND, brown to dark brown, firm	1146.07											
	C1		SANDY LEAN CLAY, silty, dark grayish brown, firm	1141.57											
5															
	C2		SAND, silty, light brown to tan	1136.07											
10	C3														
15															
20															
25															
30															
35															
40															
45															
50															

Completion Depth: 12 ft
Date: 10/18/10

Remarks: Top of PVC Cap Elevation: 1151.04

BORING LOG W/FIGURE (ELEVATIONS) 1556 E. OAK LF GP & LOGS.GPJ LANDTEC.GDT 4/29/14

LANDTEC

Soil and rock descriptions on this boring log are a compilation of data collected in both the field and the laboratory. The stratification lines represent the approximate boundary between soil types and the transition can be gradual.

Project: East Oak Landfill
Oklahoma City, Oklahoma

Project Number: 1556

BORING LOG
GP-13

Sheet 1 of 1

Location: See Figure 1
Surface El.: 1147.54
Northing: 1057185225.76
Easting: 2174928.83

Depth, feet	Samples	Symbol / USCS	MATERIAL DESCRIPTION	Hand Penetrometer, tsf	Penetration Blows / Foot	Recovery %	RQD	Moisture Content, %	Unit Dry Weight, pcf	Liquid Limit	Plastic Limit	Plasticity Index	% Passing No. 200 Sieve	Unc. Compressive Strength, tsf
	C1		SILTY SAND, brown w/thin brown clay seams 1145.54											
			SAND, silty & clayey, brown to dark brown 1143.54											
5	C2		SAND, silty, tan 1137.54											
10														

Completion Depth: 10 ft
Date: 10/18/10

Remarks: Top of PVC Cap Elevation: 1150.68

LANDTEC

Soil and rock descriptions on this boring log are a compliation of data collected in both the field and the laboratory. The stratification lines represent the approximate boundary between soil types and the transition can be gradual.

Project:	East Oak Landfill Oklahoma City, Oklahoma	**BORING LOG** **GP-14**
Project Number:	1556	Sheet 1 of 1

Location: See Figure 1
Surface El.: 1149.58
Northing: 1053185224.23
Easting: 2175426.58

Depth, feet	Samples	Symbol / USCS	MATERIAL DESCRIPTION	Elevation	Hand Penetrometer, tsf	Penetration Blows / Foot	Recovery %	RQD	Moisture Content, %	Unit Dry Weight, pcf	Liquid Limit	Plastic Limit	Plasticity Index	% Passing No. 200 Sieve	Unc. Compressive Strength, tsf
0–6	C1		SILTY SAND, light tan	1143.58											
6–10	C2		SAND, silty, tan	1139.58											

Depth scale: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50

Completion Depth: 10 ft
Date: 10/18/10

Remarks: Top of PVC Cap Elevation: 1152.40

LANDTEC

Soil and rock descriptions on this boring log are a compliation of data collected in both the field and the laboratory. The stratification lines represent the approximate boundary between soil types and the transition can be gradual.

FIGURE A5

Project: East Oak Landfill
Oklahoma City, Oklahoma

Project Number: 1556

BORING LOG
GP-15

Sheet 1 of 1

Location: See Figure 1
Surface El.: 1148.96
Northing: 1049185221.06
Easting: 2175925.58

Depth, feet	Samples	Symbol / USCS	MATERIAL DESCRIPTION	Hand Penetrometer, tsf	Penetration Blows / Foot	Recovery %	RQD	Moisture Content, %	Unit Dry Weight, pcf	Liquid Limit	Plastic Limit	Plasticity Index	% Passing No. 200 Sieve	Unc. Compressive Strength, tsf
0–3	C1		SILTY SAND, light brown to brown 1145.96											
3–10	C2		SAND, tan, silty 1138.96											

Depth scale: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50

Completion Depth: 10 ft
Date: 10/18/10

Remarks: Top of PVC Cap Elevation: 1151.57

LANDTEC

Soil and rock descriptions on this boring log are a compliation of data collected in both the field and the laboratory. The stratification lines represent the approximate boundary between soil types and the transition can be gradual.

FIGURE A6

BORING LOG W/FIGURE (ELEVATIONS) 1556 E. OAK LF GP & LOGS.GPJ LANDTEC.GDT 4/29/14

Project: East Oak Landfill
Oklahoma City, Oklahoma

Project Number: 1556

BORING LOG
GP-16

Sheet 1 of 1

Location: See Figure 1
Surface El.: 1147.93
Northing: 1041184791.26
Easting: 2176215.41

Depth, feet	Samples	Symbol / USCS	MATERIAL DESCRIPTION	Hand Penetrometer, tsf	Penetration Blows / Foot	Recovery %	RQD	Moisture Content, %	Unit Dry Weight, pcf	Liquid Limit	Plastic Limit	Plasticity Index	% Passing No. 200 Sieve	Unc. Compressive Strength, tsf
			SILTY SAND, reddish tan 1145.93											
	C1		SILTY SAND, tan											
5														
	C2													
10			1137.93											
15														
20														
25														
30														
35														
40														
45														
50														

Completion Depth: 10 ft
Date: 10/18/10

Remarks: Top of PVC Cap Elevation: 1150.76

BORING LOG W/FIGURE (ELEVATIONS) 1556 E. OAK LF GP & LOGS.GPJ LANDTEC.GDT 4/29/14

LANDTEC

Soil and rock descriptions on this boring log are a compliation of data collected in both the field and the laboratory. The stratification lines represent the approximate boundary between soil types and the transition can be gradual.

Project: East Oak Landfill
Oklahoma City, Oklahoma

Project Number: 1556

BORING LOG
GP-17

Sheet 1 of 1

Location: See Figure 1
Surface El.: 1146.32
Northing: 1037184293.30
Easting: 2176206.45

Depth, feet	Samples	Symbol / USCS	MATERIAL DESCRIPTION	Elevation	Hand Penetrometer, tsf	Penetration Blows / Foot	Recovery %	RQD	Moisture Content, %	Unit Dry Weight, pcf	Liquid Limit	Plastic Limit	Plasticity Index	% Passing No. 200 Sieve	Unc. Compressive Strength, tsf
0 – 1.5			SILTY SAND, reddish tan	1144.82											
1.5 – 10	C1, C2		SILTY SAND, tan	1136.32											

Depth scale: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50

Completion Depth: 10 ft
Date: 10/18/10

Remarks: Top of PVC Cap Elevation: 1149.27

BORING LOG W/FIGURE (ELEVATIONS) 1556 E. OAK LF GP & LOGS.GPJ LANDTEC.GDT 4/29/14

LANDTEC

Soil and rock descriptions on this boring log are a compilation of data collected in both the field and the laboratory. The stratification lines represent the approximate boundary between soil types and the transition can be gradual.

APPENDIX G-3

RECORDKEEPING FORM

EAST OAK RECYCLING AND DISPOSAL FACILITY
LANDFILL GAS MONITORING REPORT FORM

Sampled by:________________________________ Date:____________________
Time:_________(Start) ___________ (Finish) Temperature:____________________
Weather:______________________ Barometric Pressure (optional):_____________
Monitoring Equipment:__________________ Date of Calibration:______________

Probe No.	% METHANE 0-100	%[1] LEL 0-100	STATIC PRESSURE "w.c."[2] (Optional)	O_2 % (Optional)	PROBE INTEGRITY VERIFIED Yes/No

ONSITE STRUCTURES	Verify if Continuous LFG Alarm is Operational (Circle One)		Continuous LFG Alarm Activated (LEL>25%) During Previous Quarter (Circle One)	
	YES	NO	YES	NO
	YES	NO	YES	NO
	YES	NO	YES	NO
	YES	NO	YES	NO
	YES	NO	YES	NO

[1] % LEL = (20) x (observed % methane)
[2] "w.c." – Inches Water Column

EAST OAK RECYCLING AND DISPOSAL FACILITY
OKLAHOMA COUNTY, OKLAHOMA
ODEQ PERMIT NO. 3555036

APPENDIX H

SURFACE WATER MANAGEMENT PLAN

Prepared for

Waste Management of Oklahoma, Inc.

June 2015

Revised January 2016

LICENSED PROFESSIONAL ENGINEER
Charles R.
Marsh
24599
OKLAHOMA

1.15.16

Prepared by

Weaver Consultants Group, LLC
CA 3804 PE 6/30/2017
6420 Southwest Boulevard, Suite 206
Fort Worth, Texas 76109
817-735-9770

WCG Project No. 0086-356-11-40-06

CONTENTS

LICENSED PROFESSIONAL ENGINEER
Charles R. Marsh
24599
OKLAHOMA

6.5.15

LIST OF APPENDICES

1 INTRODUCTION

1.1 Purpose

The Surface Water Management Plan is prepared as part of this Tier III Permit Modification for the East Oak Recycling and Disposal Facility consistent with OAC 252:515-17. This drainage plan addresses surface water drainage design and erosion control. Permit level plans and details are presented for the proposed drainage system in this appendix. Appendix H also includes a demonstration that the proposed landfill development will not significantly alter the existing permitted drainage patterns. Note that the scope of this appendix is limited to the surface water drainage design and erosion controls. Floodplain information is included in Appendix I.

This appendix includes the design of the final cover erosion control structures (i.e., chute and swale system), perimeter drainage channels, stormwater retention and detention ponds, as well as hydrologic calculations. Consistent with OAC 252:515-17-2, these facilities are designed to convey runoff produced from the 25-year storm event.

1.2 Stormwater Management System

The Surface Water Management Plan for this lateral expansion design has been prepared in accordance with OAC 252:515-17. The proposed drainage improvements for this expansion include providing final cover erosion control structures (i.e., chutes and swales), perimeter drainage channels, and stormwater retention and detention areas. Figures depicting the layout of the drainage system are presented in Appendix H-1. As shown on Sheet H-1-1, stormwater runoff will be collected in swales located near the upper grade break on the landfill and on the 4 (Horizontal) to 1 (Vertical) sideslopes, and then conveyed to drainage letdown structures (chutes) and down the 25 percent slopes to the perimeter drainage system. The perimeter channels will be constructed before fill is placed above existing grade in each adjacent landfill phase. Stormwater drainage from developed areas will be directed into the perimeter channels or stormwater ponds that will convey stormwater to existing drainage structures or discharged off-site mechanically consistent with pre-development conditions. A majority of the runoff generated on site will be retained in ponds developed around the landfill. Portions of the proposed development occur within the 100-year floodplain of the North Canadian River. A Conditional Letter of Map Revision (CLOMR) was developed for the proposed developments and submitted to the Federal Emergency Management Agency (FEMA) for approval. Excerpts from the CLOMR are included in Appendix I. The site is designed so that the expansion area development will not significantly alter existing permitted drainage patterns.

The stormwater management system will be constructed as the site is developed to the north and south of the existing permit boundary. As the site develops, the permanent erosion control structures (i.e., chutes, swales, perimeter channels, etc.) will be constructed. This will provide for the conveyance of all stormwater generated from the developed portions of the site.

Surface waters will be managed throughout the active life of the landfill to minimize the amount of stormwater that will come in contact with waste or enter the leachate collection system. Surface water will be controlled through the use of diversion berms, stormwater diversion ditches, and stormwater retention and detention ponds. Stormwater that comes into contact with waste at the working face area will be considered contaminated water and treated as leachate. Contaminated water at the working face will be contained by the containment berm as shown in Appendix L.

Contaminated water will be recirculated to the working face or be pumped to a leachate tank before it is sent to an off-site permitted wastewater treatment plant. At no time will contaminated water be allowed to discharge into waters of the United States. The design calculations and the size of the diversion and containment berms required around the active working face for the 25-year, 24-hour storm event are provided in Appendix L. The cells at the landfill are constructed in a manner to keep contaminated water with the working face.

In accordance with OAC 252:515-17-3, the facility has been designed to prevent discharge of pollutants into waters of the State or waters of the United States, as follows:

- No discharge of solid waste or pollutants into or adjacent to waters of the State, including wetlands, that is in violation of the requirements of the Oklahoma Water Quality Management Plan will occur. During the active life of the facility all stormwater coming into contact with solid waste will be retained as contaminated water and treated or disposed of as outlined in Appendix L.
- No discharge of pollutants into or adjacent to waters of the United States, including wetlands, that violates any requirement of the Clean Water Act, including, but not limited to, the OPDES requirements as demonstrated in Appendix L-7 will occur. Waste Management of Oklahoma, Inc., has received a permit from ODEQ to discharge stormwater runoff consistent with an OPDES Multi-sector General Permit for industrial activity. A copy of Multi-sector General Permit is included in Appendix H-6.
- The proposed site development includes regrading of an unnamed tributary of the North Canadian River, which requires the placement of fill into jurisdictional waters of the United States. The USACE regulates all construction activities within the nation's waters (including wetlands). A USACE Section 404 Individual Permit application was submitted to the USACE in April 2015 for the construction activities associated with the proposed site development. Excerpts from the Section 404 Individual Permit Application are included in Appendix Z.

- No discharge of a nonpoint source pollution of waters of the United States, including wetlands, that violates any requirement of an area-wide or statewide Water Quality Management Plan that has been approved under the Federal Clean Water Act, §208 or §319, as amended will occur. Coordination with the Oklahoma Water Resources Board is included in Appendix D, Appendix D-5.

1.3 Erosion and Sedimentation Control Plan

During site development, measures such as best management practices (BMPs) will be employed to control erosion and sedimentation. BMPs may include but are not limited to the use of temporary rock riprap, silt fences, straw bales, check dams, interceptor swales and berms, temporary and permanent seeding and sodding, surface roughening, matting and mulching, sediment traps, and surface wetting for dust control.

Swales and chutes will be constructed upon placement of the final cover. In addition, each final cover area will be seeded upon the completion of final cover placement with introduced and/or native grasses. Mulch may be used to protect the seed against erosive velocities, allowing the native grass seed time to germinate. The vegetation layer and the vegetation support layer will consist of a minimum of 36 inches of earthen material that is capable of sustaining native plant life and will be seeded immediately following the application of the final cover in order to minimize erosion. A soil loss demonstration for the vegetation and vegetation support layer is included in Appendix H-5.

Drainage structures with flow velocities less than 5 feet per second (fps) will be protected from erosion by vegetation established over the structure upon its completion. Structures with flow velocities between 5 fps and 10 fps will be protected from erosion by using turf reinforcement or riprap/gabions (or equivalent material). Structures with flow velocities greater than 10 fps will be protected from erosion by using riprap/gabions (or equivalent material). See Figure H-1-1 for locations of riprap and/or gabion placement. Note that alternative materials such as turf reinforcement matting, concrete riprap, grouted riprap, or HDPE panels designed by a qualified engineer may be used as substitute materials. Velocity calculations for the drainage chutes and swales are presented in Appendix H-3. Velocity calculations for the proposed perimeter channels are provided in Appendix H-4.

The following provides general guidelines of how the erosion control features will minimize sediment discharge from the site:

- Final cover will be placed as the site develops and permanent erosion control structures (chutes, swales, vegetation) are constructed.
- Vegetation will be established on above-grade intermediate cover areas that remain inactive for long periods. The temporary vegetative cover will minimize erosion potential.
- All uncontaminated stormwater runoff from the site, except a small portion on the southwest side of the facility, will be channeled through the perimeter channel system and/or stormwater ponds before being discharged from the

site. Sediment that collects in the channels and stormwater ponds will be removed consistent with the stormwater system maintenance plan presented in Section 1.4 of this appendix.

- The operator is required by its OPDES stormwater permit to keep an updated stormwater pollution prevention plan (SWP3) on site at all times. This plan will contain details of specific measures used to control erosion throughout development of the site.

Runoff volume (25-year, 24-hour storm event) from the active fill area will be contained by the containment berm (see Appendix L, Appendix L-7 – Containment and Diversion Berm Calculations for details).

1.4 Stormwater System Maintenance Plan

Waste Management of Oklahoma, Inc. will restore and repair constructed stormwater systems such as channels, drainage swales, and chutes in the event of wash-out or failure from extreme storm events. In addition, the BMPs discussed in Section 1.3 will also be replaced or repaired in the event of failure. Excessive sediment will be removed, as needed, so that the drainage structures, such as the perimeter channels and stormwater retention and detention ponds, function as designed. Site inspections will be performed by the landfill personnel.

The following items will be evaluated during the inspections:

- Erosion of daily and intermediate cover areas, final cover areas, perimeter ditches, chutes, swales, stormwater detention areas, berms, and other drainage features.
- Settlement of intermediate cover areas, final cover areas, perimeter ditches, chutes, swales, and other drainage features.
- Silt and sediment build-up in perimeter ditches, chutes, swales, and stormwater detention areas.
- Obstructions in drainage features.
- Presence of erosion or sediment discharge at offsite stormwater discharge locations.
- Presence of sediment discharges along the site boundary in areas which have been disturbed by site activities.

Maintenance activities will be performed to correct damaged or deficient items noted during the site inspections. These activities will be performed as soon as possible after the inspection. The time frame for correction of damaged or deficient items will vary based on weather, ground conditions, and other site-specific conditions.

Maintenance activities will consist of the following, as needed:

- Re-establishing vegetation.
- Placement, grading, and stabilization of additional soils in eroded areas or in areas which have settled.
- Replacement or repair of riprap or other structural lining.
- Placement of additional riprap in eroded areas or in areas which have settled.
- Removal of obstructions from drainage structures.
- Removal of silt and sediment build-up from drainage structures.
- Repairs to erosion and sedimentation controls.
- Installation of additional erosion and sedimentation controls.

2 DRAINAGE SYSTEM DESIGN

2.1 Hydrology

Hydrologic analyses were performed to derive design flow rates for the post-development swales and chutes. The Wright-McLaughlin adjustment of the Rational Method, as described in Section 2.1.1, was used to determine the flow rates for the chutes and swales. The swale and chute drainage areas are presented in Appendix H-3, as well as the supporting calculations used to analyze the design of the chutes and swales. Perimeter channels and the stormwater retention and detention ponds were modeled using HEC-1, as discussed in Section 2.1.2. The evaluation of these structures is included in Appendix H-4.

2.1.1 Wright-McLaughlin Adjustment of the Rational Method

Peak flow rates for the post-development condition final cover erosion control structures (e.g., swales and chutes) were computed by the Wright-McLaughlin adjustment of the Rational Method (Rational Method) using the following equation:

$$Q = C_f CIA$$

where:

Q = Flow rate, cubic feet per second (cfs)
C_f = Runoff correction factor
C = Runoff coefficient
I = Rainfall intensity, inches per hour (in/hr)
A = Drainage area, acres (ac)

Runoff coefficients were obtained from Table 1-1 of the Oklahoma Department of Transportation (DOT) *Drainage Design Manual*. These coefficients are a function of land use, percent imperviousness, type of soil, and topography.

The rainfall intensity is determined from the Oklahoma DOT *Drainage Design Manual* as follows:

$$I = a / (t_c + b)^c$$

where:

- a = 95 (constant for Oklahoma County, 25-year storm)
- b = 15.0 (constant for Oklahoma County, 25-year storm)
- c = 0.800 (constant for Oklahoma County, 25-year storm)
- t_c = time of concentration, minutes (min)

Hydrologic analyses were performed to derive design flow rates for the swales, the chutes and the perimeter channels. The swale and chute drainage areas are presented in Appendix H-3, as well as the supporting calculations used to determine the design flow rates in each chute and largest drainage swales in each chute drainage area. Perimeter channel designs are provided in Appendix H-4.

2.1.2 HEC-1

HEC-1 was used to model the post-development conditions to determine peak flows entering and leaving the site. HEC-1 was developed by the USACE Hydrologic Engineering Center to simulate the surface runoff response of a watershed. The HEC-1 model represents a watershed as a network of hydrologic and hydraulic components. The modeling process results in the computation of stream-flow hydrographs at desired locations in the watershed. The hydrologic analysis of for the post-development condition is presented in Appendix H-2.

2.1.2.1 Watershed Subareas and Schematization

The landfill areas and upland drainage areas were delineated to derive a peak flow entering and leaving the site. The drainage areas for the proposed landfill condition are shown in Appendix H-1, Figure H-1-3. Upland drainage areas that drain onto the permit boundary are shown on Figure H-1-2.

2.1.2.2 Time Step

The time step, or the program computation interval, is the time interval that the flow rates for the hydrographs are generated by the program. The time step used for a design storm event is 5 minutes.

2.1.2.3 Hypothetical Precipitation

The hypothetical precipitation of the storm was obtained from National Oceanic and Atmospheric Administration Technical Paper No. 40 Rainfall Frequency Atlas of the United States for the project area. For this analysis, the design storm utilized was the 25-year, 24-hour storm event. The precipitation is assumed to be evenly distributed over the landfill area for each time interval.

2.1.2.4 Precipitation Losses

Precipitation losses (the precipitation that does not contribute to the runoff) for a drainage area are calculated using the Soil Conservation Service (SCS) Curve Number (CN) method. CN is a function of soil cover, land use, and antecedent moisture conditions. A conservative CN of 88 was selected to represent the vegetation layer at the site. A CN of 100 was used for the stormwater ponds. A CN 84 was used for non-landfill areas.

2.1.2.5 Hydrograph Information

Two different types of hydrograph generation methods have been used in this stormwater detention area drainage analysis: Distributed runoff methods and the Snyder unit hydrograph method. Muskingum-Cunge and reservoir routing (stormwater pond storage discharge) methods were used for hydrograph routings. Information for the model parameters used for this project is included in this Appendix H-2 (post-development).

Distributed Runoff Methods

The distributed runoff methods (e.g., kinematic wave) are applicable to small-water catchments with uniform slopes, channels, and drainage patterns. Conceptual drainage elements (overland flow length and channels) are used to represent the actual transfer of runoff within the drainage area in the distributed runoff methods. HEC-1 utilizes Kinematic Wave and Muskingum-Cunge routing to implement this analysis. Landfill final cover areas consist of relatively short (347 feet to 542 feet for top deck areas and 150 feet to 215 feet for the sideslopes for the post-development condition) overland flow lengths that drain into landfill final cover swales.

The Kinematic Wave and the Muskingum-Cunge methods have been used for estimating peak runoff rates for the landfill drainage areas draining to the perimeter channels and stormwater ponds. A hydrograph from the drainage area with simulate channelized flow (e.g., landfill areas to swales, etc.) was developed using the Kinematic Wave method to simulate overland flow and Muskingum-Cunge method to simulate channelized flow. These methods utilize a simplified form of the energy equation and are based on the characteristics of the drainage area, swale, or channel. Both of these methods use physical (measurable) characteristics (e.g., flow lengths, slopes, surface roughness coefficients, channel cross sections) of a watershed to estimate peak discharges.

Snyder Unit Hydrograph Method

The Snyder unit hydrograph method has been used mainly for the upland and non-landfill drainage areas. The method is applicable to basins with a wide range of basin area watershed length, slope, impervious, and conveyance characteristics. Several different methods have been developed to estimate Snyder unit hydrograph parameters (watershed lag and peaking coefficient). The Espey "10-Minute" method was used in this project to estimate Snyder unit hydrograph parameters.

Hydrograph Routing

The hydrographs at the stormwater detention area outlets are generated by routing the inflow through the detention volume for the stormwater ponds. Pond routing was performed by using storage versus discharge relationship for the pond by defining pond surface area versus elevation. Additionally, discharge structures (low level outlet and spillway) characteristics of the stormwater detention areas were used for stormwater detention areas routing.

2.2 Hydraulics

Drainage structure details are provided in Appendix H-1. The existing and proposed perimeter drainage channels will be trapezoidal or V-shaped with 3 (Horizontal) to 1 (Vertical) or 4 (Horizontal) to 1 (Vertical) side slopes. Drainage chutes will be trapezoidal with 8-foot bottom widths and 2 (Horizontal) to 1 (Vertical) side slopes. Drainage swales will be triangular and grass-lined unless noted otherwise on the permit drawings. Chutes are lined with geomembrane to protect against erosion.

The swales, chutes, and proposed perimeter channels are designed to safely convey the 25-year, 24-hour storm. These drainage features will also reduce maintenance at the site after closure by minimizing erosion. Hydraulic analyses of the swales, chutes, and channels are conducted using Manning's uniform flow formula. The uniform flow formula assumption is applicable to long prismatic channels of uniform slopes, as proposed at the site.

The general form of Manning's equation is:

$$V = \frac{1.49R^{(2/3)}S^{(1/2)}}{n}$$

in which

V = Velocity of flow, fps (feet per second)
n = Manning's friction factor
R = $\frac{A}{P}$ = Hydraulic radius, ft (feet)
S = Friction slope for nonuniform flow or channel slope for uniform flow, ft/ft
A = Area of water perpendicular to direction of flow, sf (square feet)
P = Wetted perimeter, ft

Using the relationship

$$Q = VA$$

Manning's equation can also be written as

$$Q = \frac{1.49 A R^{(2/3)} S^{(1/2)}}{n}$$

The uniform flow assumption equates the channel slope to the friction slope; therefore, the slope of the channel can be used for "S" in Manning's formula for computation of uniform flow.

Typical values for Manning's friction factor are presented in the Oklahoma DOT *Drainage Design Manual* (Table 2-1). A value of 0.01 is used for all chutes and 0.04 for the perimeter channels. A value of 0.03 is used for all swales. These values will yield maximum expected depths of flow in the drainage structures after vegetation has been established. Hydraulic calculations for the swales and chutes are presented in Appendix H-3. The perimeter channel designs are provided in Appendix H-4.

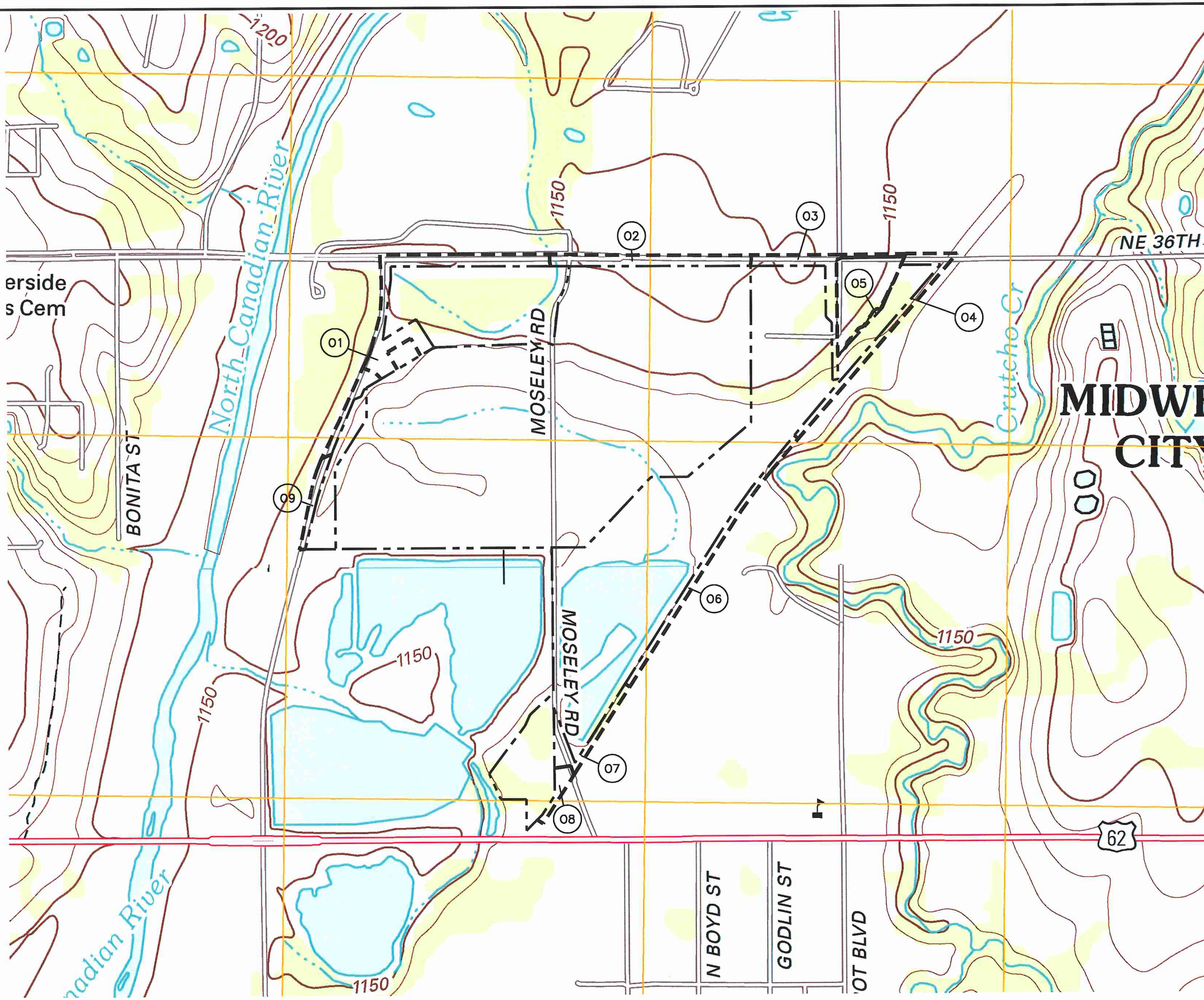
3 EXISTING AND PROPOSED DRAINAGE INFORMATION

This section includes a demonstration to show that the proposed landfill development will not significantly alter the existing permitted drainage patterns. This determination is made by comparing the existing permitted and post-development drainage conditions for the site.

To show that the proposed development does not significantly alter existing drainage patterns, Figures 3-1 and 3-2 have been developed to compare the permitted and post-development conditions. Figure 3-1 shows the off-site areas that flow onto the permit boundary. Figure 3-2 provides a comparison of the discharge locations and flow rates between the existing permitted condition and the proposed condition. In the existing permitted condition there are four retention ponds (P1, P3, P5 and P6) and two detention ponds (P2 and P4). Pond 2, Pond 4, and the area south of Pond 4 discharge out of the permit boundary and into an existing offsite pond located southwest of the landfill. On the west side of the landfill, there is a small area that sheet flows into an existing culvert that discharges offsite.

Similar to the existing permitted condition the proposed condition has three discharge locations that discharge into the existing offsite pond located southwest of the landfill and one discharge point on the west side of the landfill. Consistent with the permitted conditions, the retention ponds located within the site will manage the stormwater. As shown in Figure 3-2, the proposed condition has 5 ponds instead of 6 as in the existing condition. Ponds 3 and 4, in the existing condition, will be connected by a culvert in the post-development condition and will be treated as one pond (Pond 3). Additionally, a spillway will be constructed on the west side of proposed condition Pond 3. The spillway will allow stormwater to be retained in Pond 3 without discharge as show in Figure 3-2. Since Pond 3 will be built as a retention pond in the post-development condition, there will only be one channelized flow discharge location on the southwest side of the proposed permit boundary, instead of two as shown on the existing permitted condition. Although the discharge of Pond 2 increased, the overall discharge from the site to the offsite pond was decreased by 18 cfs. This overall decrease is due to converting detention Pond 4 in the existing condition to a retention pond in the proposed condition, as discussed above. Also, due to the development south of the existing landfill, there will be a small area that will sheet flow from the road into the existing offsite pond. As shown on Figure 3-2, the drainage patterns and peak flow rates are not significantly impacted by the proposed expansion of the landfill. Portions of the development are located in the effective floodplain of the North Canadian River. A CLOMR was prepared for the proposed expansion development and is under review by FEMA.

East Oak currently has a permit from the City that allows the landfill to mechanically discharge stormwater offsite from Pond 1. This permit will continue to be utilized in the post-development condition. Refer to Appendix H-~~6~~ 7 for City approval letter.



N

0 500 1000
SCALE IN FEET

LEGEND

EXISTING PERMIT BOUNDARY

PROPOSED PERMIT BOUNDARY

(04) DRAINAGE AREA DESIGNATION

DRAINAGE AREA BOUNDARY

DRAINAGE BASIN	AREA (ACRES)
01	8.00
02	4.23
03	3.93
04	3.50
05	0.34
06	3.11
07	2.31
08	1.09
09	1.35
010	1.53
OP1	7.16

NOTE:

1. OFF-SITE CONTOUR LINE INFORMATION REPRODUCED FROM USGS MAP (7.5' QUADRANGLE – MIDWEST CITY AND SPENCER, OKLAHOMA, 2012).
2. PERMIT BOUNDARY IS ALSO USED AS DRAINAGE BOUNDARY.

LICENSED PROFESSIONAL ENGINEER
Charles R. Marsh
24599
OKLAHOMA
6-5-15

☐ DRAFT
☒ FOR PERMITTING PURPOSES ONLY
☐ ISSUED FOR CONSTRUCTION

DATE: 06/2015
FILE: 0086-356-11
CAD: FIG 3-1-DRAINAGE.DWG

DRAWN BY: SRF
DESIGN BY: CRM
REVIEWED BY: JVQ

Weaver Consultants Group
CA 3804 PE-06/30/2015

PREPARED FOR
WASTE MANAGEMENT OF OKLAHOMA, INC.

REVISIONS

NO.	DATE	DESCRIPTION

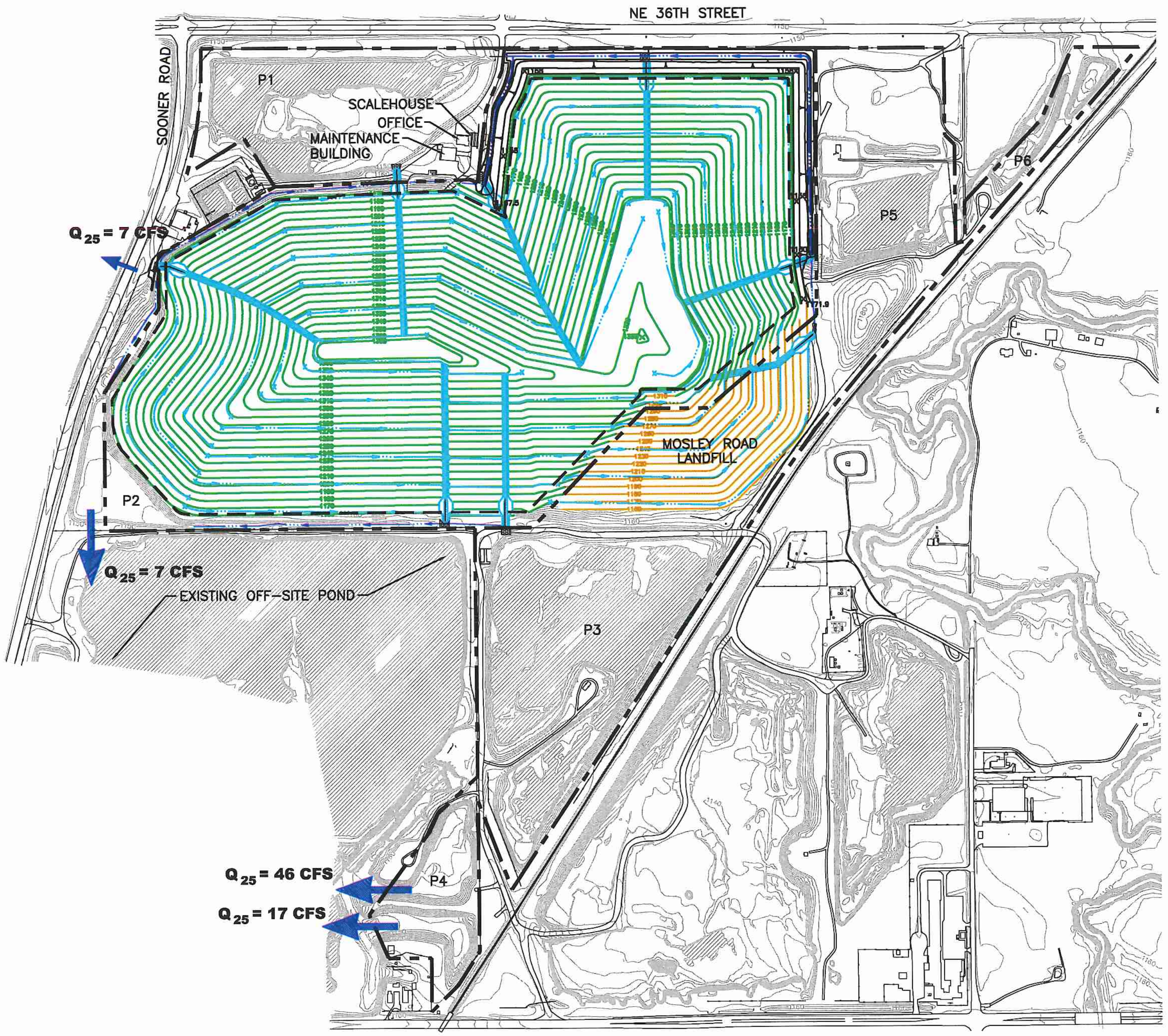
TIER III PERMIT MODIFICATION
OFF-SITE DRAINAGE AREAS

EAST OAK RDF
OKLAHOMA COUNTY, OKLAHOMA

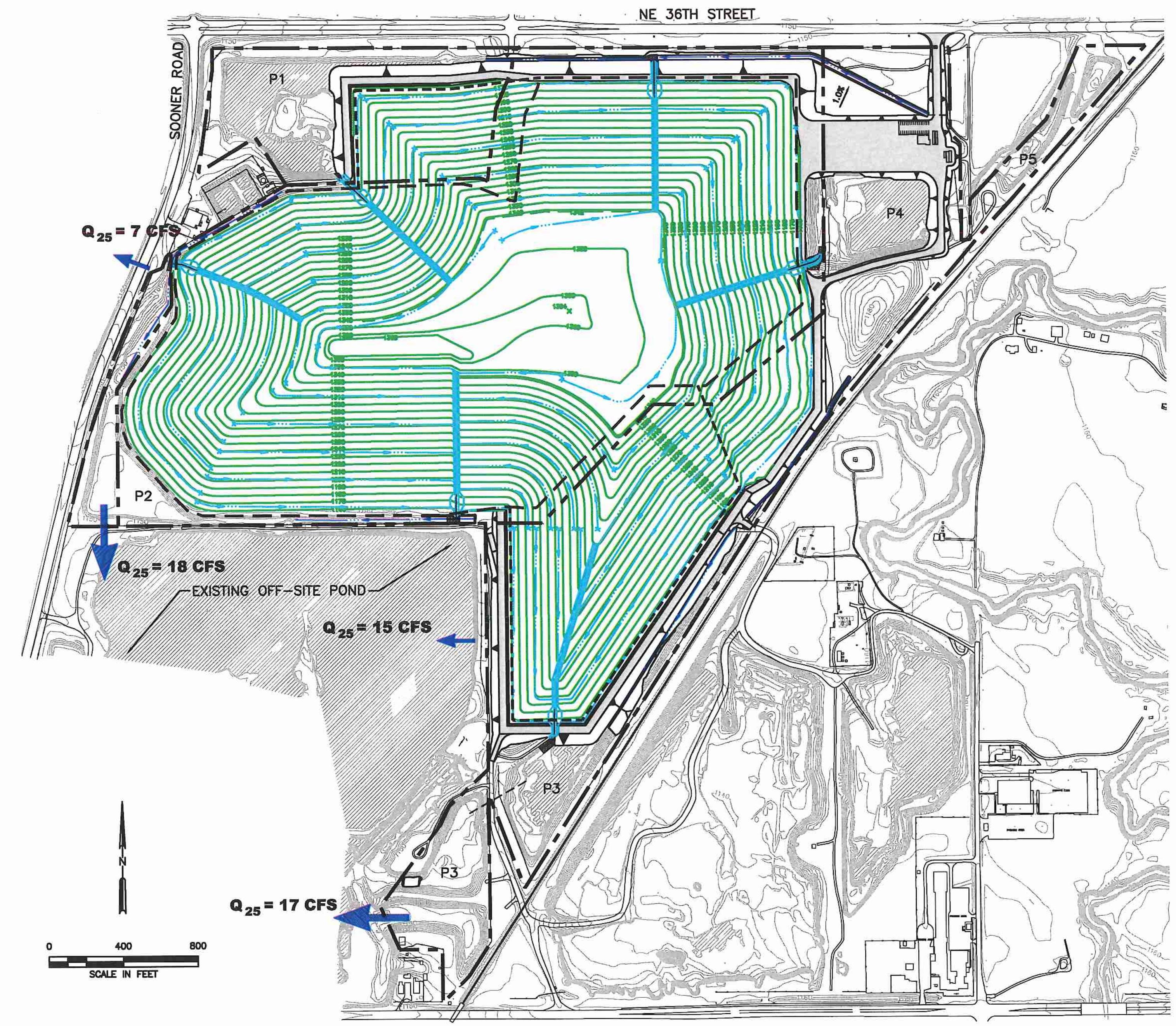
WWW.WCGRP.COM

FIGURE 3-1

G:\0086\356\EXPANSION 2013\APPENDIX H\FIG 3-1-REGIONAL DRAINAGE AREAS.dwg, uacholonu, 1:2



EXISTING PERMITTED DRAINAGE CONDITION



POST-DEVELOPMENT DRAINAGE CONDITION

NOTES:

1. EXISTING CONTOURS AND ELEVATIONS PROVIDED BY DALLAS AERIAL SURVEYS, INC. FROM AERIAL PHOTOGRAPHY FLOWN JANUARY 19, 2014.

LEGEND

- EXISTING PERMIT BOUNDARY
- PROPOSED PERMIT BOUNDARY
- PERMITTED LIMIT OF WASTE
- PROPOSED LIMIT OF WASTE
- 1202 EXISTING CONTOUR
- 1280 FINAL COVER CONTOUR
- DRAINAGE SWALE
- DRAINAGE CHUTE
- FLOW LINE
- SHEET FLOW DISCHARGE LOCATION
- CHANNELIZED FLOW DISCHARGE LOCATION

LICENSED PROFESSIONAL ENGINEER
Charles R. Marsh
24599
OKLAHOMA
6·5·15

☐ DRAFT
☒ FOR PERMITTING PURPOSES ONLY
☐ ISSUED FOR CONSTRUCTION

DATE: 06/2015
FILE: 0086-356-11
CAD: FIG 3-2-COMPARISON.DWG

DRAWN BY: SRF
DESIGN BY: CRM
REVIEWED BY: JVQ

PREPARED FOR
WASTE MANAGEMENT OF OKLAHOMA, INC.

REVISIONS		
NO.	DATE	DESCRIPTION

Weaver Consultants Group
CA 3804 PE-06/30/2015

TIER III PERMIT MODIFICATION
DRAINAGE COMPARISON

EAST OAK RDF
OKLAHOMA COUNTY, OKLAHOMA

WWW.WCGRP.COM

FIGURE 3-2

4 CONCLUSIONS

The surface water management plan for this facility is designed to convey runoff from the 25-year, 24-hour storm runoff volumes. The surface water management plan is designed to minimize surface water flow into the active fill area. The flow due to the development of the disposal facility will be attenuated before discharging into existing off-site drainage structures, except a small portion on the southwest side of the facility which sheet flows off the property. As noted in Section 3, the post-development condition does not result in significant alteration of the existing drainage patterns. Temporary and permanent erosion control measures are provided to minimize potential sediment generated from the site. With this stormwater management system, no adverse impacts to the adjacent surface waters are anticipated.

The following conclusions summarize the results of this drainage analysis:

- The design criteria used for these drainage calculations meet the requirements of the Municipal Sold Waste Management Regulations of the ODEQ.
- Drainage analyses were conducted in accordance with the *Drainage Design Manual*, February 1988, of the Oklahoma DOT and Oklahoma City Requirements.
- Drainage structures (swales, chutes, existing and proposed perimeter channels, and stormwater detention areas) are designed to convey the peak flow rates from the 25-year, 24-hour rainfall event.
- Erosion will be reduced using BMPs during site development.

APPENDIX H-1

FIGURES

LICENSED PROFESSIONAL ENGINEER
Charles R.
Marsh
24599
OKLAHOMA

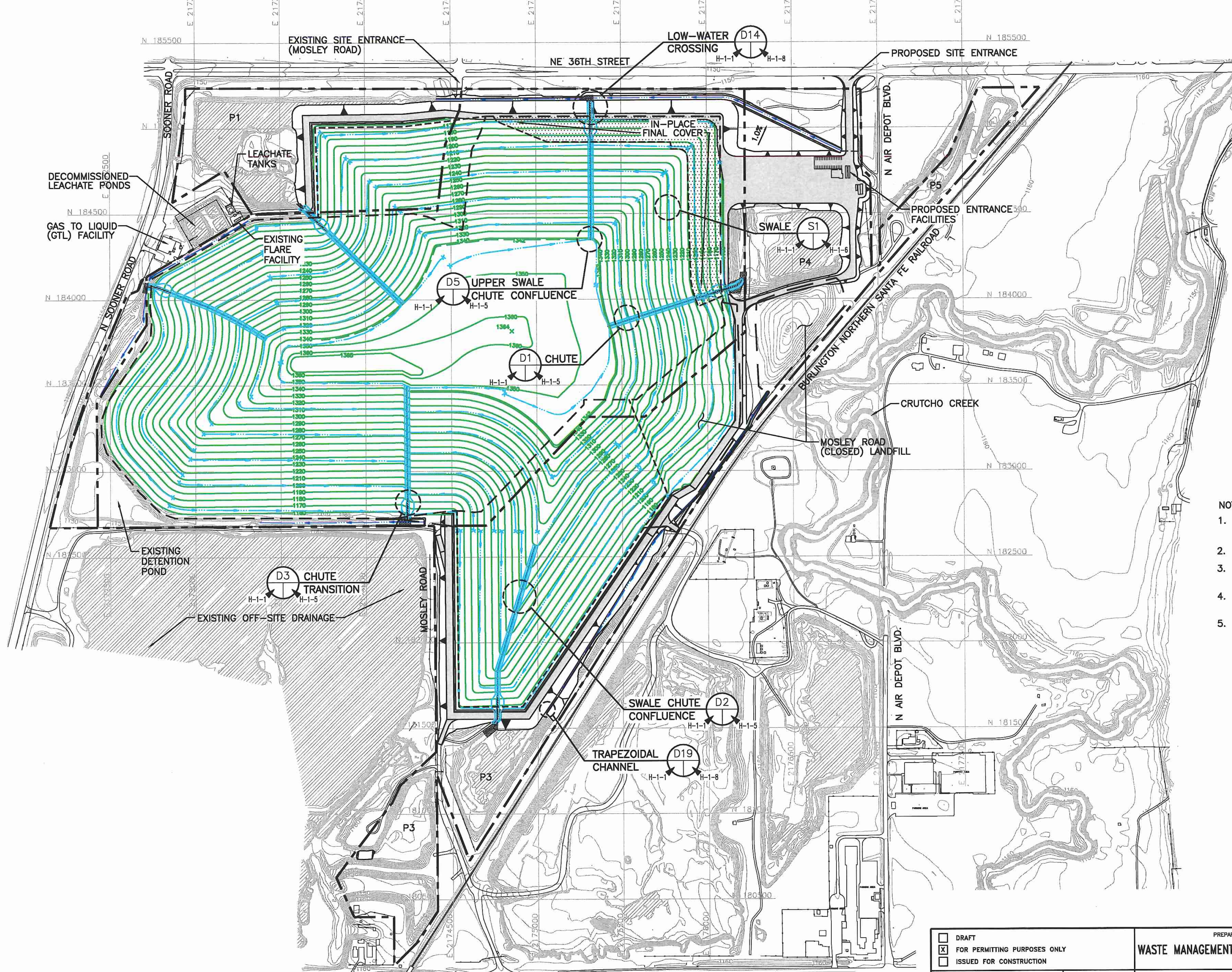
6-5-15

Includes pages H-1-ii through H-1-10

CONTENTS

LICENSED PROFESSIONAL ENGINEER
Charles R.
Marsh
24599
OKLAHOMA

6.3.15



0 300 600
SCALE IN FEET

LEGEND

	EXISTING PERMIT BOUNDARY
	PROPOSED PERMIT BOUNDARY
	PERMITTED LIMITS OF WASTE
	PROPOSED LIMITS OF WASTE
	MOSLEY ROAD LANDFILL LIMITS OF WASTE
N 183000	STATE PLANE GRID COORDINATE
1180	EXISTING CONTOUR
1280	PROPOSED FINAL COVER CONTOUR
	PROPOSED DRAINAGE SWALE
	PROPOSED DRAINAGE CHUTE
	PROPOSED DRAINAGE CHANNEL
	IN-PLACE FINAL COVER

NOTE:

1. EXISTING CONTOURS AND ELEVATIONS PROVIDED BY DALLAS AERIAL SURVEYS, INC. FROM AERIAL PHOTOGRAPHY FLOWN JANUARY 19, 2014.
2. SWALE AND CHUTE DESIGNS ARE PRESENTED IN APPENDIX H-3.
3. PERIMETER CHANNEL, CULVERT, AND DETENTION POND DESIGNS ARE PRESENTED IN APPENDIX H-4.
4. FINAL COVER EROSION CONTROL STRUCTURE DESIGN IS PRESENTED IN APPENDIX H-5.
5. TYPICAL LANDFILL SIDE SLOPES ARE 4(H):1(V) AND TYPICAL TOP SLOPE IS 4 PERCENT.

LICENSED PROFESSIONAL ENGINEER
Charles R. Marsh
24599
OKLAHOMA

6-5-15

- [ ] DRAFT
- [x] FOR PERMITTING PURPOSES ONLY
- [ ] ISSUED FOR CONSTRUCTION

DATE: 06/2015
FILE: 0086-356-11
CAD: FIG H-1-1-DRAINAGE.DWG

DRAWN BY: SRF
DESIGN BY: CRM
REVIEWED BY: JVQ

PREPARED FOR
WASTE MANAGEMENT OF OKLAHOMA, INC.

REVISIONS

NO.	DATE	DESCRIPTION

Weaver Consultants Group
CA 3804 PE-06/30/2015

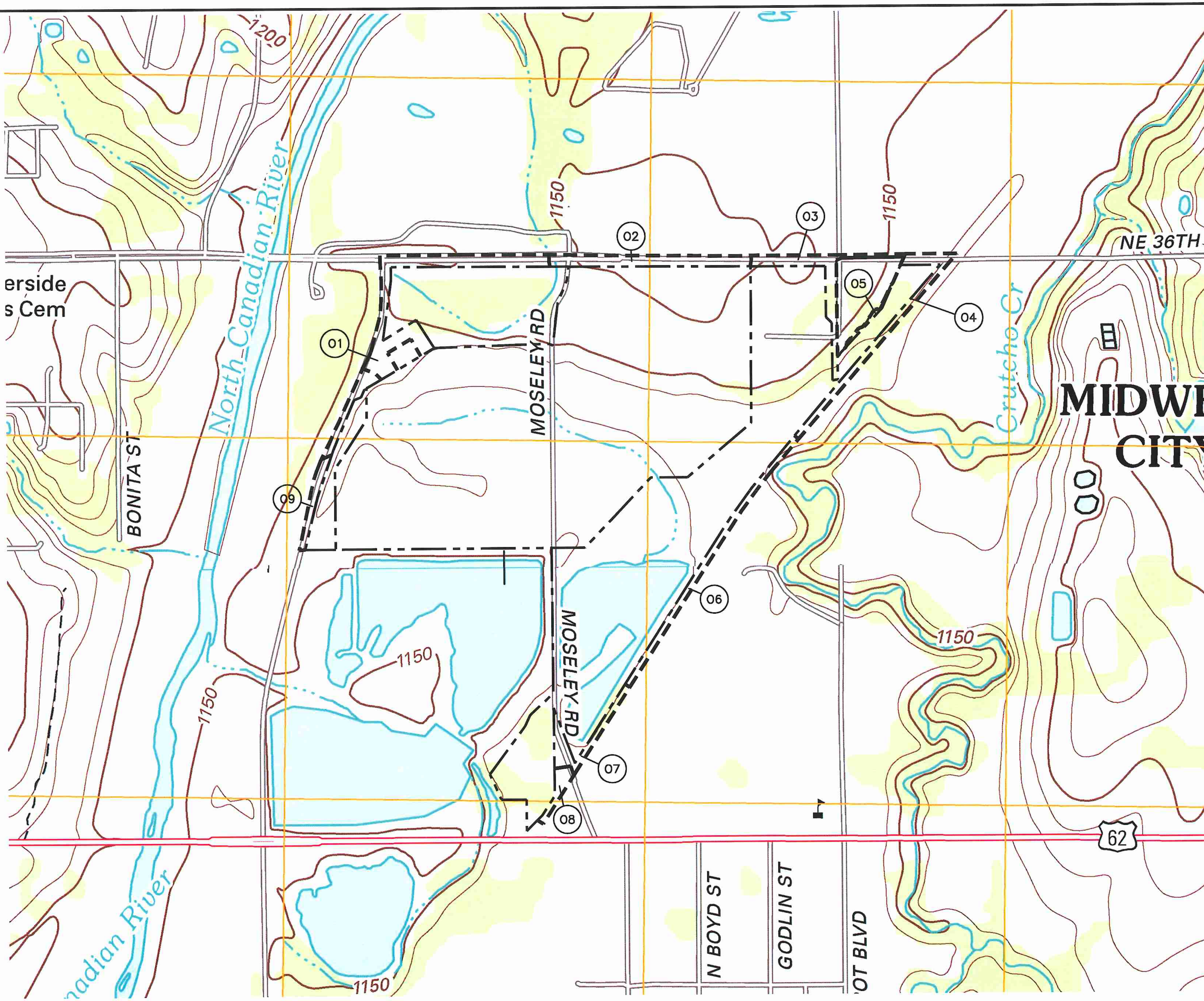
TIER III PERMIT MODIFICATION POST-DEVELOPMENT DRAINAGE PLAN

EAST OAK RDF
OKLAHOMA COUNTY, OKLAHOMA

WWW.WCGRP.COM

FIGURE H-1-1

O:\0086\356\EXPANSION 2013\APPENDIX H\FIG H-1-1-POST DEVELOPMENT DRAINAGE AREAS.dwg, uacholonu, 1:2



0 500 1000
SCALE IN FEET

LEGEND

- EXISTING PERMIT BOUNDARY
- PROPOSED PERMIT BOUNDARY
- (04) DRAINAGE AREA DESIGNATION
- DRAINAGE AREA BOUNDARY

DRAINAGE BASIN	AREA (ACRES)
01	8.00
02	4.23
03	3.93
04	3.50
05	0.34
06	3.11
07	2.31
08	1.09
09	1.35
010	1.53
OP1	7.16

NOTE:

1. OFF–SITE CONTOUR LINE INFORMATION REPRODUCED FROM USGS MAP (7.5' QUADRANGLE – MIDWEST CITY AND SPENCER, OKLAHOMA, 2012).
2. PERMIT BOUNDARY IS ALSO USED AS DRAINAGE BOUNDARY.

LICENSED PROFESSIONAL ENGINEER
Charles R. Marsh
24599
OKLAHOMA
6-5-15

☐ DRAFT
☒ FOR PERMITTING PURPOSES ONLY
☐ ISSUED FOR CONSTRUCTION

DATE: 06/2015
FILE: 0086–356–11
CAD: FIG H–1–2–DRAINAGE.DWG

DRAWN BY: SRF
DESIGN BY: CRM
REVIEWED BY: JVQ

PREPARED FOR
WASTE MANAGEMENT OF OKLAHOMA, INC.

REVISIONS

NO.	DATE	DESCRIPTION

Weaver Consultants Group
CA 3804 PE–06/30/2015

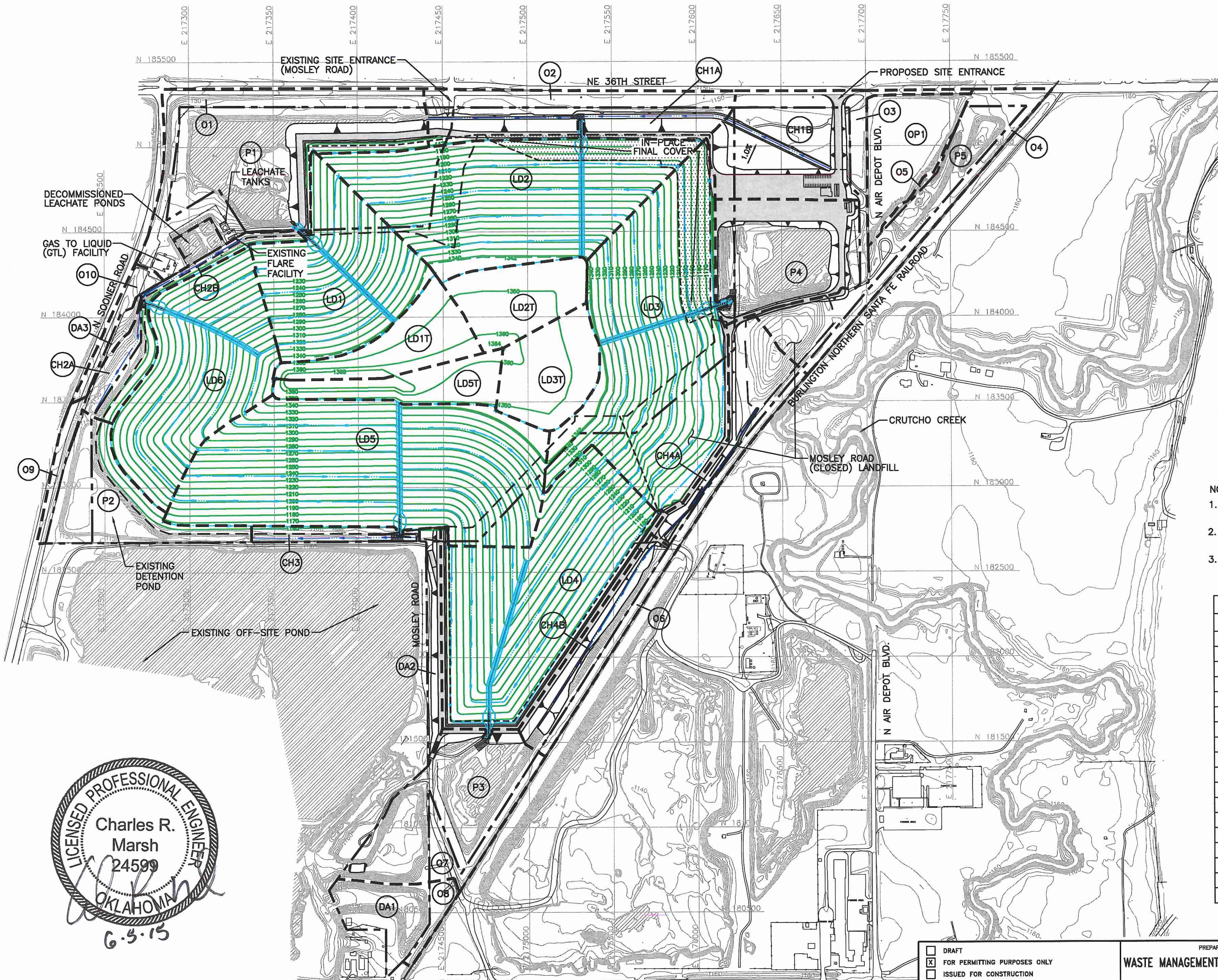
TIER III PERMIT MODIFICATION
OFF–SITE DRAINAGE AREAS

EAST OAK RDF
OKLAHOMA COUNTY, OKLAHOMA

WWW.WCGRP.COM

FIGURE H–1–2

O:\0086\356\EXPANSION 2013\APPENDIX H\FIG H-1-2-OFFSITE DRAINAGE AREA PLAN.dwg, uacholonu, 1:2



N

0 300 600

SCALE IN FEET

LEGEND

- EXISTING PERMIT BOUNDARY
- PROPOSED PERMIT BOUNDARY
- PERMITTED LIMITS OF WASTE
- PROPOSED LIMITS OF WASTE
- MOSLEY ROAD LANDFILL LIMITS OF WASTE
- N 183000 — STATE PLANE GRID COORDINATE
- 1180 — EXISTING CONTOUR
- 1280 — PROPOSED FINAL COVER CONTOUR
- PROPOSED DRAINAGE SWALE
- PROPOSED DRAINAGE CHUTE
- PERIMETER DRAINAGE CHANNEL
- IN-PLACE FINAL COVER
- DRAINAGE AREA BOUNDARY
- (CH3) DRAINAGE AREA DESIGNATION

NOTE:

1. EXISTING CONTOURS AND ELEVATIONS PROVIDED BY DALLAS AERIAL SURVEYS, INC. FROM AERIAL PHOTOGRAPHY FLOWN JANUARY 19, 2014.
2. TYPICAL LANDFILL SIDE SLOPES ARE 4(H):1(V) AND TYPICAL TOP SLOPE IS 4 PERCENT.
3. PERMIT BOUNDARY IS ALSO USED AS DRAINAGE BOUNDARY.

PROPOSED DRAINAGE AREAS

DRAINAGE AREA	AREA (ACRES)	DRAINAGE AREA	AREA (ACRES)
DA1	4.31	LD3	31.81
DA2	2.58	LD3T	7.21
DA3	0.62	LD4	27.14
O1	8.00	LD5	35.26
O2	4.23	LD5T	5.49
O3	3.93	LD6	19.24
O4	3.50	CH1B	9.95
O5	0.34	CH1A	7.54
O6	3.11	CH2B	2.56
O7	2.31	CH2A	3.23
O8	1.09	CH3	1.97
O9	1.35	CH4A	5.85
O10	1.53	CH4B	4.90
OP1	7.16	P1	16.26
LD1	16.58	P2	8.57
LD1T	6.70	P3	11.98
LD2	26.90	P4	12.02
LD2T	6.90	P5	8.41

LICENSED PROFESSIONAL ENGINEER
Charles R. Marsh
24599
OKLAHOMA
6·5·15

☐ DRAFT
☒ FOR PERMITTING PURPOSES ONLY
☐ ISSUED FOR CONSTRUCTION

DATE: 06/2015
FILE: 0086-356-11
CAD: FIG H-1-3-DRAINAGE.DWG

DRAWN BY: SRF
DESIGN BY: CRM
REVIEWED BY: JVQ

Weaver Consultants Group
CA 3804 PE-06/30/2015

PREPARED FOR
WASTE MANAGEMENT OF OKLAHOMA, INC.

REVISIONS

NO.	DATE	DESCRIPTION

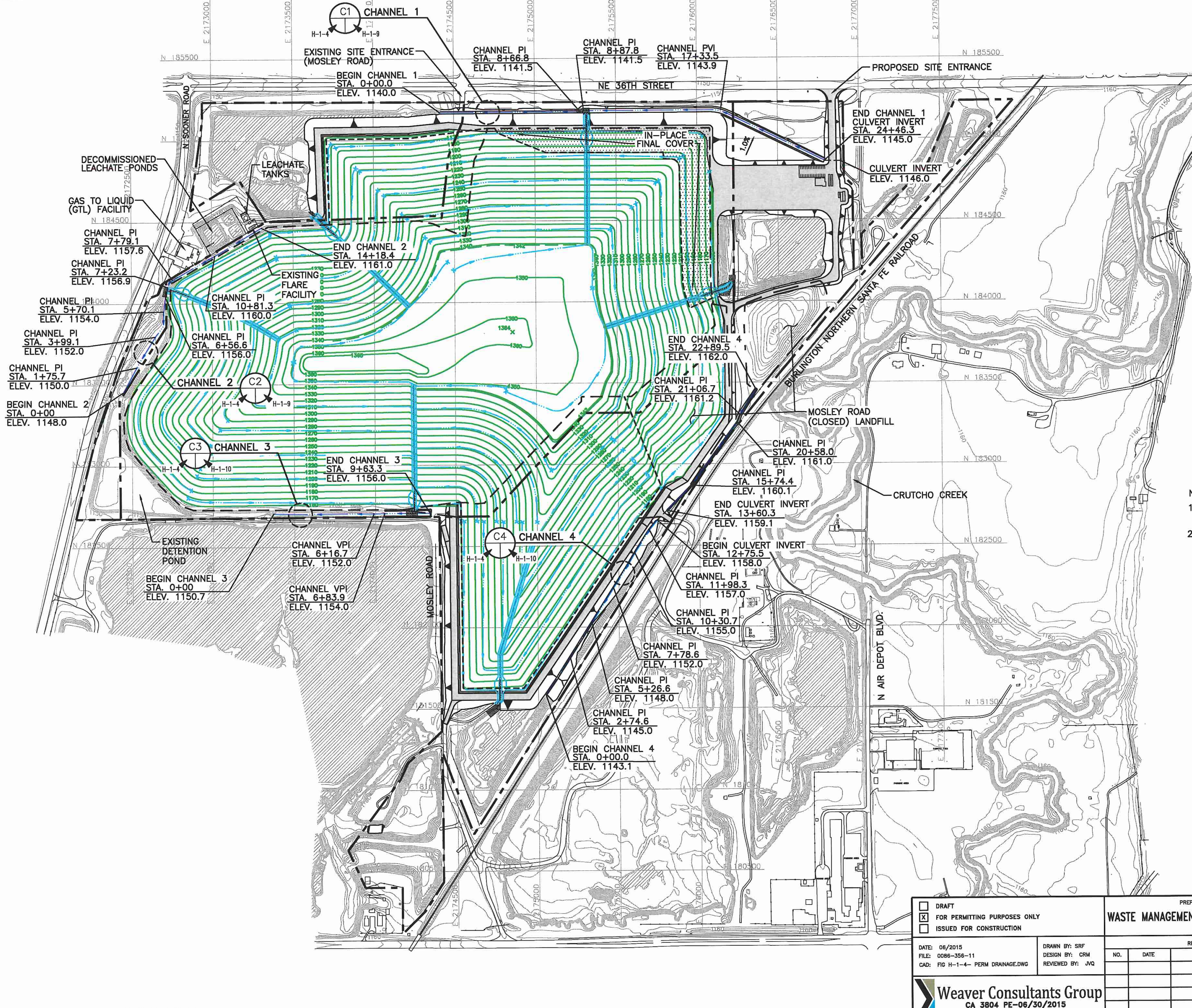
TIER III PERMIT MODIFICATION
POST-DEVELOPMENT DRAINAGE AREAS

EAST OAK RDF
OKLAHOMA COUNTY, OKLAHOMA

WWW.WCGRP.COM

FIGURE H-1-3

O:\0086\356\EXPANSION 2013\APPENDIX H\FIG H-1-3-POST DEVELOPMENT DRAINAGE AREAS.dwg, uacholonu, 1:2



LEGEND

- EXISTING PERMIT BOUNDARY
- PROPOSED PERMIT BOUNDARY
- PERMITTED LIMITS OF WASTE
- PROPOSED LIMITS OF WASTE
- MOSLEY ROAD LANDFILL LIMITS OF WASTE
- N 183000 STATE PLANE GRID COORDINATE
- 1180 EXISTING CONTOUR
- 1280 PROPOSED FINAL COVER CONTOUR
- PROPOSED DRAINAGE SWALE
- PROPOSED DRAINAGE CHUTE
- PERIMETER DRAINAGE CHANNEL
- IN-PLACE FINAL COVER

NOTE:

1. EXISTING CONTOURS AND ELEVATIONS PROVIDED BY DALLAS AERIAL SURVEYS, INC. FROM AERIAL PHOTOGRAPHY FLOWN JANUARY 19, 2014.
2. TYPICAL LANDFILL SIDE SLOPES ARE 4(H):1(V) AND TYPICAL TOP SLOPE IS 4 PERCENT.

LICENSED PROFESSIONAL ENGINEER
Charles R. Marsh
24599
OKLAHOMA
6.5.15

- [ ] DRAFT
- [x] FOR PERMITTING PURPOSES ONLY
- [ ] ISSUED FOR CONSTRUCTION

DATE: 06/2015
FILE: 0086-356-11
CAD: FIG H-1-4- PERM DRAINAGE.DWG

DRAWN BY: SRF
DESIGN BY: CRM
REVIEWED BY: JVQ

PREPARED FOR
WASTE MANAGEMENT OF OKLAHOMA, INC.

REVISIONS

NO.	DATE	DESCRIPTION

Weaver Consultants Group
CA 3804 PE-06/30/2015

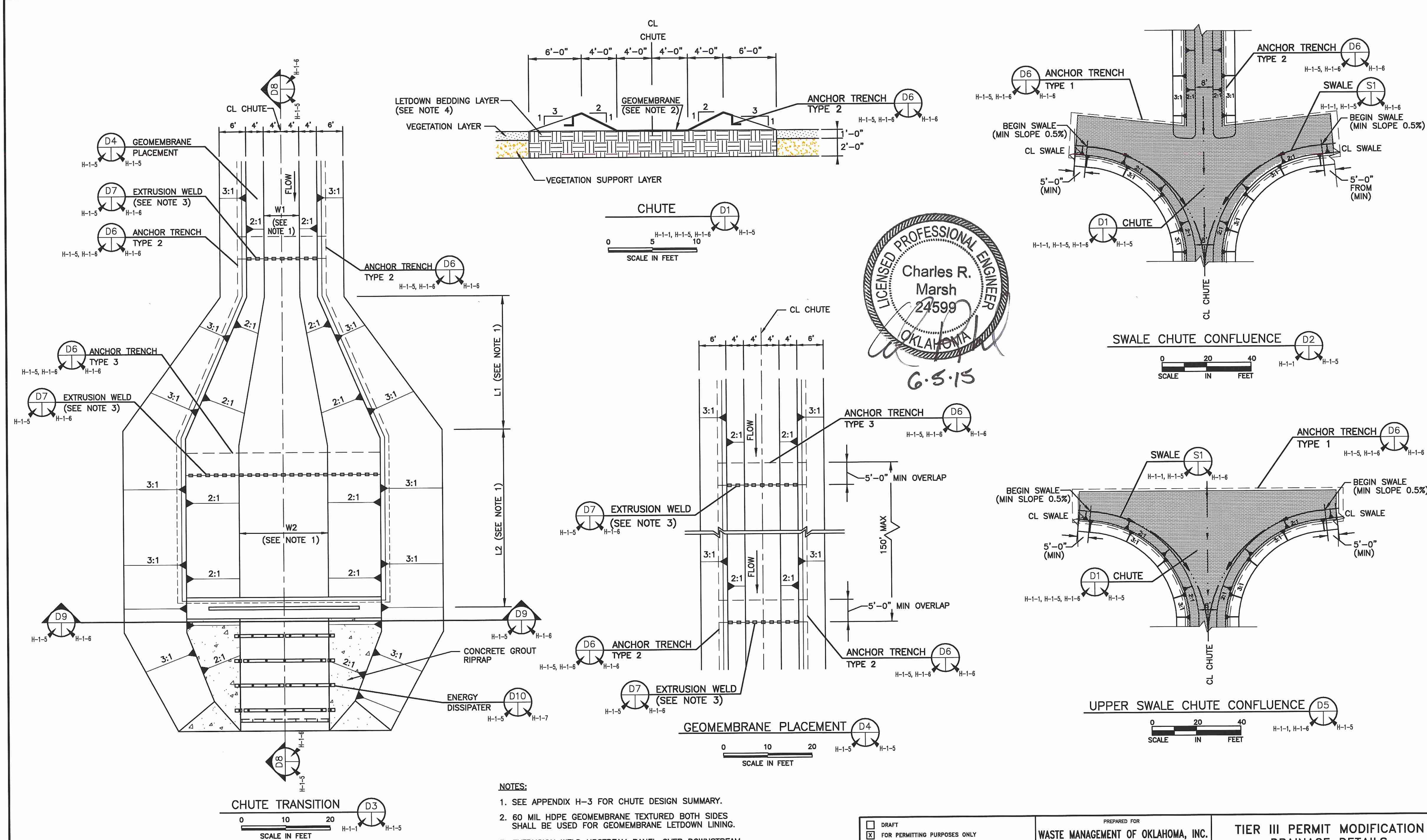
TIER III PERMIT MODIFICATION
PERIMETER DRAINAGE PLAN

EAST OAK RDF
OKLAHOMA COUNTY, OKLAHOMA

WWW.WCGRP.COM

FIGURE H-1-4

O:\0086\356\EXPANSION 2013\APPENDIX H\FIG H-1-4-PERIMETER DRAINAGE PLAN.dwg, uacholonu, 1:2

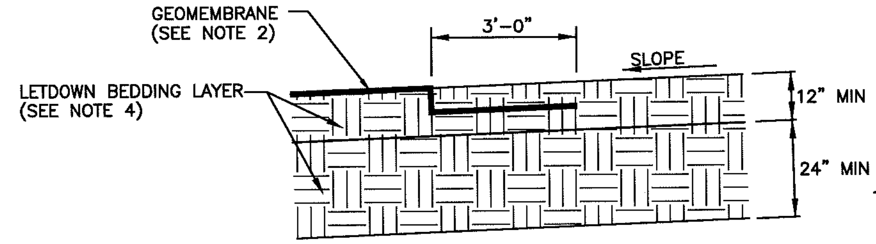


NOTES:

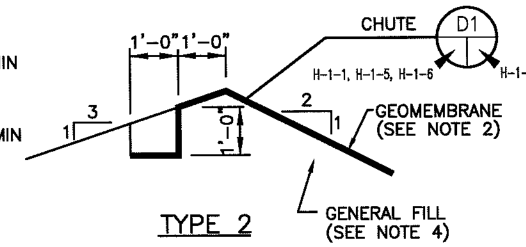
1. SEE APPENDIX H-3 FOR CHUTE DESIGN SUMMARY.
2. 60 MIL HDPE GEOMEMBRANE TEXTURED BOTH SIDES SHALL BE USED FOR GEOMEMBRANE LETDOWN LINING.
3. EXTRUSION WELD UPSTREAM PANEL OVER DOWNSTREAM PANEL USING 1'-0" LONG EXTRUSION WELD WITH A SPACING OF 1'-0" BETWEEN EACH WELD.
4. SOIL PLACED UNDER GEOMEMBRANE LETDOWN AND CONCRETE DISSIPATER SHALL NOT CONTAIN TOPSOIL THAT WILL BE USED FOR VEGETATION LAYER.

☐ DRAFT ☒ FOR PERMITTING PURPOSES ONLY ☐ ISSUED FOR CONSTRUCTION	PREPARED FOR WASTE MANAGEMENT OF OKLAHOMA, INC.		TIER III PERMIT MODIFICATION DRAINAGE DETAILS
DATE: 06/2015 FILE: 0086-356-11 CAD: FIG H-1-5-DETAILS.DWG	DRAWN BY: SRF DESIGN BY: CRM REVIEWED BY: JVQ	REVISIONS NO. DATE DESCRIPTION	EAST OAK RDF OKLAHOMA COUNTY, OKLAHOMA
Weaver Consultants Group CA 3804 PE-06/30/2015			WWW.WCGRP.COM | FIGURE H-1-5

O:\0086\356\EXPANSION 2013\APPENDIX H\FIG H-1-5-DRAINAGE DETAILS.dwg, uacholonu, 1:2



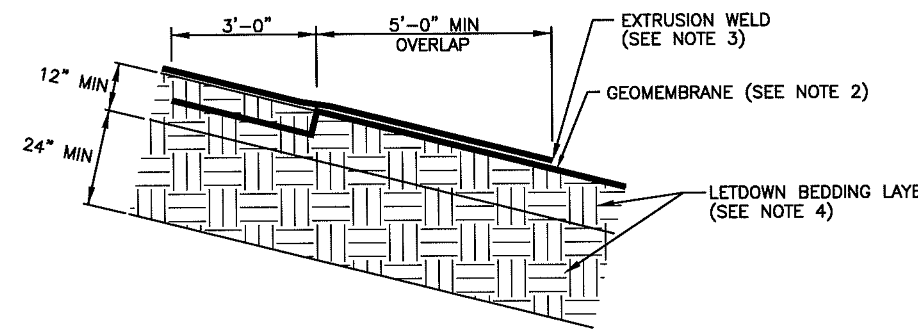
TYPE 1



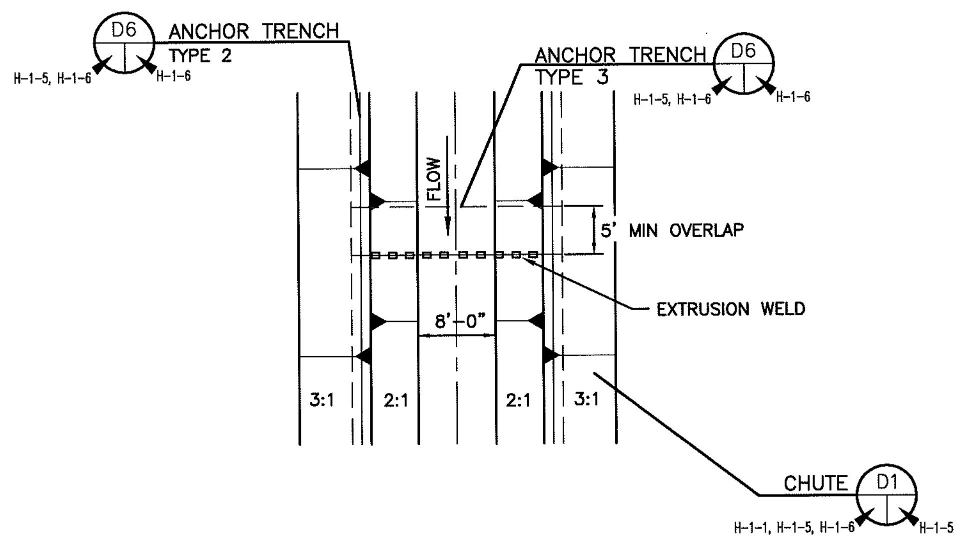
TYPE 2

ANCHOR TRENCH D6 H-1-5, H-1-6 H-1-6

0 2 4 SCALE IN FEET

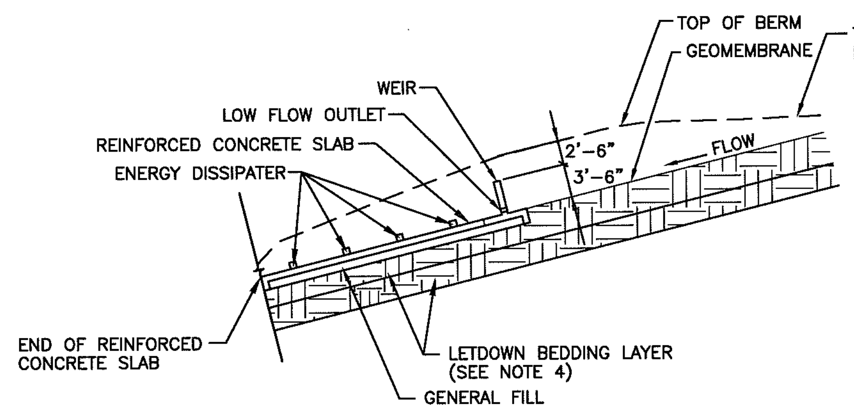


TYPE 3



EXTRUSION WELD (TYP) D7 H-1-5 H-1-6

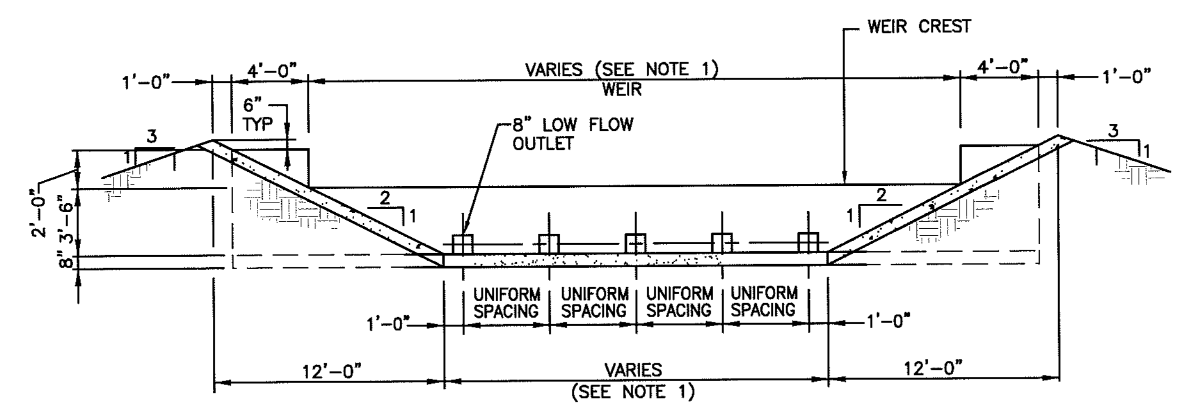
0 10 20 SCALE IN FEET



LONGITUDINAL SECTION D8 H-1-5 H-1-6

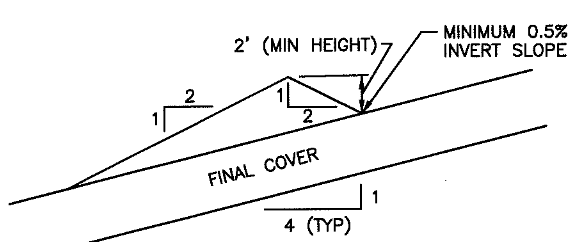
0 10 20 SCALE IN FEET

LICENSED PROFESSIONAL ENGINEER
Charles R. Marsh
24599
OKLAHOMA
6.5.15



SECTION D9 H-1-5 H-1-6

0 5 10 SCALE IN FEET



SWALE S1 H-1-1, H-1-5 H-1-6

0 5 10 SCALE IN FEET

NOTES:

1. SEE APPENDIX H-3 FOR CHUTE DESIGN SUMMARY.
2. 60 MIL HDPE GEOMEMBRANE TEXTURED BOTH SIDES SHALL BE USED FOR GEOMEMBRANE LETDOWN LINING.
3. EXTRUSION WELD UPSTREAM PANEL OVER DOWNSTREAM PANEL USING 1'-0" LONG EXTRUSION WELD WITH A SPACING OF 1'-0" BETWEEN EACH WELD.
4. SOIL PLACED UNDER GEOMEMBRANE LETDOWN AND CONCRETE DISSIPATER SHALL NOT CONTAIN TOPSOIL THAT WILL BE USED FOR VEGETATION LAYER.

☐ DRAFT
☒ FOR PERMITTING PURPOSES ONLY
☐ ISSUED FOR CONSTRUCTION

DATE: 06/2015
FILE: 0086-356-11
CAD: FIG H-1-6-DETAILS.DWG

DRAWN BY: SRF
DESIGN BY: CRM
REVIEWED BY: JVQ

PREPARED FOR
WASTE MANAGEMENT OF OKLAHOMA, INC.

REVISIONS		
NO.	DATE	DESCRIPTION

Weaver Consultants Group
CA 3804 PE-06/30/2015

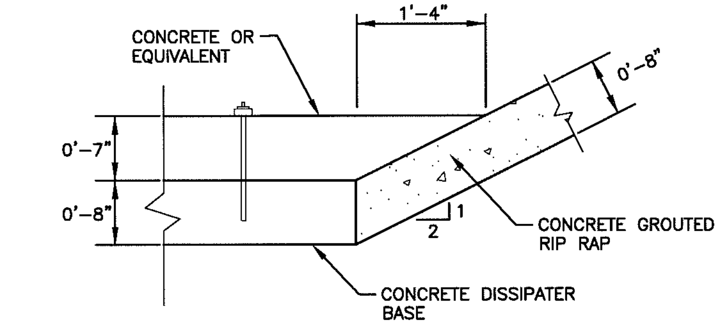
TIER III PERMIT MODIFICATION
DRAINAGE DETAILS

EAST OAK RDF
OKLAHOMA COUNTY, OKLAHOMA

WWW.WCGRP.COM

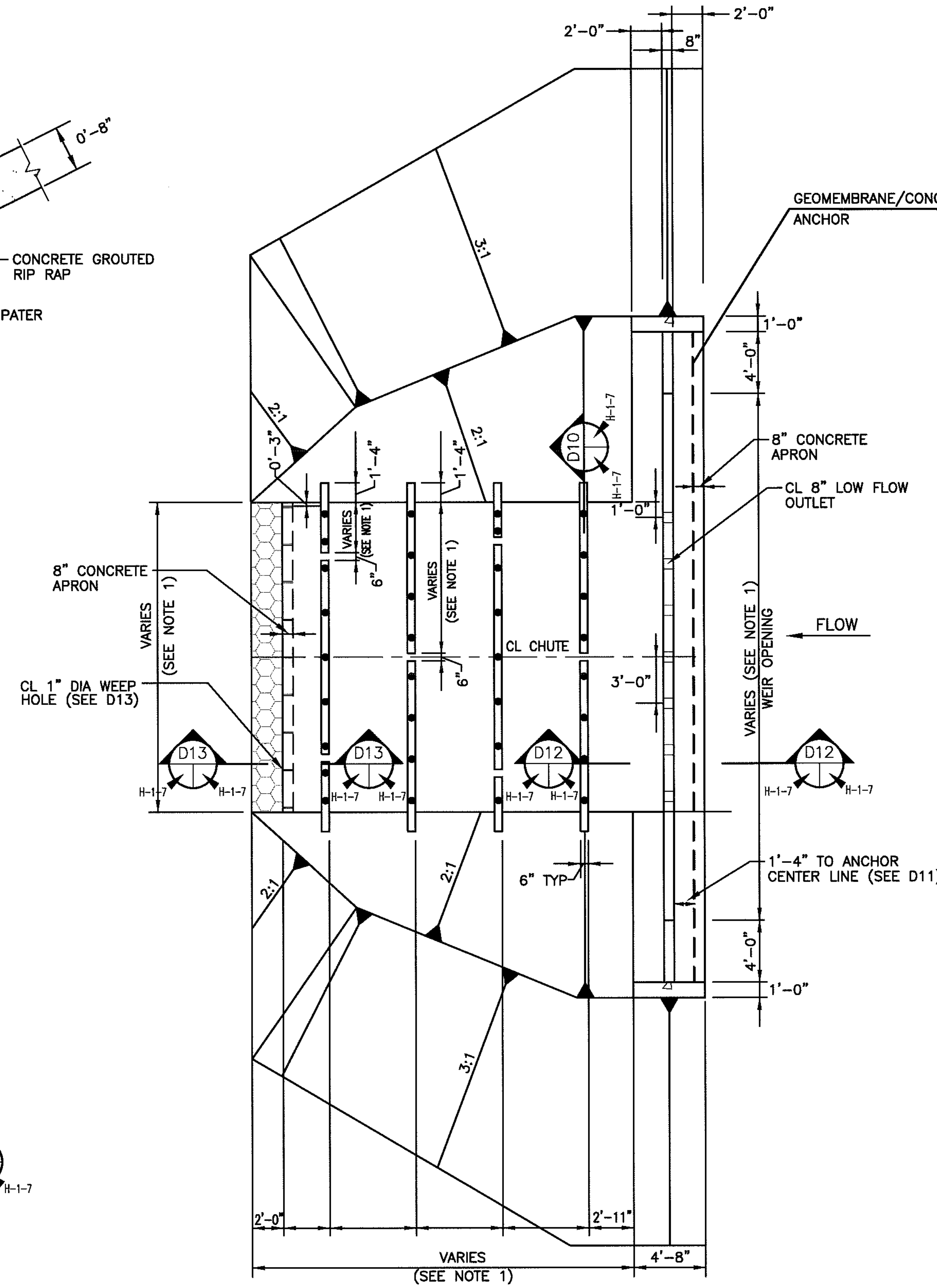
FIGURE H-1-6

O:\0086\356\EXPANSION 2013\APPENDIX H\FIG H-1-6 DRAINAGE DETAILS.dwg, uacholonu, 1:2



DISSIPATER BLOCK CROSS-SECTION D10 H-1-7 H-1-7

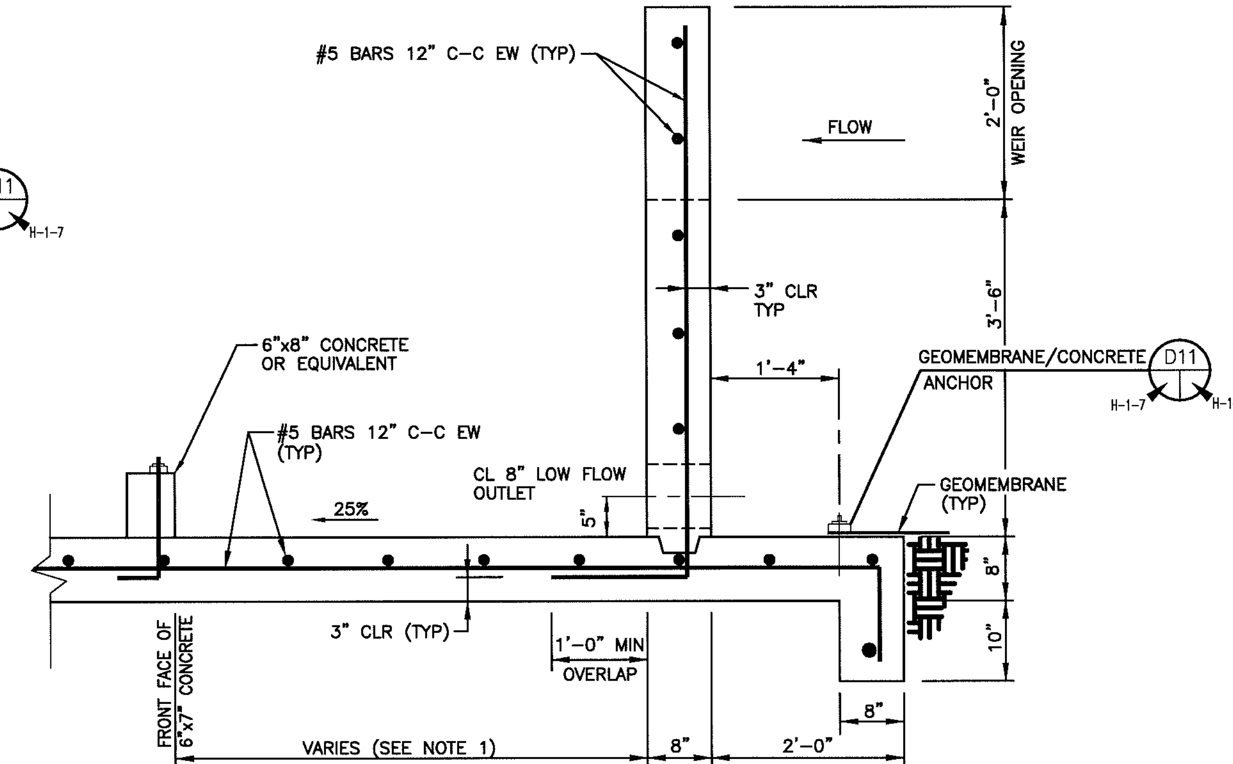
0 1 2 SCALE IN FEET



TYPICAL ENERGY DISSIPATER DETAIL D10 H-1-5 H-1-7

(SEE NOTES)

0 5 10 SCALE IN FEET

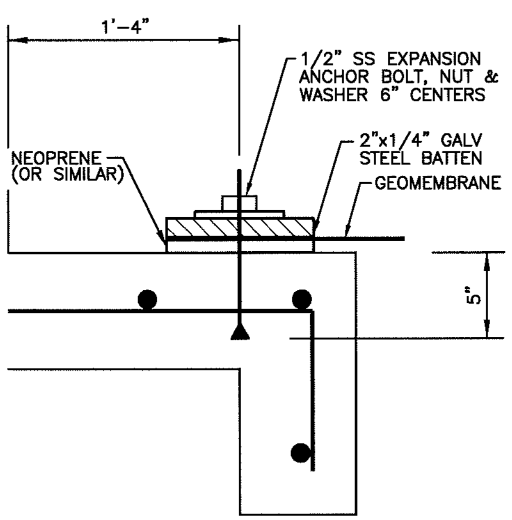


WEIR SECTION D12 H-1-7 H-1-7

0 1 2 SCALE IN FEET

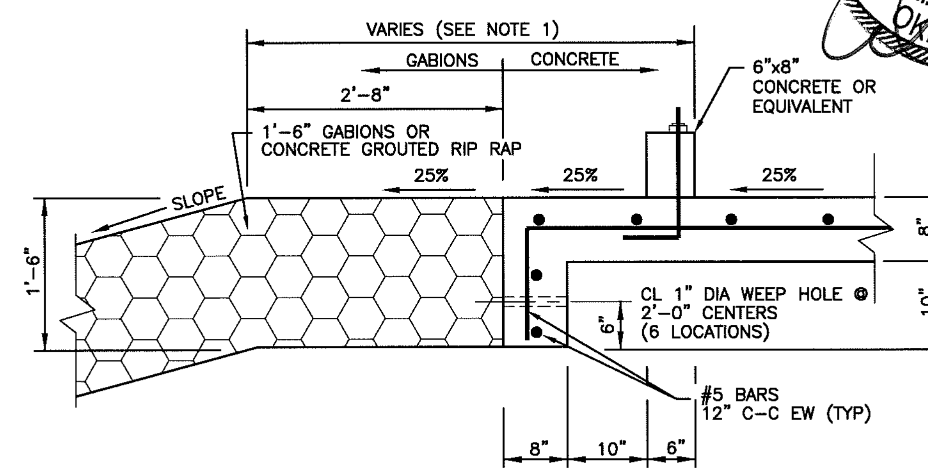
LICENSED PROFESSIONAL ENGINEER
Charles R. Marsh
24599
OKLAHOMA

6·5·15



GEOMEMBRANE/CONCRETE ANCHOR D11 H-1-7 H-1-7

NTS



DISSIPATER SECTION D13 H-1-7 H-1-7

0 1 2 SCALE IN FEET

NOTES:

1. SEE APPENDIX H-3 FOR CHUTE DESIGN SUMMARY.
2. CHUTE BOTTOM DOWNSTREAM OF WEIR SHALL BE LINED WITH 3,500 PSI REINFORCED CONCRETE AS SHOWN IN WEIR SECTION DETAIL.
3. SIDESLOPES DOWNSTREAM OF WEIR WILL BE LINED WITH CONCRETE GROUT RIP RAP OR AN ENGINEER APPROVED EQUIVALENT.
4. GEOMEMBRANE/CONCRETE ANCHORS (D11) WILL BE PLACED WITH 6" SPACING AT THE BOTTOM AND SIDESLOPES.

☐ DRAFT
☒ FOR PERMITTING PURPOSES ONLY
☐ ISSUED FOR CONSTRUCTION

DATE: 06/2015
FILE: 0086-356-11
CAD: FIG H-1-7-DETAILS.DWG

DRAWN BY: SRF
DESIGN BY: CRM
REVIEWED BY: JVQ

PREPARED FOR
WASTE MANAGEMENT OF OKLAHOMA, INC.

REVISIONS

NO.	DATE	DESCRIPTION

Weaver Consultants Group
CA 3804 PE-06/30/2015

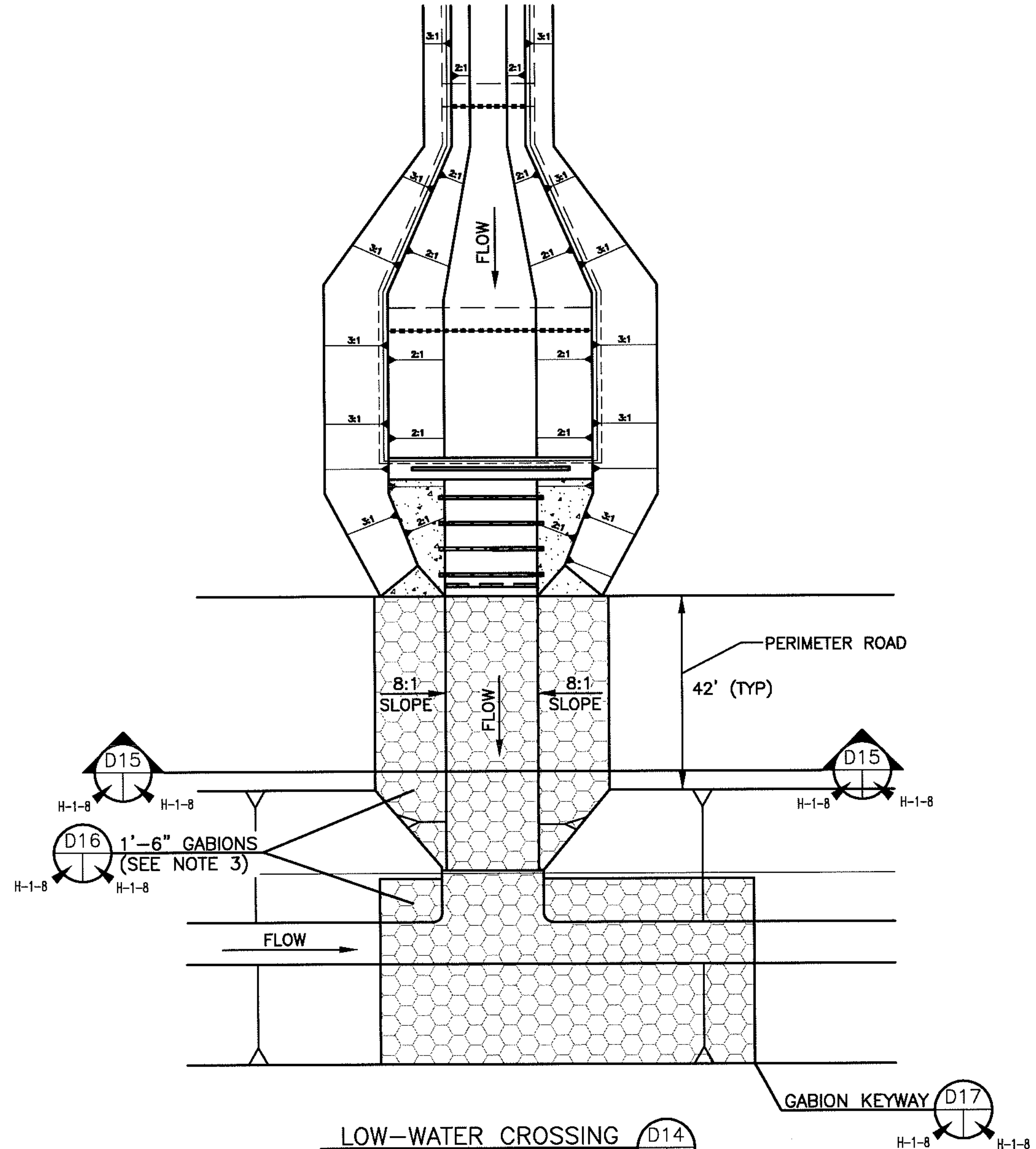
TIER III PERMIT MODIFICATION
DRAINAGE DETAILS

EAST OAK RDF
OKLAHOMA COUNTY, OKLAHOMA

WWW.WCGRP.COM

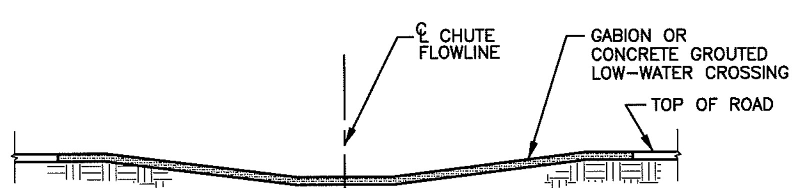
FIGURE H-1-7

G:\0086\356\EXPANSION 2013\APPENDIX H\FIG H-1-7 DRAINAGE DETAILS.dwg, uacholonu, 1:2



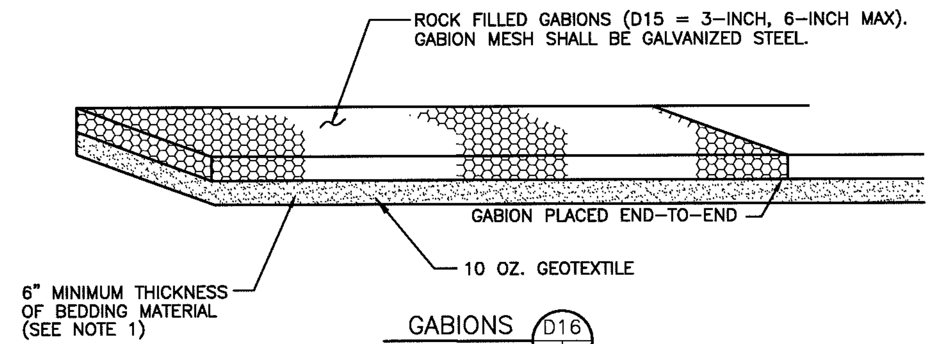
LOW-WATER CROSSING D14 H-1-1 H-1-8

0 20 40 SCALE IN FEET



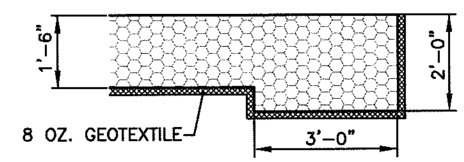
LOW-WATER CROSSING SECTION D15 H-1-8 H-1-8

0 10 20 SCALE IN FEET



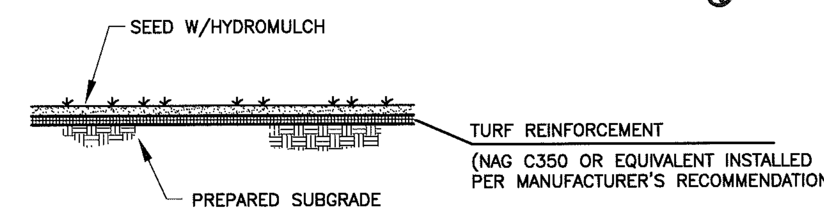
GABIONS D16 H-1-5,H-1-8,H-1-9 H-1-8

0 2 4 SCALE IN FEET

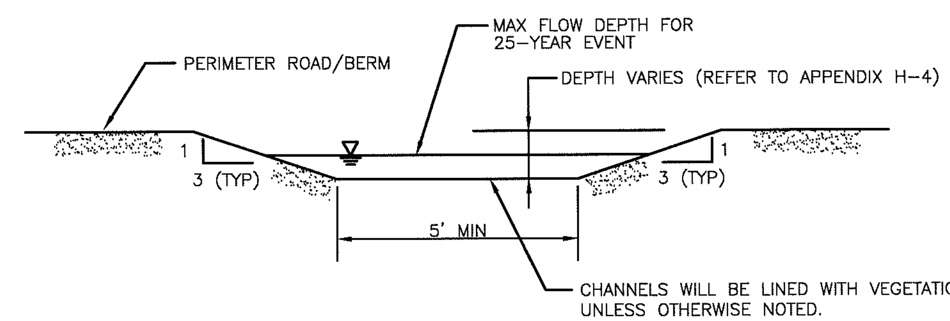


GABION KEYWAY (TYP) D17 H-1-5,H-1-8 H-1-8

0 2 4 SCALE IN FEET



TURF REINFORCEMENT D18 H-1-9 H-1-8
NOT TO SCALE
(SEE NOTE 2)



TRAPEZOIDAL CHANNEL (TYP) D19 H-1-1 H-1-8

0 2 4 SCALE IN FEET

LICENSED PROFESSIONAL ENGINEER
Charles R. Marsh
24599
OKLAHOMA
6·5·15

NOTES:

1. BEDDING MATERIAL WILL CONSIST OF A SW OR SP MATERIAL AS DEFINED BY UNIFIED SOIL CLASSIFICATION SYSTEM (USCS).
2. TURF REINFORCEMENT MATTING WILL BE USED IN CHANNELS FOR VELOCITIES BETWEEN 5fps AND 10fps. SEE APPENDIX H-4 FOR CHANNEL CALCULATIONS.
3. GABIONS MAY BE REPLACED WITH CONCRETE GROUTED RIP RAP.
4. REFER TO FIGURES H-1-9 AND H-1-10 FOR THE PERIMETER CHANNEL PROFILES.

☐ DRAFT
☒ FOR PERMITTING PURPOSES ONLY
☐ ISSUED FOR CONSTRUCTION

PREPARED FOR
WASTE MANAGEMENT OF OKLAHOMA, INC.

TIER III PERMIT MODIFICATION
DRAINAGE DETAILS

EAST OAK RDF
OKLAHOMA COUNTY, OKLAHOMA

DATE: 06/2015
FILE: 0086-356-11
CAD: FIG H-1-8-DETAILS.DWG

DRAWN BY: SRF
DESIGN BY: CRM
REVIEWED BY: JVQ

REVISIONS

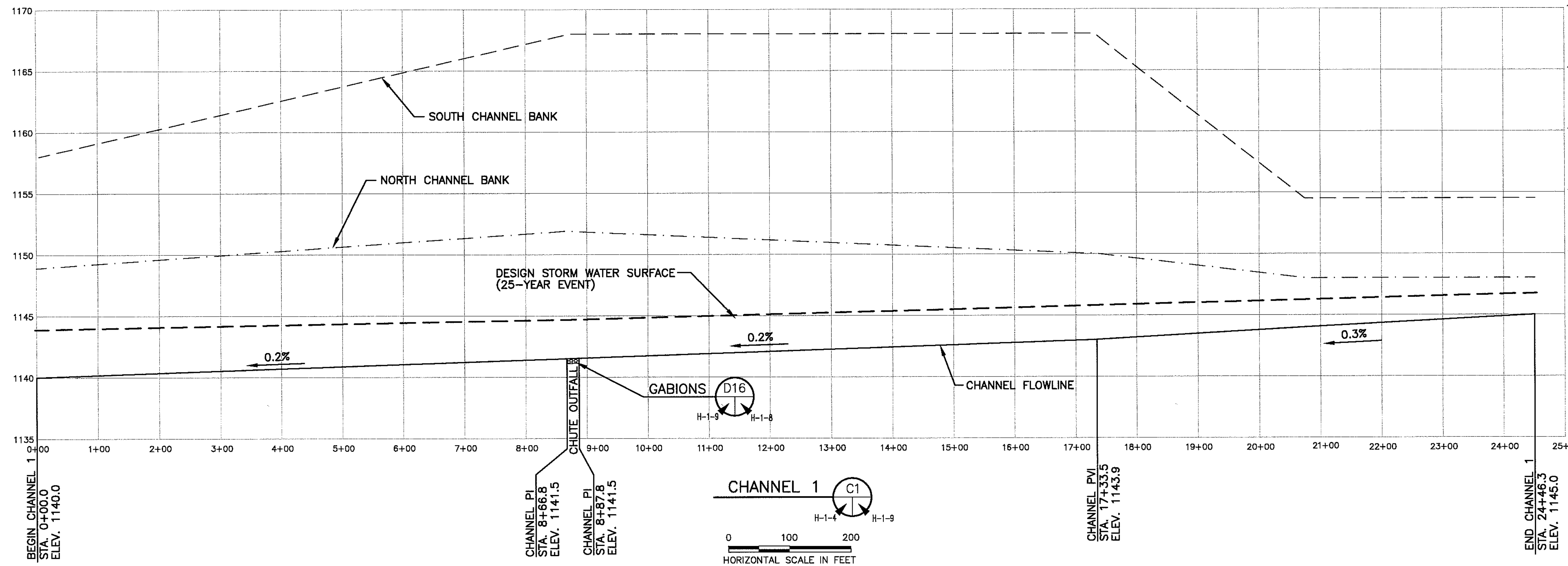
NO.	DATE	DESCRIPTION

Weaver Consultants Group
CA 3804 PE-06/30/2015

WWW.WCGRP.COM

FIGURE H-1-8

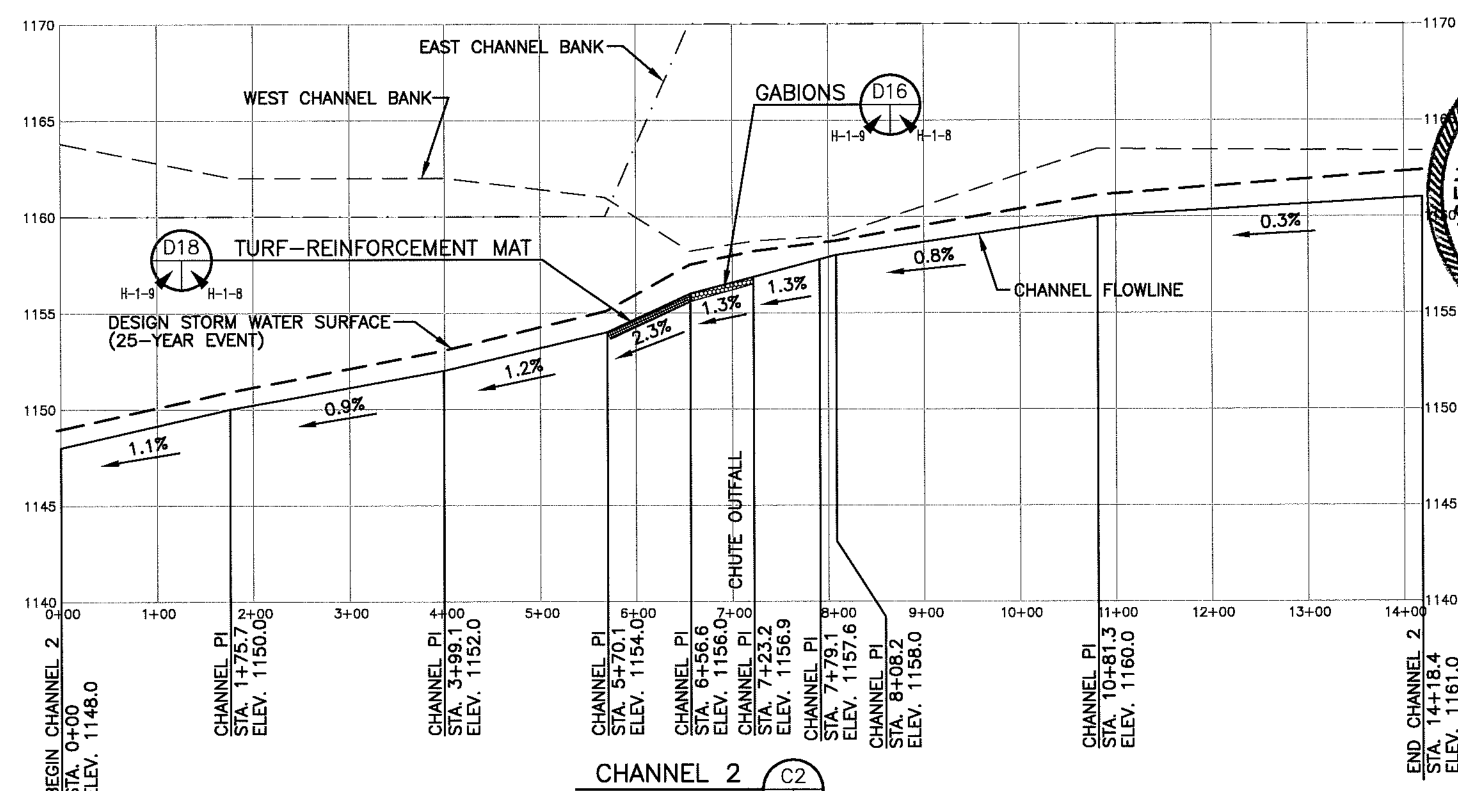
O:\0086\356\EXPANSION 2013\APPENDIX H\FIG H-1-8 DRAINAGE DETAILS.dwg, uacholonu, 1:2



CHANNEL 1 (C1, H-1-4, H-1-9)

HORIZONTAL SCALE IN FEET: 0, 100, 200

VERTICAL SCALE IN FEET: 0, 5, 10



CHANNEL 2 (C2, H-1-4, H-1-9)

HORIZONTAL SCALE IN FEET: 0, 100, 200

VERTICAL SCALE IN FEET: 0, 5, 10

25-YEAR CHANNEL "1" INFORMATION

CHANNEL STATION FROM	TO	BOTTOM WIDTH (FT)	PEAK INFLOW (CFS)	SLOPE (%)	FLOW DEPTH (FT.)	VELOCITY (FT/S)
0+00	8+67.3	15	333	0.2	3.92	3.17
8+67.3	17+33.5	25	333	0.2	3.19	3.01
17+33.5	24+46.3	25	51	0.3	0.98	1.86

NOTE: NORMAL DEPTH CALCULATION DOES NOT ACCOUNT FOR BACK WATER WHICH WILL INCREASE FLOW DEPTH (SEE PROFILE) AND DECREASE VELOCITY.

LICENSED PROFESSIONAL ENGINEER Charles R. Marsh 24599 OKLAHOMA

6.5.15

25-YEAR CHANNEL "2" INFORMATION

CHANNEL STATION FROM	TO	BOTTOM WIDTH (FT)	PEAK INFLOW (CFS)	SLOPE (%)	FLOW DEPTH (FT.)	VELOCITY (FT/S)
0+00	1+75.7	50	186	1.1	0.96	3.61
1+75.7	3+99.1	60	186	0.9	0.91	3.19
3+99.1	5+70.1	45	186	1.2	0.99	3.83
5+70.1	6+56.6	15	186	2.3	1.46	6.10
6+56.6	7+23.2	0	21	1.3	1.27	3.07
7+23.2	7+79.1	0	21	1.3	1.13	2.87
7+79.1	10+81.3	0	21	0.8	1.13	2.26
10+81.3	14+18.4	0	21	0.3	1.42	1.60

NOTE: NORMAL DEPTH CALCULATION DOES NOT ACCOUNT FOR BACK WATER WHICH WILL INCREASE FLOW DEPTH (SEE PROFILE) AND DECREASE VELOCITY.

NOTES:

1. REFER TO DRAWING H-1-4 FOR PROFILE LOCATIONS.
2. EXISTING CONTOURS AND ELEVATIONS PROVIDED BY DALLAS AERIAL SURVEYS, INC. FROM AERIAL PHOTOGRAPHY FLOWN JANUARY 19, 2014.

☐ DRAFT
☒ FOR PERMITTING PURPOSES ONLY
☐ ISSUED FOR CONSTRUCTION

DATE: 06/2015
FILE: 0086-356-11
CAD: FIG H-1-9-PROFILES.DWG

DRAWN BY: SRF
DESIGN BY: CRM
REVIEWED BY: JVQ

PREPARED FOR
WASTE MANAGEMENT OF OKLAHOMA, INC.

REVISIONS

NO.	DATE	DESCRIPTION

Weaver Consultants Group
CA 3804 PE-06/30/2015

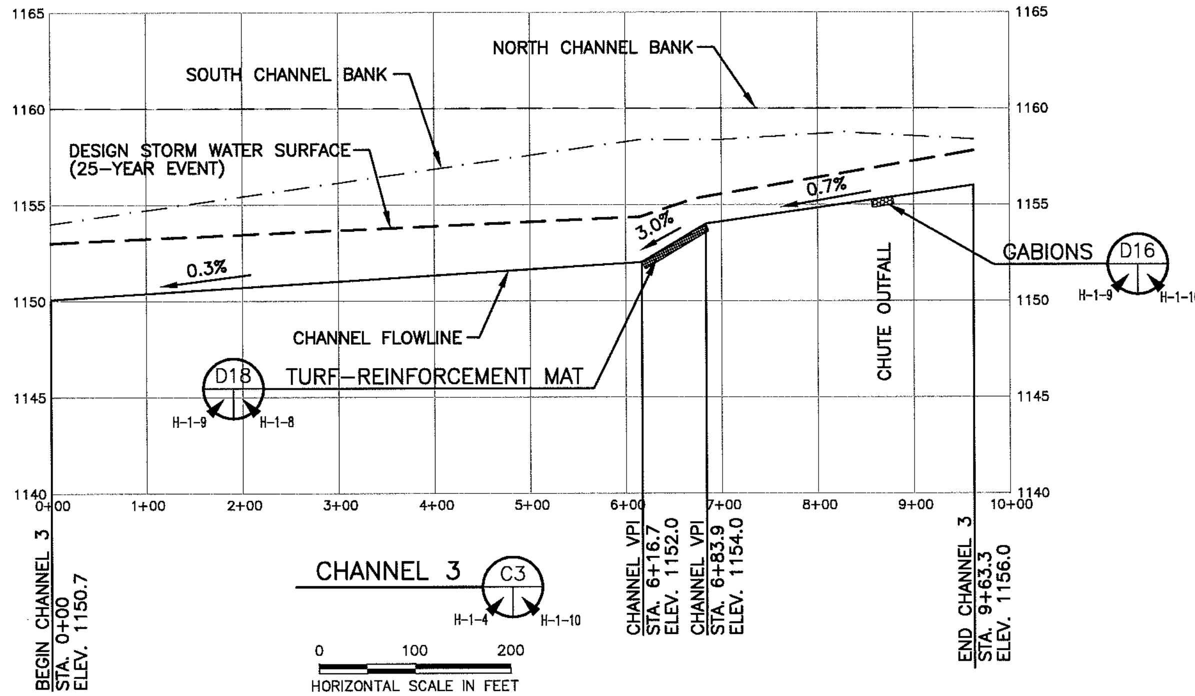
TIER III PERMIT MODIFICATION
POST-DEVELOPMENT CHANNEL PROFILES

EAST OAK RDF
OKLAHOMA COUNTY, OKLAHOMA

WWW.WCGRP.COM

FIGURE H-1-9

O:\0086\356\EXPANSION 2013\APPENDIX H\FIG H-1-9-CHANNEL PROFILES.dwg, uacholonu, 1:200



CHANNEL 3 (C3, H-1-4, H-1-10)

0 100 200
HORIZONTAL SCALE IN FEET

0 5 10
VERTICAL SCALE IN FEET

25-YEAR CHANNEL "3" INFORMATION

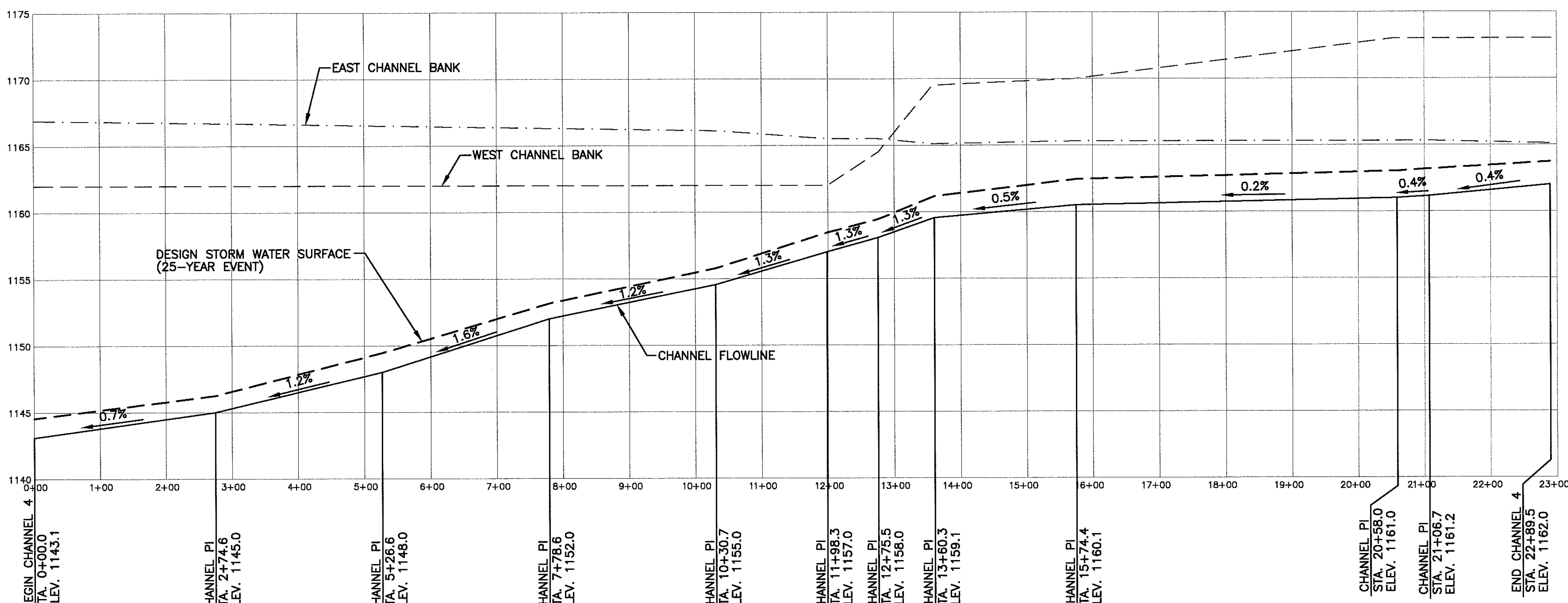
CHANNEL STATION FROM	CHANNEL STATION TO	BOTTOM WIDTH (FT)	PEAK INFLOW (CFS)	SLOPE (%)	FLOW DEPTH (FT.)	VELOCITY (FT/S)
0+00	6+16.7	20	310.0	0.3	2.93	3.34
6+16.7	6+83.9	25	310.0	3.0	1.41	7.18
6+83.9	9+63.3	35	310.0	0.7	1.82	4.22

NOTE: NORMAL DEPTH CALCULATION DOES NOT ACCOUNT FOR BACK WATER WHICH WILL INCREASE FLOW DEPTH (SEE PROFILE) AND DECREASE VELOCITY.

25-YEAR CHANNEL "4" INFORMATION

CHANNEL STATION FROM	CHANNEL STATION TO	BOTTOM WIDTH (FT)	PEAK INFLOW (CFS)	SLOPE (%)	FLOW DEPTH (FT.)	VELOCITY (FT/S)
0+00	2+74.6	10	67.0	0.7	1.44	3.26
2+74.6	5+26.6	10	67.0	1.2	1.24	3.94
5+26.6	7+78.6	10	67.0	1.6	1.15	4.35
7+78.6	10+30.7	10	67.0	1.2	1.24	3.94
10+30.7	11+98.3	10	67.0	1.3	1.21	4.05
11+98.3	12+75.5	10	67.0	1.3	1.21	4.05
12+75.5	13+60.3	4	43.0	1.3	1.37	3.88
13+60.3	15+74.4	5	43.0	0.5	1.61	2.71
15+74.4	20+58.0	5	43.0	0.2	2.02	1.93
20+58.0	21+06.7	5	43.0	0.4	1.71	2.49
21+06.7	22+89.5	5	43.0	0.4	1.71	2.49

NOTE: NORMAL DEPTH CALCULATION DOES NOT ACCOUNT FOR BACK WATER WHICH WILL INCREASE FLOW DEPTH (SEE PROFILE) AND DECREASE VELOCITY.



CHANNEL 4 (C4, H-1-4, H-1-10)

0 100 200
HORIZONTAL SCALE IN FEET

0 5 10
VERTICAL SCALE IN FEET

NOTES:

1. REFER TO DRAWING H-1-4 FOR PROFILE LOCATIONS.
2. EXISTING CONTOURS AND ELEVATIONS PROVIDED BY DALLAS AERIAL SURVEYS, INC. FROM AERIAL PHOTOGRAPHY FLOWN JANUARY 19, 2014.

LICENSED PROFESSIONAL ENGINEER
Charles R. Marsh
24599
OKLAHOMA
6.5.15

- [ ] DRAFT
- [x] FOR PERMITTING PURPOSES ONLY
- [ ] ISSUED FOR CONSTRUCTION

DATE: 06/2015
FILE: 0086-356-11
CAD: FIG H-1-10-PROFILES.DWG

DRAWN BY: SRF
DESIGN BY: CRM
REVIEWED BY: JVQ

Weaver Consultants Group
CA 3804 PE-06/30/2015

PREPARED FOR
WASTE MANAGEMENT OF OKLAHOMA, INC.

REVISIONS

NO.	DATE	DESCRIPTION

TIER III PERMIT MODIFICATION
POST-DEVELOPMENT CHANNEL PROFILES

EAST OAK RDF
OKLAHOMA COUNTY, OKLAHOMA

WWW.WCGRP.COM

FIGURE H-1-10

O:\0086\356\EXPANSION 2013\APPENDIX H\FIG H-1-10-CHANNEL PROFILES.dwg, uacholonu, 1:200

APPENDIX H-2

POST-DEVELOPMENT DRAINAGE ANALYSIS

Includes pages H-2-ii through H-2-67

LICENSED PROFESSIONAL ENGINEER
Charles R.
Marsh
24599
OKLAHOMA

6-5-15

CONTENTS

LICENSED PROFESSIONAL ENGINEER
Charles R.
Marsh
24599
OKLAHOMA

6·5·15

HYPOTHETICAL STORM DATA

Hypothetical Storm Data

Precipitation data taken from TP-40 and Hydro 35 rainfall data.

Time	5 min	15 min	60 min	2 hr	3 hr	6 hr	12 hr	24 hr
25-Year Event	0.95	1.84	3.25	3.90	4.23	5.00	5.93	6.83

PRECIPITATION LOSS DATA

Required:

Determine the SCS curve numbers for the on-site drainage areas and the upland drainage areas for use in the HEC-1 analysis.

References:

1. Dodson's and Associates, Inc., *Hands-On HEC-1*, 1997.
2. United States Department of Agriculture, National Resource Conservation Service, Web Soil Survey for Oklahoma County, Oklahoma (http://websoilsurvey.nrcs.usda.gov).

Solution:

The final cover system will be in place and the erosion layer will control precipitation loss. A curve number for the erosion layer was selected using the chart on page H-2-6 (Ref.1).

Use:	CN = 88

A curve number for the upland and non-landfill drainage areas was selected using the chart on page H-2-6 (Ref.1) based on soil information attained from pages H-2-7 through H-2-12 (Ref. 2).

Use:	CN = 84

The pond areas are assumed to be at capacity. Therefore, no losses from the pond surfaces will occur.

Use:	CN = 100

HYDROGRAPH DEVELOPMENT INFORMATION

TABLE 5.3 Values of SCS Curve Number for Rural Areas

Source: [McCuen, 1982]

Land Use Description	Hydrologic Soil Group A	B	C	D
Fallow:				
Straight Row	77	86	91	94
Row Crops:				
Straight Row, Poor Condition	72	81	88	91
Straight Row, Good Condition	67	78	85	89
Contoured, Poor Condition	70	79	84	88
Contoured, Good Condition	65	75	82	86
Contoured and Terraced, Poor Condition	66	74	80	82
Contoured and Terraced, Good Condition	62	71	78	81
Small Grain:				
Straight Row, Poor Condition	65	76	84	88
Straight Row, Good Condition	63	75	83	87
Contoured, Poor Condition	63	74	82	85
Contoured, Good Condition	61	73	81	84
Contoured and Terraced, Poor Condition	61	72	79	82
Contoured and Terraced, Good Condition	59	70	78	81
Close-Seeded Legumes or Rotation Meadow				
Straight Row, Poor Condition	66	77	85	89
Straight Row, Good Condition	58	72	81	85
Contoured, Poor Condition	64	75	83	85
Contoured, Good Condition	55	69	78	83
Contoured and Terraced, Poor Condition	63	73	80	83
Contoured and Terraced, Good Condition	51	67	76	80
Pasture or Range:				
Poor Condition	68	79	86	89
Fair Condition	49	69	79	84
Good Condition	39	61	74	80
Contoured, Poor Condition	47	67	81	88
Contoured, Fair Condition	25	59	75	83
Contoured, Good Condition	6	35	70	79
Meadow, Good Condition	30	58	71	78
Woods or Forest Land:				
Poor Condition	45	66	77	83
Fair Condition	36	60	73	79
Good Condition	25	55	70	77
Farmsteads:	59	74	82	86

Initial and Uniform Loss Rate

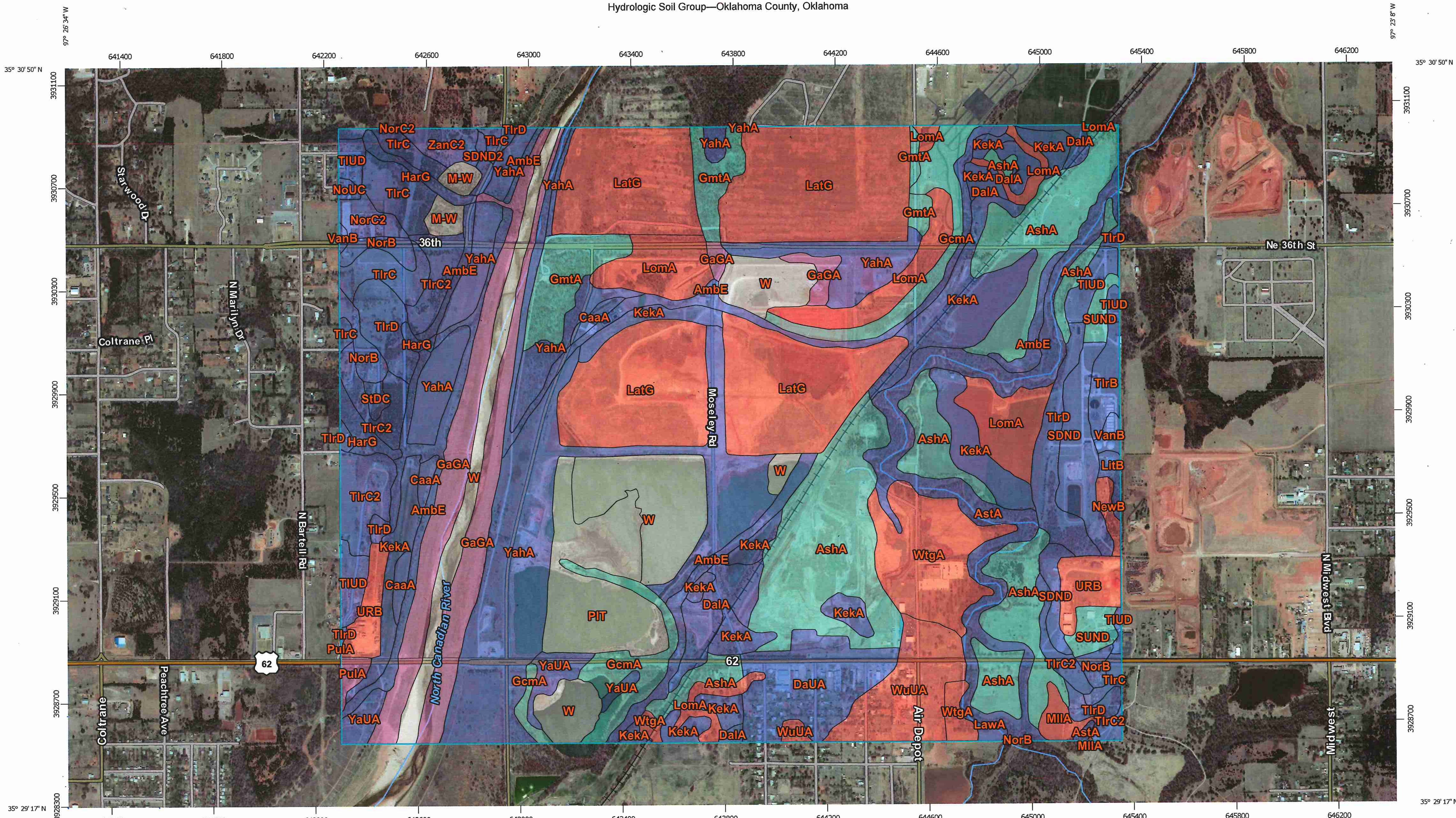
An initial loss in inches (*STRTL*) and a constant loss rate (*CNSTL*) in inches per hour are specified for this method. All rainfall is lost until the volume of initial loss is satisfied. After the initial loss is satisfied, rainfall is lost at the constant rate.

This section provides guidance in selecting the values used for the initial loss and uniform loss rate in two ways:

1. By consulting previous studies of actual rainfall events for a particular watershed or region.
2. By relating the parameters to the SCS Curve Number, which can be estimated using the information presented earlier in this chapter.

Previous studies by the U.S. Army Corps of Engineers or other public agencies may provide guidance on selecting appropriate values for the initial loss and uniform loss rate for a particular location. Tables 5.4 through 5.6 list the values of initial and

Hydrologic Soil Group—Oklahoma County, Oklahoma



Map Scale: 1:14,000 if printed on B landscape (17" x 11") sheet.

Meters: 0, 200, 400, 800, 1200

Feet: 0, 500, 1000, 2000, 3000

N

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 14N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Soil Rating Lines

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Soil Rating Points

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Oklahoma County, Oklahoma
Survey Area Data: Version 12, Dec 23, 2013

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 28, 2011—Mar 23, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Hydrologic Soil Group— Summary by Map Unit — Oklahoma County, Oklahoma (OK109)				
Map unit symbol	**Map unit name**	**Rating**	**Acres in AOI**	**Percent of AOI**
AmbE	Amber very fine sandy loam, 5 to 15 percent slopes, rarely flooded	B	80.8	4.5%
AshA	Asher silty clay loam, 0 to 1 percent slopes, rarely flooded	C	192.7	10.7%
AstA	Ashport silt loam, 0 to 1 percent slopes, frequently flooded	B	68.8	3.8%
CaaA	Canadian fine sandy loam, 0 to 1 percent slopes, rarely flooded	B	8.1	0.4%
DalA	Dale silt loam, 0 to 1 percent slopes, rarely flooded	B	30.1	1.7%
DaUA	Dale-Urban land complex, 0 to 1 percent slopes, rarely flooded	B	43.0	2.4%
GaGA	Gaddy-Gracemore complex, 0 to 1 percent slopes, frequently flooded	A	90.8	5.0%
GcmA	Gracemont silty clay, 0 to 1 percent slopes, frequently flooded, overwash	C	46.5	2.6%
GmtA	Gracemont fine sandy loam, 0 to 1 percent slopes, occasionally flooded	C	40.4	2.2%
HarG	Harrah fine sandy loam, 3 to 45 percent slopes	B	12.5	0.7%
KekA	Keokuk very fine sandy loam, 0 to 1 percent slopes, rarely flooded	B	109.2	6.0%
LatG	Latrass loam, 1 to 45 percent slopes	D	255.2	14.1%
LawA	Lawrie loam, 0 to 1 percent slopes, rarely flooded	B	1.9	0.1%
LitB	Littleaxe fine sandy loam, 1 to 3 percent slopes	B	3.3	0.2%
LomA	Lomill silty clay loam, 0 to 1 percent slopes, occasionally flooded	D	75.2	4.2%

Hydrologic Soil Group— Summary by Map Unit — Oklahoma County, Oklahoma (OK109)				
Map unit symbol	**Map unit name**	**Rating**	**Acres in AOI**	**Percent of AOI**
M-W	Miscellaneous water		8.2	0.5%
MIlA	Miller silty clay, 0 to 1 percent slopes, occasionally flooded	D	5.8	0.3%
NewB	Newalla fine sandy loam, 1 to 5 percent slopes	D	3.8	0.2%
NorB	Norge silt loam, 1 to 3 percent slopes	B	15.0	0.8%
NorC2	Norge silt loam, 3 to 5 percent slopes, eroded	B	7.3	0.4%
NoUC	Norge-Urban land complex, 1 to 5 percent slopes	B	1.5	0.1%
PIT	Pits		55.4	3.1%
PulA	Pulaski fine sandy loam, 0 to 1 percent slopes, occasionally flooded	A	3.2	0.2%
SDND	Stephenville-Darsil-Newalla complex, 3 to 8 percent slopes	B	29.5	1.6%
SDND2	Stephenville-Darsil-Newalla complex, 3 to 8 percent slopes, eroded	B	2.5	0.1%
StDC	Stephenville-Darsil complex, 1 to 5 percent slopes	B	2.4	0.1%
SUND	Stephenville-Urban land-Newalla complex, 1 to 8 percent slopes	C	11.8	0.7%
TlrB	Teller fine sandy loam, 1 to 3 percent slopes	B	9.4	0.5%
TlrC	Teller fine sandy loam, 3 to 5 percent slopes	B	38.5	2.1%
TlrC2	Teller fine sandy loam, 3 to 5 percent slopes, eroded	B	47.2	2.6%
TlrD	Teller fine sandy loam, 5 to 8 percent slopes	B	43.3	2.4%
TlUD	Teller-Urban land complex, 1 to 8 percent slopes	B	20.5	1.1%
URB	Urban land	D	23.7	1.3%
VanB	Vanoss silt loam, 1 to 3 percent slopes	B	3.5	0.2%
W	Water		106.8	5.9%

Hydrologic Soil Group— Summary by Map Unit — Oklahoma County, Oklahoma (OK109)				
Map unit symbol	**Map unit name**	**Rating**	**Acres in AOI**	**Percent of AOI**
WtgA	Watonga silty clay, 0 to 1 percent slopes, rarely flooded	D	53.2	2.9%
WuUA	Watonga-Urban land complex, 0 to 1 percent slopes, rarely flooded	D	38.2	2.1%
YahA	Yahola fine sandy loam, 0 to 1 percent slopes, occasionally flooded	B	193.4	10.7%
YaUA	Yahola-Urban land complex, 0 to 1 percent slopes, protected	B	14.7	0.8%
ZanC2	Zaneis loam, 3 to 5 percent slopes, eroded	B	8.3	0.5%
Totals for Area of Interest			**1,805.4**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: *None Specified*

Tie-break Rule: Higher

HYDROGRAPH DEVELOPMENT INFORMATION

Landfill Areas

Direct runoff methods (i.e., kinematic wave) have been used for landfill final cover areas that drain to the stormwater detention areas. The kinematic wave method has been used to model the 4(H):1(V) sideslope areas before the flow is intercepted by perimeter channels. The kinematic wave method is a physically-based method using slope, surface roughness, catchment lengths and areas. This method does not consider attenuation for flood wave; as a consequence, this method provides for a conservative analysis. To demonstrate how the HEC-1 model was developed for landfill areas, typical parameters used for the kinematic wave method are listed below for drainage area LD1.

Kinematic wave parameters for overland flow:

Slope: 0.25 ft/ft landfill sideslopes

N: 0.3 Manning's friction coefficient

L: Represents a typical distance between swales for overland flow

Percentage of drainage area represented by this element is 100 percent.

Kinematic Wave routing data for swale:

- Swale length (ft): Longest swale length for the drainage area was used.
- Swale bottom slope (ft/ft): 0.005
- Channel roughness coefficient: 0.03
- Channel type: A trapezoidal channel was used with no bottom width to simulate a triangular channel.

Drainage Areas

The onsite and offsite drainage areas used for this analysis are shown on Sheet H-2-2. The Espey "10 Minute" method has been used to estimate Snyder parameters for the non-landfill areas. Snyder parameter estimations are provided on page H-2-14. The routing scheme is shown in the HEC-1 output file.

Area No.	Area (acres)	Max. Flow Length (L) (ft)	S (ft/ft)	I (%)	Manning "n"[1]	Φ[1]	T_r[2] (min)	T_{lag}[3] (min)	T_{lag} (hr)	Area (sq mi)	q_p[4] (cfs/sq mi)	C_p[5]
DA1	4.31	633	0.0126	2	0.06	0.96	33.7	31.2	0.52	0.0067	894.0	0.73
DA2	2.58	80	0.1500	2	0.06	0.96	11.3	8.8	0.15	0.0040	2942.6	0.67
DA3	0.62	97	0.1237	2	0.06	0.96	12.4	9.9	0.16	0.0010	2821.7	0.73
O1	8.00	360	0.0561	2	0.06	0.96	20.4	17.9	0.30	0.0125	1493.1	0.70
O2	4.23	103	0.0194	2	0.06	0.96	20.0	17.5	0.29	0.0066	1569.0	0.71
O3	3.93	827	0.0097	2	0.06	0.96	38.4	35.9	0.60	0.0061	782.2	0.73
O4	3.50	272	0.0074	2	0.06	0.96	31.8	29.3	0.49	0.0055	960.1	0.73
O5	0.34	48	0.2500	2	0.06	0.96	8.8	6.3	0.11	0.0005	4148.3	0.69
O6	3.11	1,133	0.0026	2	0.06	0.96	57.2	54.7	0.91	0.0049	514.8	0.73
O7	2.31	182	0.0330	2	0.06	0.96	19.9	17.4	0.29	0.0036	1609.8	0.73
O8	1.09	166	0.0301	2	0.06	0.96	20.0	17.5	0.29	0.0017	1656.4	0.75
O9	1.35	83	0.1205	2	0.06	0.96	12.0	9.5	0.16	0.0021	2822.2	0.70
O10	1.53	680	0.0176	2	0.06	0.96	31.6	29.1	0.48	0.0024	1001.0	0.76

[1] Conveyance efficiency coefficient from Dodson & Associates Inc., *ProHec-1 Program Documentation*, 1995, pages 6-19 and 6-20.

[2] $T_r = 3.1(L^{0.23})(S^{-0.25})(I^{-0.18})(\Phi^{1.57})$

[3] $T_{lag} = T_r - 5/2$

[4] $q_p = 31600(A^{-0.04})(T_r^{-1.07})$

[5] $C_p = 49.375(A^{-0.04})(T_r^{-1.07})(T_{lag})$

T_r = surface runoff to unit hydrograph peak (min)
L = distance along main channel from study point to watershed boundary (ft)
S = main channel slope (ft/ft)
I = impervious cover within the watershed (%)
T_{lag} = watershed lag time (min)
q_p = unit hydrograph peak discharge (cfs/sq mi)
C_p = Snyder's peaking coefficient

Example Calculation: Unit Hydrograph Data Area No. DA1

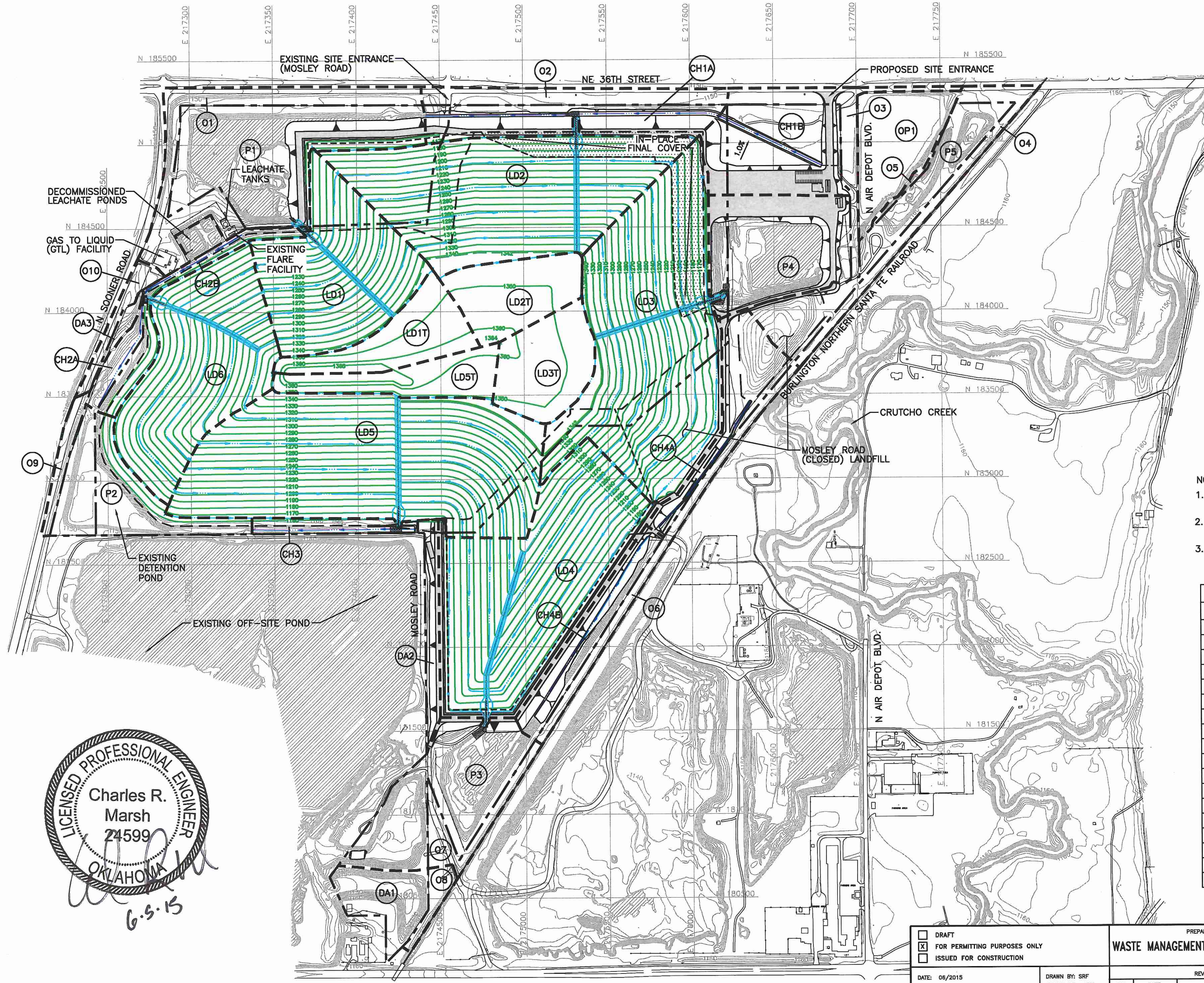
$$T_r = 3.1(L^{0.23})(S^{-0.25})(I^{-0.18})(\Phi^{1.57})$$
$$= 3.1(633^{0.23})(0.0063^{-0.25})(2^{-0.18})(0.96^{1.57})$$
$$= \boxed{33.7 \text{ minutes}}$$

$$T_{lag} = T_r - 5/2$$
$$= 40.2-(5/2)$$
$$= 31.2 \text{ minutes}$$
$$= \boxed{0.52 \text{ hours}}$$

$$q_p = 31600(A^{-0.04})(T_r^{-1.07})$$
$$= 31600(0.0067^{-0.04})(40.2^{-1.07})$$
$$= \boxed{894.0 \text{ cfs/sq mi}}$$

$$C_p = 49.375(A^{-0.04})(T_r^{-1.07})(T_{lag})$$
$$= 49.375(0.0067^{-0.04})(40.2^{-1.07})(0.63)$$
$$= \boxed{0.73}$$

POST-DEVELOPMENT HEC-1 DRAINAGE AREAS



0 300 600
SCALE IN FEET

LEGEND

- EXISTING PERMIT BOUNDARY
- PROPOSED PERMIT BOUNDARY
- PERMITTED LIMITS OF WASTE
- PROPOSED LIMITS OF WASTE
- MOSLEY ROAD LANDFILL LIMITS OF WASTE
- N 183000 — STATE PLANE GRID COORDINATE
- 1180 — EXISTING CONTOUR
- 1280 — PROPOSED FINAL COVER CONTOUR
- PROPOSED DRAINAGE SWALE
- PROPOSED DRAINAGE CHUTE
- PERIMETER DRAINAGE CHANNEL
- IN-PLACE FINAL COVER
- DRAINAGE AREA BOUNDARY
- (CH3) DRAINAGE AREA DESIGNATION

NOTE:

1. EXISTING CONTOURS AND ELEVATIONS PROVIDED BY DALLAS AERIAL SURVEYS, INC. FROM AERIAL PHOTOGRAPHY FLOWN JANUARY 19, 2014.
2. TYPICAL LANDFILL SIDE SLOPES ARE 4(H):1(V) AND TYPICAL TOP SLOPE IS 4 PERCENT.
3. PERMIT BOUNDARY IS ALSO USED AS DRAINAGE BOUNDARY.

PROPOSED DRAINAGE AREAS			
DRAINAGE AREA	AREA (ACRES)	DRAINAGE AREA	AREA (ACRES)
DA1	4.31	LD3	31.81
DA2	2.58	LD3T	7.21
DA3	0.62	LD4	27.14
O1	8.00	LD5	35.26
O2	4.23	LD5T	5.49
O3	3.93	LD6	19.24
O4	3.50	CH1B	9.95
O5	0.34	CH1A	7.54
O6	3.11	CH2B	2.56
O7	2.31	CH2A	3.23
O8	1.09	CH3	1.97
O9	1.35	CH4A	5.85
O10	1.53	CH4B	4.90
OP1	7.16	P1	16.26
LD1	16.58	P2	8.57
LD1T	6.70	P3	11.98
LD2	26.90	P4	12.02
LD2T	6.90	P5	8.41

☐ DRAFT
☒ FOR PERMITTING PURPOSES ONLY
☐ ISSUED FOR CONSTRUCTION

DATE: 06/2015
FILE: 0086-356-11
CAD: H-2-16-DRAINAGE.DWG

DRAWN BY: SRF
DESIGN BY: CRM
REVIEWED BY: JVQ

Weaver Consultants Group
CA 3804 PE-06/30/2015

PREPARED FOR
WASTE MANAGEMENT OF OKLAHOMA, INC.

REVISIONS		
NO.	DATE	DESCRIPTION

TIER III PERMIT MODIFICATION
POST-DEVELOPMENT DRAINAGE AREAS

EAST OAK RDF
OKLAHOMA COUNTY, OKLAHOMA

WWW.WCGRP.COM

SHEET H-2-16

O:\0086\356\EXPANSION 2013\APPENDIX H\SHEET H-2-16-POST DEVELOPMENT DRAINAGE AREAS.dwg, uacholonu, 1:2

HEC-1 OUTPUT

```
1****************************************                                    ***************************************
*                                        *                                    *                                     *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)    *                                    *   U.S. ARMY CORPS OF ENGINEERS      *
*            JUN   1998                  *                                    *   HYDROLOGIC ENGINEERING CENTER     *
*          VERSION 4.1                   *                                    *        609 SECOND STREET            *
*                                        *                                    *     DAVIS, CALIFORNIA 95616         *
* RUN DATE   29OCT14  TIME  19:28:19     *                                    *        (916) 756-1104               *
*                                        *                                    *                                     *
****************************************                                     ***************************************


                    X     X  XXXXXXX   XXXXX         X
                    X     X  X        X     X       XX
                    X     X  X        X              X
                    XXXXXXX  XXXX     X      XXXXX   X
                    X     X  X        X              X
                    X     X  X        X     X        X
                    X     X  XXXXXXX   XXXXX        XXX


     THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

     THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
     THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
     NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
     DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL   LOSS RATE:GREEN AND AMPT INFILTRATION
     KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

1                                        HEC-1 INPUT                                                  PAGE  1

         LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

                       *DIAGRAM
           1           ID        EAST OAK RDF
           2           ID        TIER III PERMIT MODIFICATION
           3           ID        PROPOSED CONDITIONS
           4           ID        25-YEAR, 24-HOUR STORM EVENT
                       *
           5           ID        P:\SW\WM\East Oak\Expansion 2013\Application\Appendix H\HEC-1\PRO
           6           IT       5       0    2400     289       0       0
           7           IO       3       0       0
                       *
                       *
                       *

           8           KK     LD3
           9           PH               0    0.95    1.84    3.25    3.90    4.23    5.00    5.93    6.83
          10           KO       0       0       0       7      21
          11           BA  0.0497
          12           LS       0      88
          13           UK     150    0.25     0.3     100
          14           RK    1200   0.005    0.03            TRAP       0       2      NO
                       *

          15           KK    LD3T
          16           KO       0       0       0       7      21
          17           BA  0.0113
          18           LS       0      86
          19           UK     352    0.04     0.3     100
          20           RK    1200   0.005    0.03            TRAP       0       2      NO
                       *

          21           KK   C/LD3
          22           KO       0       0       0       7      21
          23           HC       2
                       *

          24           KK      P4
          25           KO       0       0       0       7      21
          26           BA  0.0188
          27           LS       0     100
          28           UD       0
                       *

          29           KK    C/P4
          30           KO       0       0       0       7      21
          31           HC       2
                       *

          32           KK    R/P4
          33           KO       0       0       0       7      21
          34           RS       1    ELEV  1139.8
          35           SA       0    2.81    3.32    3.72    4.38    5.64
          36           SE  1139.8    1140    1142    1144    1146    1148
          37           SS  1147.8     100     2.6     1.5
                       *
1                                        HEC-1 INPUT                                                  PAGE  2

         LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


          38           KK      O3
          39           KO       0       0       0       7      21
          40           BA  0.0061
          41           LS       0      84
          42           US    0.60    0.73
                       *
```

```
 43          KK  R/CH1B
 44          KO       0       0       0       7      21
 45          BA  0.0155
 46          LS       0      88
 47          UK     280   0.007     0.3     100
 48          RK     676   0.004    0.04            TRAP      20       3     YES
             *

 49          KK    LD2T
 50          KO       0       0       0       7      21
 51          BA  0.0108
 52          LS       0      86
 53          UK     487    0.04     0.3     100
 54          RK     833   0.005    0.03            TRAP       0       2      NO
             *

 55          KK     LD2
 56          KO       0       0       0       7      21
 57          BA  0.0420
 58          LS       0      88
 59          UK     216    0.25     0.3     100
 60          RK    1558   0.005    0.03            TRAP       0       2      NO
             *

 61          KK   C/LD2
 62          KO       0       0       0       7      21
 63          HC       2
             *

 64          KK      O2
 65          KO       0       0       0       7      21
 66          BA  0.0066
 67          LS       0      84
 68          US    0.29    0.71
             *

 69          KK  C/CH1A
 70          KO       0       0       0       7      21
 71          HC       3
             *

 72          KK  R/CH1A
 73          KO       0       0       0       7      21
 74          BA  0.0118
 75          LS       0      88
 76          UK     152   0.105     0.3     100
 77          RK    1745   0.002    0.04            TRAP      15       3     YES
             *
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 78          KK    LD1T
 79          KO       0       0       0       7      21
 80          BA  0.0105
 81          LS       0      86
 82          UK     542    0.04     0.3     100
 83          RK     353   0.005    0.03            TRAP       0       2      NO
             *

 84          KK     LD1
 85          KO       0       0       0       7      21
 86          BA  0.0259
 87          LS       0      88
 88          UK     216    0.25     0.3     100
 89          RK     506   0.005    0.03            TRAP       0       2      NO
             *

 90          KK   C/LD1
 91          KO       0       0       0       7      21
 92          HC       2
             *

 93          KK      O1
 94          KO       0       0       0       7      21
 95          BA  0.0125
 96          LS       0      84
 97          US    0.30    0.70
             *

 98          KK      P1
 99          KO       0       0       0       7      21
100          BA  0.0254
101          LS       0     100
102          UD       0
             *

103          KK    C/P1
104          KO       0       0       0       7      21
105          HC       4
             *

106          KK    R/P1
107          KO       0       0       0       7      21
108          RS       1    ELEV    1137
109          SA       0    4.57    7.10    7.73    8.55   11.30   13.64
110          SE    1137    1138    1140    1142    1144    1146    1148
111          SS    1147     100     2.8     1.5
             *

112          KK     DA3
113          KO       0       0       0       7      21
114          BA  0.0010
```

```
 115          LS      0     84
 116          US   0.16   0.73
              *
1                                          HEC-1 INPUT                                             PAGE  4

 LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


 117          KK     O10
 118          KO       0       0       0       7      21
 119          BA  0.0024
 120          LS       0      84
 121          US    0.48    0.76
              *

 122          KK  C/CULV
 123          KO       0       0       0       7      21
 124          HC       2
              *

 125          KK    CH2B
 126          KO       0       0       0       7      21
 127          BA  0.0040
 128          LS       0      88
 129          UK      32    0.25     0.3     100
 130          RK    1046   0.006    0.04            TRAP      10       3      NO
              *

 131          KK     LD6
 132          KO       0       0       0       7      21
 133          BA  0.0301
 134          LS       0      88
 135          UK     145    0.25     0.3     100
 136          RK    1430   0.005    0.03            TRAP       0       2      NO
              *

 137          KK  C/CH2A
 138          KO       0       0       0       7      21
 139          HC       2
              *

 140          KK  R/CH2A
 141          KO       0       0       0       7      21
 142          BA  0.0050
 143          LS       0      88
 144          UK      87    0.25     0.3     100
 145          RK     755   0.009    0.04            TRAP      50       4     YES
              *

 146          KK    LD5T
 147          KO       0       0       0       7      21
 148          BA  0.0086
 149          LS       0      86
 150          UK     347    0.04     0.3     100
 151          RK     553   0.005    0.03            TRAP       0       2      NO
              *
1                                          HEC-1 INPUT                                             PAGE  5

 LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


 152          KK     LD5
 153          KO       0       0       0       7      21
 154          BA  0.0551
 155          LS       0      88
 156          UK     145    0.25     0.3     100
 157          RK    1378   0.005    0.03            TRAP       0       2      NO
              *

 158          KK   C/LD5
 159          KO       0       0       0       7      21
 160          HC       2
              *

 161          KK   R/CH3
 162          KO       0       0       0       7      21
 163          BA  0.0031
 164          LS       0      88
 165          UK      42    0.13     0.3     100
 166          RK     965   0.008    0.04            TRAP      18       3     YES
              *

 167          KK      O9
 168          KO       0       0       0       7      21
 169          BA  0.0021
 170          LS       0      84
 171          US    0.16    0.70
              *

 172          KK      P2
 173          KO       0       0       0       7      21
 174          BA  0.0134
 175          LS       0     100
 176          UD       0
              *

 177          KK    C/P2
 178          KO       0       0       0       7      21
 179          HC       4
              *

 180          KK    R/P2
 181          KO       0       0       0       7      21
 182          RS       1    ELEV    1142
```

```
183            SA       0    2.73    3.05    3.41    3.82    4.46    5.25
184            SE  1141.8    1142    1144    1146    1148    1150    1152
185            SS  1149.9      75     2.6     1.5
               *

186            KK     LD4
187            KO       0       0       0       7      21
188            BA  0.0424
189            LS       0      88
190            UK     119    0.25     0.3     100
191            RK    1615   0.005    0.03            TRAP       0       2      NO
               *
```



```
LINE           ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

192            KK    CH4A
193            KO       0       0       0       7      21
194            BA  0.0113
195            LS       0      88
196            UK     375   0.048     0.3     100
197            RK     930   0.004    0.04            TRAP       5       3      NO
               *

198            KK    CH4B
199            KO       0       0       0       7      21
200            BA  0.0077
201            LS       0      88
202            UK      72   0.069     0.3     100
203            RK    1276   0.012    0.04            TRAP      10       4     YES
               *

204            KK      O6
205            KO       0       0       0       7      21
206            BA  0.0049
207            LS       0      84
208            US    0.91    0.73
               *

209            KK      O7
210            KO       0       0       0       7      21
211            BA  0.0036
212            LS       0      84
213            US    0.29    0.73
               *

214            KK      P3
215            KO       0       0       0       7      21
216            BA  0.0187
217            LS       0     100
218            UD       0
               *

219            KK    C/P3
220            KO       0       0       0       7      21
221            HC       5
               *

222            KK    R/P3
223            KO       0       0       0       7      21
224            RS       1    ELEV  1141.1
225            SA       0    1.64    2.28    3.60    5.03    5.99    3.96    4.30    4.74
226            SE  1141.1    1142    1144    1146    1148    1150    1152    1154    1156
227            SS  1149.8      35     2.6     1.5
               *
```



```
LINE           ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

228            KK     DA1
229            KO       0       0       0       7      21
230            BA  0.0067
231            LS       0      84
232            US    0.52    0.73
               *

233            KK      O8
234            KO       0       0       0       7      21
235            BA  0.0017
236            LS       0      84
237            US    0.29    0.75
               *

238            KK   C/DA1
239            KO       0       0       0       7      21
240            HC       2
               *

241            KK      O4
242            KO       0       0       0       7      21
243            BA  0.0055
244            LS       0      84
245            US    0.49    0.73
               *

246            KK      O5
247            KO       0       0       0       7      21
248            BA  0.0005
249            LS       0      84
250            US    0.11    0.69
               *
```

```
          251            KK      P5
          252            KO       0       0       0       7      21
          253            BA  0.0131
          254            LS       0     100
          255            UD       0
                         *

          256            KK    C/P5
          257            KO       0       0       0       7      21
          258            HC       3
                         *

          259            KK    R/P5
          260            KO       0       0       0       7      21
          261            RS       1    ELEV  1139.6
          262            SA       0    0.02    0.08    0.58    1.14    1.46    1.70    1.93    2.16    2.41
          263            SE  1139.6    1140    1142    1144    1146    1148    1150    1152    1154    1156
          264            SS    1155     100     2.6     1.5
                         *
1                                                      HEC-1 INPUT                                                  PAGE  8

         LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


          265            KK     DA2
          266            KO       0       0       0       7      21
          267            BA  0.0040
          268            LS       0      84
          269            US    0.15    0.67
                         *

          270            KK     OP1
          271            KO       0       0       0       7      21
          272            BA  0.0112
          273            LS       0     100
          274            UD       0
                         *

          275            KK   R/OP1
          276            KO       0       0       0       7      21
          277            RS       1    ELEV    1146
          278            SA       0    5.08    5.67
          279            SE    1146  1146.1    1147
          280            SS  1146.9     100     2.6     1.5
                         *
          281            ZZ
1
              SCHEMATIC DIAGRAM OF STREAM NETWORK
 INPUT
  LINE       (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

   NO.       (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

    8          LD3
                .
                .
   15           .         LD3T
                .            .
                .            .
   21        C/LD3...........
                .
                .
   24           .          P4
                .            .
                .            .
   29         C/P4...........
                V
                V
   32         R/P4
                .
                .
   38           .          O3
                .           V
                .           V
   43           .       R/CH1B ***
                .            .
                .            .
   49           .            .         LD2T
                .            .            .
                .            .            .
   55           .            .            .          LD2
                .            .            .            .
                .            .            .            .
   61           .            .         C/LD2...........
                .            .            .
                .            .            .
   64           .            .            .           O2
                .            .            .            .
                .            .            .            .
   69           .       C/CH1A.......................
                .            V
                .            V
   72           .       R/CH1A ***
                .            .
                .            .
   78           .            .         LD1T
                .            .            .
                .            .            .
   84           .            .            .          LD1
                .            .            .            .
                .            .            .            .
   90           .            .         C/LD1...........
                .            .            .
                .            .            .
```

```
93          .         .         .        O1
            .         .         .         .
            .         .         .         .
98          .         .         .         .        P1
            .         .         .         .         .
            .         .         .         .         .
103         .      C/P1..............................
            .         V
            .         V
106         .      R/P1
            .         .
            .         .
112         .         .       DA3
            .         .         .
            .         .         .
117         .         .         .       O10
            .         .         .         .
            .         .         .         .
122         .         .    C/CULV..........
            .         .         .
            .         .         .
125         .         .         .      CH2B
            .         .         .         .
            .         .         .         .
131         .         .         .         .       LD6
            .         .         .         .         .
            .         .         .         .         .
137         .         .         .    C/CH2A..........
            .         .         .         V
            .         .         .         V
140         .         .         .    R/CH2A ***
            .         .         .         .
            .         .         .         .
146         .         .         .         .      LD5T
            .         .         .         .         .
            .         .         .         .         .
152         .         .         .         .         .       LD5
            .         .         .         .         .         .
            .         .         .         .         .         .
158         .         .         .         .     C/LD5..........
            .         .         .         .         V
            .         .         .         .         V
161         .         .         .         .     R/CH3 ***
            .         .         .         .         .
            .         .         .         .         .
167         .         .         .         .         .        O9
            .         .         .         .         .         .
            .         .         .         .         .         .
172         .         .         .         .         .         .        P2
            .         .         .         .         .         .         .
            .         .         .         .         .         .         .
177         .         .         .      C/P2..............................
            .         .         .         V
            .         .         .         V
180         .         .         .      R/P2
            .         .         .         .
            .         .         .         .
186         .         .         .         .       LD4
            .         .         .         .         .
            .         .         .         .         .
192         .         .         .         .         .      CH4A
            .         .         .         .         .         V
            .         .         .         .         .         V
198         .         .         .         .         .      CH4B ***
            .         .         .         .         .         .
            .         .         .         .         .         .
204         .         .         .         .         .         .        O6
            .         .         .         .         .         .         .
            .         .         .         .         .         .         .
209         .         .         .         .         .         .         .        O7
            .         .         .         .         .         .         .         .
            .         .         .         .         .         .         .         .
214         .         .         .         .         .         .         .         .        P3
            .         .         .         .         .         .         .         .         .
            .         .         .         .         .         .         .         .         .
219         .         .         .         .      C/P3........................................
            .         .         .         .         V
            .         .         .         .         V
222         .         .         .         .      R/P3
            .         .         .         .         .
            .         .         .         .         .
228         .         .         .         .         .       DA1
            .         .         .         .         .         .
            .         .         .         .         .         .
233         .         .         .         .         .         .        O8
            .         .         .         .         .         .         .
            .         .         .         .         .         .         .
238         .         .         .         .         .     C/DA1..........
            .         .         .         .         .         .
            .         .         .         .         .         .
241         .         .         .         .         .         .        O4
            .         .         .         .         .         .         .
            .         .         .         .         .         .         .
246         .         .         .         .         .         .         .        O5
            .         .         .         .         .         .         .         .
            .         .         .         .         .         .         .         .
251         .         .         .         .         .         .         .         .        P5
            .         .         .         .         .         .         .         .         .
            .         .         .         .         .         .         .         .         .
256         .         .         .         .         .         .      C/P5....................
            .         .         .         .         .         .         V
            .         .         .         .         .         .         V
259         .         .         .         .         .         .      R/P5
            .         .         .         .         .         .         .
```

```
265         .         .         .         .         .         .         .         DA2
            .         .         .         .         .         .         .          .
            .         .         .         .         .         .         .          .
270         .         .         .         .         .         .         .          .          OP1
            .         .         .         .         .         .         .          .           V
            .         .         .         .         .         .         .          .           V
275         .         .         .         .         .         .         .          .         R/OP1

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION
1****************************************                                         ****************************************
*                                       *                                         *                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *                                         *   U.S. ARMY CORPS OF ENGINEERS       *
*              JUN  1998                *                                         *   HYDROLOGIC ENGINEERING CENTER      *
*            VERSION 4.1                *                                         *         609 SECOND STREET            *
*                                       *                                         *      DAVIS, CALIFORNIA 95616         *
*  RUN DATE   29OCT14  TIME  19:28:19   *                                         *          (916) 756-1104              *
*                                       *                                         *                                      *
****************************************                                          ****************************************




                              EAST OAK RDF
                              TIER III PERMIT MODIFICATION
                              PROPOSED CONDITIONS
                              25-YEAR, 24-HOUR STORM EVENT
                              P:\SW\WM\East Oak\Expansion 2013\Application\Appendix H\HEC-1\PRO

  7 IO         OUTPUT CONTROL VARIABLES
                     IPRNT          3  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE

    IT         HYDROGRAPH TIME DATA
                      NMIN          5  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1   0  STARTING DATE
                     ITIME       0000  STARTING TIME
                        NQ        289  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      3   0  ENDING DATE
                    NDTIME       0000  ENDING TIME
                     ICENT         19  CENTURY MARK

                 COMPUTATION INTERVAL     .08 HOURS
                      TOTAL TIME BASE   24.00 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


           **************
           *            *
  8 KK     *      LD3   *
           *            *
           **************

 10 KO         OUTPUT CONTROL VARIABLES
                     IPRNT          3  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE
                     IPNCH          7  PUNCH COMPUTED HYDROGRAPH
                      IOUT         21  SAVE HYDROGRAPH ON THIS UNIT
                     ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                     ISAV2        289  LAST ORDINATE PUNCHED OR SAVED
                    TIMINT       .083  TIME INTERVAL IN HOURS


             SUBBASIN RUNOFF DATA

 11 BA         SUBBASIN CHARACTERISTICS
                     TAREA        .05  SUBBASIN AREA

               PRECIPITATION DATA

  9 PH                            DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
               ..... HYDRO-35 ......  ............... TP-40 ...............  ........... TP-49 ...........
               5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                 .95    1.84    3.25    3.90    4.23    5.00    5.93    6.83     .00     .00     .00     .00

                                              STORM AREA =       .05

 12 LS         SCS LOSS RATE
                    STRTL         .27  INITIAL ABSTRACTION
                   CRVNBR       88.00  CURVE NUMBER
                    RTIMP         .00  PERCENT IMPERVIOUS AREA

               KINEMATIC WAVE
 13 UK           OVERLAND-FLOW ELEMENT NO. 1
                        L        150.  OVERLAND FLOW LENGTH
                        S       .2500  SLOPE
                        N        .300  ROUGHNESS COEFFICIENT
                       PA       100.0  PERCENT OF SUBBASIN
                    DXMIN           5  MINIMUM NUMBER OF DX INTERVALS
```

```
                        KINEMATIC WAVE
 14 RK                    MAIN CHANNEL
                              L          1200.  CHANNEL LENGTH
                              S          .0050  SLOPE
                              N           .030  CHANNEL ROUGHNESS COEFFICIENT
                             CA            .05  CONTRIBUTING AREA
                          SHAPE           TRAP  CHANNEL SHAPE
                             WD            .00  BOTTOM WIDTH OR DIAMETER
                              Z           2.00  SIDE SLOPE
                         NDXMIN              2  MINIMUM NUMBER OF DX INTERVALS
                         RUPSTQ             NO  ROUTE UPSTREAM HYDROGRAPH

                                                              ***
                                    COMPUTED KINEMATIC PARAMETERS
                                          VARIABLE TIME STEP
                                        (DT SHOWN IS A MINIMUM)

                         ELEMENT   ALPHA      M         DT        DX       PEAK    TIME TO     VOLUME    MAXIMUM
                                                                                    PEAK                 CELERITY
                                                       (MIN)     (FT)     (CFS)     (MIN)       (IN)      (FPS)

                        PLANE1      2.48     1.67        .70     30.00    325.20    724.83      5.40        .81
                        MAIN        1.63     1.33        .84    400.00    303.76    725.88      5.40       8.61

CONTINUITY SUMMARY (AC-FT) - INFLOW= .0000E+00  EXCESS= .1439E+02 OUTFLOW= .1430E+02 BASIN STORAGE= .7372E-01 PERCENT ERROR=     .1

                                      INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL


                        MAIN        1.63     1.33       5.00               294.46    725.00      5.41

      ***            ***         ***          ***           ***

                          HYDROGRAPH AT STATION       LD3

    TOTAL RAINFALL =     6.83, TOTAL LOSS =     1.40, TOTAL EXCESS =     5.43

  PEAK FLOW     TIME                         MAXIMUM AVERAGE FLOW
                                   6-HR        24-HR        72-HR       24.00-HR
+    (CFS)      (HR)
                         (CFS)
+      294.     12.08                23.           7.           7.            7.
                         (INCHES)  4.393        5.410        5.410         5.410
                          (AC-FT)    12.          14.          14.           14.

                        CUMULATIVE AREA =      .05 SQ MI



*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


                  **************
                  *            *
 15 KK            *    LD3T    *
                  *            *
                  **************

 16 KO                  OUTPUT CONTROL VARIABLES
                              IPRNT          3  PRINT CONTROL
                              IPLOT          0  PLOT CONTROL
                              QSCAL         0.  HYDROGRAPH PLOT SCALE
                              IPNCH          7  PUNCH COMPUTED HYDROGRAPH
                               IOUT         21  SAVE HYDROGRAPH ON THIS UNIT
                              ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                              ISAV2        289  LAST ORDINATE PUNCHED OR SAVED
                             TIMINT       .083  TIME INTERVAL IN HOURS


                      SUBBASIN RUNOFF DATA

 17 BA                  SUBBASIN CHARACTERISTICS
                              TAREA        .01  SUBBASIN AREA

                        PRECIPITATION DATA

  9 PH                                  DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                        ..... HYDRO-35 ......    ............... TP-40 ...............    ........... TP-49 ...........
                        5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                          .95    1.84    3.25    3.90    4.23    5.00    5.93    6.83     .00     .00     .00     .00

                                                     STORM AREA =       .01

 18 LS                  SCS LOSS RATE
                              STRTL        .33  INITIAL ABSTRACTION
                             CRVNBR      86.00  CURVE NUMBER
                              RTIMP        .00  PERCENT IMPERVIOUS AREA

                        KINEMATIC WAVE
 19 UK                    OVERLAND-FLOW ELEMENT NO. 1
                              L           352.  OVERLAND FLOW LENGTH
                              S          .0400  SLOPE
                              N           .300  ROUGHNESS COEFFICIENT
                             PA          100.0  PERCENT OF SUBBASIN
                          DXMIN              5  MINIMUM NUMBER OF DX INTERVALS

                        KINEMATIC WAVE
 20 RK                    MAIN CHANNEL
                              L          1200.  CHANNEL LENGTH
                              S          .0050  SLOPE
```

```
                    N          .030  CHANNEL ROUGHNESS COEFFICIENT
                   CA           .01  CONTRIBUTING AREA
                SHAPE          TRAP  CHANNEL SHAPE
                   WD           .00  BOTTOM WIDTH OR DIAMETER
                    Z          2.00  SIDE SLOPE
               NDXMIN             2  MINIMUM NUMBER OF DX INTERVALS
               RUPSTQ            NO  ROUTE UPSTREAM HYDROGRAPH

                                                       ***
                             COMPUTED KINEMATIC PARAMETERS
                                 VARIABLE TIME STEP
                                (DT SHOWN IS A MINIMUM)

        ELEMENT     ALPHA       M        DT       DX       PEAK    TIME TO    VOLUME   MAXIMUM
                                                                    PEAK               CELERITY
                                        (MIN)     (FT)     (CFS)    (MIN)      (IN)     (FPS)

        PLANE1        .99      1.67      2.33     70.40    43.17    728.58     5.12      .52
        MAIN         1.63      1.33      1.38    400.00    42.02    731.43     5.12     5.28

CONTINUITY SUMMARY (AC-FT) - INFLOW= .0000E+00  EXCESS= .3135E+01 OUTFLOW= .3084E+01 BASIN STORAGE= .4911E-01 PERCENT ERROR=    .1

                              INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

        MAIN         1.63      1.33      5.00              41.72    730.00     5.11

     ***           ***           ***           ***           ***

                    HYDROGRAPH AT STATION     LD3T

     TOTAL RAINFALL =    6.83, TOTAL LOSS =    1.63, TOTAL EXCESS =    5.20

   PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                    6-HR        24-HR       72-HR      24.00-HR
 +   (CFS)       (HR)
                            (CFS)
 +     42.      12.17                  5.          2.          2.          2.
                          (INCHES)  4.216       5.114       5.114       5.114
                           (AC-FT)     3.          3.          3.          3.

                    CUMULATIVE AREA =     .01 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

            **************
            *            *
   21 KK    *    C/LD3   *
            *            *
            **************

   22 KO          OUTPUT CONTROL VARIABLES
                        IPRNT           3  PRINT CONTROL
                        IPLOT           0  PLOT CONTROL
                        QSCAL          0.  HYDROGRAPH PLOT SCALE
                        IPNCH           7  PUNCH COMPUTED HYDROGRAPH
                         IOUT          21  SAVE HYDROGRAPH ON THIS UNIT
                        ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                        ISAV2         289  LAST ORDINATE PUNCHED OR SAVED
                       TIMINT        .083  TIME INTERVAL IN HOURS


   23 HC          HYDROGRAPH COMBINATION
                        ICOMP           2  NUMBER OF HYDROGRAPHS TO COMBINE
                                                      ***

     ***           ***           ***           ***           ***

                    HYDROGRAPH AT STATION     C/LD3

   PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                    6-HR        24-HR       72-HR      24.00-HR
 +   (CFS)       (HR)
                            (CFS)
 +    324.      12.08                 29.          9.          9.          9.
                          (INCHES)  4.358       5.355       5.355       5.355
                           (AC-FT)    14.         17.         17.         17.

                    CUMULATIVE AREA =     .06 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

            **************
            *            *
   24 KK    *       P4   *
            *            *
            **************

   25 KO          OUTPUT CONTROL VARIABLES
                        IPRNT           3  PRINT CONTROL
                        IPLOT           0  PLOT CONTROL
                        QSCAL          0.  HYDROGRAPH PLOT SCALE
                        IPNCH           7  PUNCH COMPUTED HYDROGRAPH
```

```
                    IOUT          21  SAVE HYDROGRAPH ON THIS UNIT
                   ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                   ISAV2         289  LAST ORDINATE PUNCHED OR SAVED
                  TIMINT        .083  TIME INTERVAL IN HOURS

              SUBBASIN RUNOFF DATA

  26 BA         SUBBASIN CHARACTERISTICS
                   TAREA         .02  SUBBASIN AREA

                PRECIPITATION DATA

   9 PH                              DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
                5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                  .95    1.84    3.25    3.90    4.23    5.00    5.93    6.83     .00     .00     .00     .00

                                                      STORM AREA =       .02

  27 LS         SCS LOSS RATE
                   STRTL         .00  INITIAL ABSTRACTION
                  CRVNBR      100.00  CURVE NUMBER
                   RTIMP         .00  PERCENT IMPERVIOUS AREA

  28 UD         SCS DIMENSIONLESS UNITGRAPH
                    TLAG         .00  LAG

                                                                ***

                                                         UNIT HYDROGRAPH
                                                     5 END-OF-PERIOD ORDINATES
              108.        30.         6.         1.         0.

      ***              ***              ***              ***              ***

                           HYDROGRAPH AT STATION         P4

    TOTAL RAINFALL =      6.83, TOTAL LOSS =       .00, TOTAL EXCESS =      6.83

   PEAK FLOW      TIME                          MAXIMUM AVERAGE FLOW
                                        6-HR        24-HR        72-HR       24.00-HR
+    (CFS)        (HR)
                              (CFS)
+      120.      12.08                   10.           3.           3.            3.
                            (INCHES)   5.000        6.826        6.826         6.826
                             (AC-FT)      5.           7.           7.            7.

                           CUMULATIVE AREA =       .02 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

             **************
             *            *
  29 KK      *     C/P4   *
             *            *
             **************

  30 KO         OUTPUT CONTROL VARIABLES
                  IPRNT            3  PRINT CONTROL
                  IPLOT            0  PLOT CONTROL
                  QSCAL           0.  HYDROGRAPH PLOT SCALE
                  IPNCH            7  PUNCH COMPUTED HYDROGRAPH
                   IOUT           21  SAVE HYDROGRAPH ON THIS UNIT
                  ISAV1            1  FIRST ORDINATE PUNCHED OR SAVED
                  ISAV2          289  LAST ORDINATE PUNCHED OR SAVED
                 TIMINT         .083  TIME INTERVAL IN HOURS


  31 HC         HYDROGRAPH COMBINATION
                  ICOMP            2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                ***

      ***              ***              ***              ***              ***

                           HYDROGRAPH AT STATION       C/P4

   PEAK FLOW      TIME                          MAXIMUM AVERAGE FLOW
                                        6-HR        24-HR        72-HR       24.00-HR
+    (CFS)        (HR)
                              (CFS)
+      444.      12.08                   39.          12.          12.           12.
                            (INCHES)   4.497        5.701        5.701         5.701
                             (AC-FT)     19.          24.          24.           24.

                           CUMULATIVE AREA =       .08 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

             **************
             *            *
  32 KK      *     R/P4   *
             *            *
             **************
```

```
33 KO          OUTPUT CONTROL VARIABLES
                     IPRNT          3  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE
                     IPNCH          7  PUNCH COMPUTED HYDROGRAPH
                      IOUT         21  SAVE HYDROGRAPH ON THIS UNIT
                     ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                     ISAV2        289  LAST ORDINATE PUNCHED OR SAVED
                    TIMINT       .083  TIME INTERVAL IN HOURS


              HYDROGRAPH ROUTING DATA

34 RS          STORAGE ROUTING
                     NSTPS          1  NUMBER OF SUBREACHES
                      ITYP       ELEV  TYPE OF INITIAL CONDITION
                    RSVRIC    1139.80  INITIAL CONDITION
                         X        .00 WORKING R AND D COEFFICIENT

35 SA                 AREA         .0        2.8        3.3        3.7        4.4        5.6

36 SE          ELEVATION    1139.80    1140.00    1142.00    1144.00    1146.00    1148.00

37 SS          SPILLWAY
                      CREL    1147.80  SPILLWAY CREST ELEVATION
                     SPWID     100.00  SPILLWAY WIDTH
                      COQW       2.60  WEIR COEFFICIENT
                      EXPW       1.50  EXPONENT OF HEAD

                                                                ***

                                                   COMPUTED STORAGE-ELEVATION DATA

         STORAGE        .00        .19       6.31      13.35      21.44      31.43
       ELEVATION    1139.80    1140.00    1142.00    1144.00    1146.00    1148.00

                                                   COMPUTED OUTFLOW-ELEVATION DATA

         OUTFLOW        .00        .00        .00        .03        .11        .26        .50        .86       1.37       2.05
       ELEVATION    1139.80    1147.80    1147.80    1147.80    1147.81    1147.81    1147.82    1147.82    1147.83    1147.84

         OUTFLOW       2.91       3.99       5.31       6.89       8.75      10.94      13.46      16.32      19.58      23.25
       ELEVATION    1147.85    1147.86    1147.87    1147.89    1147.90    1147.92    1147.94    1147.96    1147.98    1148.00

                                               COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

         STORAGE        .00        .19       6.31      13.35      21.44      30.32      30.40      30.48      30.59      30.66
         OUTFLOW        .00        .00        .00        .00        .00        .00        .50       1.37       2.91       3.99
       ELEVATION    1139.80    1140.00    1142.00    1144.00    1146.00    1147.80    1147.82    1147.83    1147.85    1147.86

         STORAGE      30.73      30.81      30.89      30.99      31.09      31.19      31.31      31.43
         OUTFLOW       5.31       6.89       8.75      10.94      13.46      16.32      19.58      23.25
       ELEVATION    1147.87    1147.89    1147.90    1147.92    1147.94    1147.96    1147.98    1148.00

    ***               ***             ***             ***              ***

                      HYDROGRAPH AT STATION      R/P4

 PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                  6-HR        24-HR        72-HR      24.00-HR
+   (CFS)      (HR)
                          (CFS)
+        0.     .00                  0.           0.           0.            0.
                       (INCHES)    .000         .000         .000          .000
                        (AC-FT)      0.           0.           0.            0.

PEAK STORAGE   TIME                        MAXIMUM AVERAGE STORAGE
                                  6-HR        24-HR        72-HR      24.00-HR
+  (AC-FT)     (HR)
       24.    24.00                 23.          11.          11.           11.

 PEAK STAGE    TIME                        MAXIMUM AVERAGE STAGE
                                  6-HR        24-HR        72-HR      24.00-HR
+   (FEET)     (HR)
   1146.57    24.00             1146.40      1143.10      1143.10      1143.10

                     CUMULATIVE AREA =      .08 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

            **************
            *            *
38 KK       *       O3   *
            *            *
            **************

39 KO          OUTPUT CONTROL VARIABLES
                     IPRNT          3  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE
                     IPNCH          7  PUNCH COMPUTED HYDROGRAPH
                      IOUT         21  SAVE HYDROGRAPH ON THIS UNIT
                     ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                     ISAV2        289  LAST ORDINATE PUNCHED OR SAVED
                    TIMINT       .083  TIME INTERVAL IN HOURS


              SUBBASIN RUNOFF DATA
```

```
40 BA          SUBBASIN CHARACTERISTICS
                     TAREA         .01  SUBBASIN AREA

               PRECIPITATION DATA

 9 PH                               DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
               ..... HYDRO-35 ......    ............... TP-40 ...............    ........... TP-49 ...........
               5-MIN  15-MIN  60-MIN     2-HR     3-HR     6-HR    12-HR    24-HR    2-DAY    4-DAY    7-DAY  10-DAY
                 .95    1.84    3.25     3.90     4.23     5.00     5.93     6.83      .00      .00      .00     .00

                                              STORM AREA =       .01

41 LS          SCS LOSS RATE
                     STRTL         .38  INITIAL ABSTRACTION
                    CRVNBR       84.00  CURVE NUMBER
                     RTIMP         .00  PERCENT IMPERVIOUS AREA

42 US          SNYDER UNITGRAPH
                        TP         .60  LAG
                        CP         .73  PEAKING COEFFICIENT

               SYNTHETIC ACCUMULATED-AREA VS. TIME CURVE WILL BE USED

                                                     ***

                                             UNIT HYDROGRAPH PARAMETERS
                                        CLARK   TC=    .73 HR,        R=    .39 HR
                                       SNYDER   TP=    .59 HR,       CP=    .72

                                                  UNIT HYDROGRAPH
                                             30 END-OF-PERIOD ORDINATES
               0.         1.         2.         3.         4.         4.         5.         5.         4.         4.
               3.         2.         2.         2.         1.         1.         1.         1.         1.         0.
               0.         0.         0.         0.         0.         0.         0.         0.         0.         0.

   ***            ***            ***            ***            ***

                         HYDROGRAPH AT STATION       O3

   TOTAL RAINFALL =     6.83, TOTAL LOSS =     1.85, TOTAL EXCESS =     4.98

 PEAK FLOW     TIME                         MAXIMUM AVERAGE FLOW
                                 6-HR        24-HR        72-HR       24.00-HR
+   (CFS)      (HR)
                         (CFS)
+     11.     12.67                 3.           1.           1.            1.
                       (INCHES)  4.045        4.915        4.915         4.915
                        (AC-FT)     1.           2.           2.            2.

                       CUMULATIVE AREA =      .01 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

            **************
            *            *
43 KK       *   R/CH1B   *
            *            *
            **************

44 KO          OUTPUT CONTROL VARIABLES
                     IPRNT           3  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE
                     IPNCH           7  PUNCH COMPUTED HYDROGRAPH
                      IOUT          21  SAVE HYDROGRAPH ON THIS UNIT
                     ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                     ISAV2         289  LAST ORDINATE PUNCHED OR SAVED
                    TIMINT        .083  TIME INTERVAL IN HOURS


             SUBBASIN RUNOFF DATA

45 BA          SUBBASIN CHARACTERISTICS
                     TAREA         .02  SUBBASIN AREA

               PRECIPITATION DATA

 9 PH                               DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
               ..... HYDRO-35 ......    ............... TP-40 ...............    ........... TP-49 ...........
               5-MIN  15-MIN  60-MIN     2-HR     3-HR     6-HR    12-HR    24-HR    2-DAY    4-DAY    7-DAY  10-DAY
                 .95    1.84    3.25     3.90     4.23     5.00     5.93     6.83      .00      .00      .00     .00

                                              STORM AREA =       .02

46 LS          SCS LOSS RATE
                     STRTL         .27  INITIAL ABSTRACTION
                    CRVNBR       88.00  CURVE NUMBER
                     RTIMP         .00  PERCENT IMPERVIOUS AREA

               KINEMATIC WAVE
47 UK            OVERLAND-FLOW ELEMENT NO. 1
                         L        280.  OVERLAND FLOW LENGTH
                         S       .0070  SLOPE
                         N        .300  ROUGHNESS COEFFICIENT
                        PA       100.0  PERCENT OF SUBBASIN
                     DXMIN           5  MINIMUM NUMBER OF DX INTERVALS

               KINEMATIC WAVE
48 RK            MAIN CHANNEL
                         L        676.  CHANNEL LENGTH
```

```
                       S        .0040  SLOPE
                       N         .040  CHANNEL ROUGHNESS COEFFICIENT
                      CA          .02  CONTRIBUTING AREA
                   SHAPE         TRAP  CHANNEL SHAPE
                      WD        20.00  BOTTOM WIDTH OR DIAMETER
                       Z         3.00  SIDE SLOPE
                  NDXMIN            2  MINIMUM NUMBER OF DX INTERVALS
                  RUPSTQ          YES  ROUTE UPSTREAM HYDROGRAPH

                                                         ***
                                     COMPUTED KINEMATIC PARAMETERS
                                          VARIABLE TIME STEP
                                        (DT SHOWN IS A MINIMUM)

                  ELEMENT   ALPHA      M         DT        DX       PEAK   TIME TO      VOLUME   MAXIMUM
                                                                              PEAK                CELERITY
                                                (MIN)     (FT)     (CFS)    (MIN)        (IN)     (FPS)

                 PLANE1       .42     1.67      3.75     56.00     46.62    734.46       5.32       .25
                 MAIN         .46     1.48      1.14    225.33     51.31    735.55       5.18      3.34

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1599E+01  EXCESS= .4487E+01 OUTFLOW= .5969E+01 BASIN STORAGE= .9397E-01 PERCENT ERROR=    .4

                                       INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

                 MAIN         .46     1.48      5.00               51.24    735.00       5.18

      ***             ***           ***              ***             ***

                      HYDROGRAPH AT STATION    R/CH1B

      TOTAL RAINFALL =     6.83, TOTAL LOSS =     1.40, TOTAL EXCESS =     5.43

    PEAK FLOW      TIME                           MAXIMUM AVERAGE FLOW
                                        6-HR         24-HR        72-HR       24.00-HR
+    (CFS)         (HR)
                                (CFS)
+      51.        12.25                  10.           3.           3.            3.
                              (INCHES)  4.266        5.183        5.183         5.183
                               (AC-FT)     5.           6.           6.            6.

                         CUMULATIVE AREA =      .02 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

              **************
              *            *
   49 KK      *     LD2T   *
              *            *
              **************

   50 KO           OUTPUT CONTROL VARIABLES
                         IPRNT          3  PRINT CONTROL
                         IPLOT          0  PLOT CONTROL
                         QSCAL         0.  HYDROGRAPH PLOT SCALE
                         IPNCH          7  PUNCH COMPUTED HYDROGRAPH
                          IOUT         21  SAVE HYDROGRAPH ON THIS UNIT
                         ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                         ISAV2        289  LAST ORDINATE PUNCHED OR SAVED
                        TIMINT       .083  TIME INTERVAL IN HOURS

                 SUBBASIN RUNOFF DATA

   51 BA           SUBBASIN CHARACTERISTICS
                         TAREA        .01  SUBBASIN AREA

                   PRECIPITATION DATA

    9 PH                                    DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                   ..... HYDRO-35 ......    ............... TP-40 ...............    ........... TP-49 ...........
                   5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                     .95    1.84    3.25    3.90    4.23    5.00    5.93    6.83     .00     .00     .00     .00

                                                       STORM AREA =      .01

   52 LS           SCS LOSS RATE
                         STRTL        .33  INITIAL ABSTRACTION
                        CRVNBR      86.00  CURVE NUMBER
                         RTIMP        .00  PERCENT IMPERVIOUS AREA

                   KINEMATIC WAVE
   53 UK             OVERLAND-FLOW ELEMENT NO. 1
                             L       487.  OVERLAND FLOW LENGTH
                             S      .0400  SLOPE
                             N       .300  ROUGHNESS COEFFICIENT
                            PA      100.0  PERCENT OF SUBBASIN
                         DXMIN          5  MINIMUM NUMBER OF DX INTERVALS

                   KINEMATIC WAVE
   54 RK             MAIN CHANNEL
                             L       833.  CHANNEL LENGTH
                             S      .0050  SLOPE
                             N       .030  CHANNEL ROUGHNESS COEFFICIENT
                            CA        .01  CONTRIBUTING AREA
                         SHAPE       TRAP  CHANNEL SHAPE
                            WD        .00  BOTTOM WIDTH OR DIAMETER
```

```
                        Z          2.00  SIDE SLOPE
                   NDXMIN             2  MINIMUM NUMBER OF DX INTERVALS
                   RUPSTQ            NO  ROUTE UPSTREAM HYDROGRAPH

                                                                 ***
                                         COMPUTED KINEMATIC PARAMETERS
                                              VARIABLE TIME STEP
                                            (DT SHOWN IS A MINIMUM)

                   ELEMENT    ALPHA       M         DT        DX        PEAK     TIME TO    VOLUME    MAXIMUM
                                                                                  PEAK                CELERITY
                                                   (MIN)     (FT)      (CFS)     (MIN)       (IN)      (FPS)

                  PLANE1        .99      1.67      3.06     97.40     36.09     729.45      5.11       .56
                  MAIN         1.63      1.33      1.02    277.67     35.69     732.08      5.09      5.08

CONTINUITY SUMMARY (AC-FT) - INFLOW= .0000E+00  EXCESS= .2996E+01 OUTFLOW= .2934E+01 BASIN STORAGE= .5032E-01 PERCENT ERROR=     .4

                                           INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

                  MAIN         1.63      1.33      5.00               34.77     730.00      5.09

       ***            ***           ***           ***           ***

                            HYDROGRAPH AT STATION      LD2T

     TOTAL RAINFALL =     6.83, TOTAL LOSS =     1.63, TOTAL EXCESS =     5.20

   PEAK FLOW      TIME                           MAXIMUM AVERAGE FLOW
                                      6-HR         24-HR         72-HR       24.00-HR
 +    (CFS)       (HR)
                             (CFS)
 +     35.       12.17                   5.            1.            1.            1.
                            (INCHES)    4.203         5.090         5.090         5.090
                             (AC-FT)      2.            3.            3.            3.

                            CUMULATIVE AREA =      .01 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

               **************
               *            *
    55 KK      *     LD2    *
               *            *
               **************

    56 KO           OUTPUT CONTROL VARIABLES
                         IPRNT            3  PRINT CONTROL
                         IPLOT            0  PLOT CONTROL
                         QSCAL           0.  HYDROGRAPH PLOT SCALE
                         IPNCH            7  PUNCH COMPUTED HYDROGRAPH
                          IOUT           21  SAVE HYDROGRAPH ON THIS UNIT
                         ISAV1            1  FIRST ORDINATE PUNCHED OR SAVED
                         ISAV2          289  LAST ORDINATE PUNCHED OR SAVED
                        TIMINT         .083  TIME INTERVAL IN HOURS


                SUBBASIN RUNOFF DATA

    57 BA           SUBBASIN CHARACTERISTICS
                         TAREA          .04  SUBBASIN AREA

                    PRECIPITATION DATA

     9 PH                                DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                    ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
                    5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                      .95    1.84    3.25    3.90    4.23    5.00    5.93    6.83     .00     .00     .00     .00

                                                     STORM AREA =      .04

    58 LS           SCS LOSS RATE
                         STRTL          .27  INITIAL ABSTRACTION
                        CRVNBR        88.00  CURVE NUMBER
                         RTIMP          .00  PERCENT IMPERVIOUS AREA

                    KINEMATIC WAVE
    59 UK             OVERLAND-FLOW ELEMENT NO. 1
                             L         216.  OVERLAND FLOW LENGTH
                             S        .2500  SLOPE
                             N         .300  ROUGHNESS COEFFICIENT
                            PA        100.0  PERCENT OF SUBBASIN
                         DXMIN            5  MINIMUM NUMBER OF DX INTERVALS

                    KINEMATIC WAVE
    60 RK             MAIN CHANNEL
                             L        1558.  CHANNEL LENGTH
                             S        .0050  SLOPE
                             N         .030  CHANNEL ROUGHNESS COEFFICIENT
                            CA          .04  CONTRIBUTING AREA
                         SHAPE         TRAP  CHANNEL SHAPE
                            WD          .00  BOTTOM WIDTH OR DIAMETER
                             Z         2.00  SIDE SLOPE
                        NDXMIN            2  MINIMUM NUMBER OF DX INTERVALS
                        RUPSTQ           NO  ROUTE UPSTREAM HYDROGRAPH

                                                                 ***
```

COMPUTED KINEMATIC PARAMETERS
VARIABLE TIME STEP
(DT SHOWN IS A MINIMUM)

ELEMENT	ALPHA	M	DT (MIN)	DX (FT)	PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)	MAXIMUM CELERITY (FPS)
PLANE1	2.48	1.67	.94	43.20	257.12	725.27	5.40	.91
MAIN	1.63	1.33	1.10	519.33	235.73	726.60	5.39	8.03

CONTINUITY SUMMARY (AC-FT) - INFLOW= .0000E+00 EXCESS= .1216E+02 OUTFLOW= .1207E+02 BASIN STORAGE= .8751E-01 PERCENT ERROR= .0

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.63	1.33	5.00		211.47	725.00	5.39

*** *** *** *** ***

HYDROGRAPH AT STATION LD2

TOTAL RAINFALL = 6.83, TOTAL LOSS = 1.40, TOTAL EXCESS = 5.43

PEAK FLOW (CFS)	TIME (HR)		6-HR	24-HR	72-HR	24.00-HR
			MAXIMUM AVERAGE FLOW			
+ 211.	12.08	(CFS)	20.	6.	6.	6.
		(INCHES)	4.376	5.385	5.385	5.385
		(AC-FT)	10.	12.	12.	12.

CUMULATIVE AREA = .04 SQ MI

*** ***

```
          **************
          *            *
 61 KK    *    C/LD2   *
          *            *
          **************
```

62 KO OUTPUT CONTROL VARIABLES

IPRNT	3	PRINT CONTROL
IPLOT	0	PLOT CONTROL
QSCAL	0.	HYDROGRAPH PLOT SCALE
IPNCH	7	PUNCH COMPUTED HYDROGRAPH
IOUT	21	SAVE HYDROGRAPH ON THIS UNIT
ISAV1	1	FIRST ORDINATE PUNCHED OR SAVED
ISAV2	289	LAST ORDINATE PUNCHED OR SAVED
TIMINT	.083	TIME INTERVAL IN HOURS

63 HC HYDROGRAPH COMBINATION
ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

***

*** *** *** *** ***

HYDROGRAPH AT STATION C/LD2

PEAK FLOW (CFS)	TIME (HR)		6-HR	24-HR	72-HR	24.00-HR
			MAXIMUM AVERAGE FLOW			
+ 236.	12.08	(CFS)	25.	8.	8.	8.
		(INCHES)	4.338	5.325	5.325	5.325
		(AC-FT)	12.	15.	15.	15.

CUMULATIVE AREA = .05 SQ MI

*** ***

```
          **************
          *            *
 64 KK    *       O2   *
          *            *
          **************
```

65 KO OUTPUT CONTROL VARIABLES

IPRNT	3	PRINT CONTROL
IPLOT	0	PLOT CONTROL
QSCAL	0.	HYDROGRAPH PLOT SCALE
IPNCH	7	PUNCH COMPUTED HYDROGRAPH
IOUT	21	SAVE HYDROGRAPH ON THIS UNIT
ISAV1	1	FIRST ORDINATE PUNCHED OR SAVED
ISAV2	289	LAST ORDINATE PUNCHED OR SAVED
TIMINT	.083	TIME INTERVAL IN HOURS

SUBBASIN RUNOFF DATA

66 BA SUBBASIN CHARACTERISTICS

```
                  TAREA         .01  SUBBASIN AREA

              PRECIPITATION DATA

   9 PH                          DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
              ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
              5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                .95    1.84    3.25    3.90    4.23    5.00    5.93    6.83     .00     .00     .00     .00

                                              STORM AREA =      .01

  67 LS       SCS LOSS RATE
                  STRTL         .38  INITIAL ABSTRACTION
                 CRVNBR       84.00  CURVE NUMBER
                  RTIMP         .00  PERCENT IMPERVIOUS AREA

  68 US       SNYDER UNITGRAPH
                     TP         .29  LAG
                     CP         .71  PEAKING COEFFICIENT

              SYNTHETIC ACCUMULATED-AREA VS. TIME CURVE WILL BE USED

                                                                ***

                                                 UNIT HYDROGRAPH PARAMETERS
                                            CLARK   TC=   .36 HR,       R=   .20 HR
                                           SNYDER   TP=   .29 HR,      CP=   .71

                                                      UNIT HYDROGRAPH
                                                 16 END-OF-PERIOD ORDINATES
              1.        5.        9.       10.        9.        6.        4.        3.        2.        1.
              1.        0.        0.        0.        0.        0.

       ***           ***           ***            ***            ***

                   HYDROGRAPH AT STATION        O2

     TOTAL RAINFALL =     6.83, TOTAL LOSS =     1.85, TOTAL EXCESS =     4.98

   PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                    6-HR        24-HR        72-HR      24.00-HR
 +   (CFS)       (HR)
                          (CFS)
 +      18.     12.33                   3.           1.           1.           1.
                        (INCHES)    4.054        4.940        4.940        4.940
                         (AC-FT)       1.           2.           2.           2.

                      CUMULATIVE AREA =      .01 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
  69 KK   *    C/CH1A  *
          *            *
          **************

  70 KO         OUTPUT CONTROL VARIABLES
                    IPRNT            3  PRINT CONTROL
                    IPLOT            0  PLOT CONTROL
                    QSCAL           0.  HYDROGRAPH PLOT SCALE
                    IPNCH            7  PUNCH COMPUTED HYDROGRAPH
                     IOUT           21  SAVE HYDROGRAPH ON THIS UNIT
                    ISAV1            1  FIRST ORDINATE PUNCHED OR SAVED
                    ISAV2          289  LAST ORDINATE PUNCHED OR SAVED
                   TIMINT         .083  TIME INTERVAL IN HOURS

  71 HC         HYDROGRAPH COMBINATION
                    ICOMP            3  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                ***

       ***           ***           ***            ***            ***

                   HYDROGRAPH AT STATION    C/CH1A

   PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                    6-HR        24-HR        72-HR      24.00-HR
 +   (CFS)       (HR)
                          (CFS)
 +     276.     12.08                  37.          11.          11.          11.
                        (INCHES)    4.293        5.256        5.256        5.256
                         (AC-FT)      19.          23.          23.          23.

                      CUMULATIVE AREA =      .08 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
  72 KK   *    R/CH1A  *
          *            *
          **************

  73 KO         OUTPUT CONTROL VARIABLES
```

```
                    IPRNT            3  PRINT CONTROL
                    IPLOT            0  PLOT CONTROL
                    QSCAL           0.  HYDROGRAPH PLOT SCALE
                    IPNCH            7  PUNCH COMPUTED HYDROGRAPH
                     IOUT           21  SAVE HYDROGRAPH ON THIS UNIT
                    ISAV1            1  FIRST ORDINATE PUNCHED OR SAVED
                    ISAV2          289  LAST ORDINATE PUNCHED OR SAVED
                   TIMINT         .083  TIME INTERVAL IN HOURS


            SUBBASIN RUNOFF DATA

 74 BA        SUBBASIN CHARACTERISTICS
                    TAREA          .01  SUBBASIN AREA

              PRECIPITATION DATA

  9 PH                           DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
              ..... HYDRO-35 ......   ............... TP-40 ...............    ........... TP-49 ...........
              5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                .95    1.84    3.25    3.90    4.23    5.00    5.93    6.83     .00     .00     .00     .00

                                                 STORM AREA =       .01

 75 LS        SCS LOSS RATE
                   STRTL           .27  INITIAL ABSTRACTION
                  CRVNBR         88.00  CURVE NUMBER
                   RTIMP           .00  PERCENT IMPERVIOUS AREA

              KINEMATIC WAVE
 76 UK          OVERLAND-FLOW ELEMENT NO. 1
                       L          152.  OVERLAND FLOW LENGTH
                       S         .1050  SLOPE
                       N          .300  ROUGHNESS COEFFICIENT
                      PA         100.0  PERCENT OF SUBBASIN
                   DXMIN             5  MINIMUM NUMBER OF DX INTERVALS

              KINEMATIC WAVE
 77 RK          MAIN CHANNEL
                       L         1745.  CHANNEL LENGTH
                       S         .0020  SLOPE
                       N          .040  CHANNEL ROUGHNESS COEFFICIENT
                      CA           .01  CONTRIBUTING AREA
                   SHAPE          TRAP  CHANNEL SHAPE
                      WD         15.00  BOTTOM WIDTH OR DIAMETER
                       Z          3.00  SIDE SLOPE
                  NDXMIN             2  MINIMUM NUMBER OF DX INTERVALS
                  RUPSTQ           YES  ROUTE UPSTREAM HYDROGRAPH

                                                        ***
                                      COMPUTED KINEMATIC PARAMETERS
                                           VARIABLE TIME STEP
                                         (DT SHOWN IS A MINIMUM)

                 ELEMENT    ALPHA         M          DT        DX        PEAK    TIME TO     VOLUME    MAXIMUM
                                                                                   PEAK                CELERITY
                                                   (MIN)      (FT)      (CFS)     (MIN)       (IN)      (FPS)

                PLANE1       1.61       1.67        .96      30.40      73.02    725.05       5.40        .61
                MAIN          .38       1.45       2.17     581.67     333.70    729.89       5.25       4.57

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2271E+02  EXCESS= .3416E+01 OUTFLOW= .2599E+02 BASIN STORAGE= .1330E+00 PERCENT ERROR=    .0

                                         INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL


                MAIN          .38       1.45       5.00                 333.21    730.00       5.26

      ***             ***             ***             ***             ***

                    HYDROGRAPH AT STATION   R/CH1A

    TOTAL RAINFALL =     6.83, TOTAL LOSS =     1.40, TOTAL EXCESS =     5.43

  PEAK FLOW     TIME                         MAXIMUM AVERAGE FLOW
                                    6-HR        24-HR        72-HR      24.00-HR
+   (CFS)       (HR)
                         (CFS)
+     333.      12.17                 43.          13.          13.          13.
                       (INCHES)     4.316        5.261        5.261        5.261
                        (AC-FT)       21.          26.          26.          26.

                       CUMULATIVE AREA =      .09 SQ MI



*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


           **************
           *            *
 78 KK     *      LD1T  *
           *            *
           **************

 79 KO        OUTPUT CONTROL VARIABLES
                    IPRNT            3  PRINT CONTROL
                    IPLOT            0  PLOT CONTROL
                    QSCAL           0.  HYDROGRAPH PLOT SCALE
                    IPNCH            7  PUNCH COMPUTED HYDROGRAPH
                     IOUT           21  SAVE HYDROGRAPH ON THIS UNIT
```

```
                 ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                 ISAV2        289  LAST ORDINATE PUNCHED OR SAVED
                TIMINT       .083  TIME INTERVAL IN HOURS


             SUBBASIN RUNOFF DATA

 80 BA         SUBBASIN CHARACTERISTICS
                 TAREA        .01  SUBBASIN AREA

               PRECIPITATION DATA

  9 PH                            DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
               ..... HYDRO-35 ......  ............... TP-40 ...............  ........... TP-49 ...........
               5-MIN  15-MIN  60-MIN   2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                 .95    1.84    3.25   3.90    4.23    5.00    5.93    6.83     .00     .00     .00     .00

                                             STORM AREA =      .01

 81 LS         SCS LOSS RATE
                 STRTL        .33  INITIAL ABSTRACTION
                CRVNBR      86.00  CURVE NUMBER
                 RTIMP        .00  PERCENT IMPERVIOUS AREA

               KINEMATIC WAVE
 82 UK           OVERLAND-FLOW ELEMENT NO. 1
                     L       542.  OVERLAND FLOW LENGTH
                     S      .0400  SLOPE
                     N       .300  ROUGHNESS COEFFICIENT
                    PA      100.0  PERCENT OF SUBBASIN
                 DXMIN          5  MINIMUM NUMBER OF DX INTERVALS

               KINEMATIC WAVE
 83 RK           MAIN CHANNEL
                     L       353.  CHANNEL LENGTH
                     S      .0050  SLOPE
                     N       .030  CHANNEL ROUGHNESS COEFFICIENT
                    CA        .01  CONTRIBUTING AREA
                 SHAPE       TRAP  CHANNEL SHAPE
                    WD        .00  BOTTOM WIDTH OR DIAMETER
                     Z       2.00  SIDE SLOPE
                NDXMIN          2  MINIMUM NUMBER OF DX INTERVALS
                RUPSTQ         NO  ROUTE UPSTREAM HYDROGRAPH

                                                  ***
                                   COMPUTED KINEMATIC PARAMETERS
                                         VARIABLE TIME STEP
                                       (DT SHOWN IS A MINIMUM)

                ELEMENT    ALPHA       M          DT        DX       PEAK    TIME TO     VOLUME   MAXIMUM
                                                                              PEAK                CELERITY
                                                 (MIN)      (FT)     (CFS)    (MIN)       (IN)     (FPS)

               PLANE1         .99     1.67       3.21    108.40     33.40    729.83      5.10       .57
               MAIN          1.63     1.33        .50    117.67     33.32    732.69      5.09      5.04

CONTINUITY SUMMARY (AC-FT) - INFLOW= .0000E+00  EXCESS= .2913E+01 OUTFLOW= .2851E+01 BASIN STORAGE= .5246E-01 PERCENT ERROR=     .3

                                      INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL


               MAIN          1.63     1.33       5.00               32.21    730.00      5.11

      ***             ***             ***             ***             ***

                         HYDROGRAPH AT STATION     LD1T

    TOTAL RAINFALL =     6.83, TOTAL LOSS =     1.63, TOTAL EXCESS =     5.20

   PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                      6-HR         24-HR        72-HR      24.00-HR
 +   (CFS)       (HR)
                             (CFS)
 +       32.     12.17                  5.           1.           1.           1.
                          (INCHES)   4.221        5.107        5.107        5.107
                           (AC-FT)      2.           3.           3.           3.

                          CUMULATIVE AREA =      .01 SQ MI



*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


            **************
            *            *
  84 KK     *      LD1   *
            *            *
            **************

  85 KO         OUTPUT CONTROL VARIABLES
                   IPRNT          3  PRINT CONTROL
                   IPLOT          0  PLOT CONTROL
                   QSCAL         0.  HYDROGRAPH PLOT SCALE
                   IPNCH          7  PUNCH COMPUTED HYDROGRAPH
                    IOUT         21  SAVE HYDROGRAPH ON THIS UNIT
                   ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                   ISAV2        289  LAST ORDINATE PUNCHED OR SAVED
                  TIMINT       .083  TIME INTERVAL IN HOURS
```

```
             SUBBASIN RUNOFF DATA

 86 BA         SUBBASIN CHARACTERISTICS
                  TAREA          .03  SUBBASIN AREA

               PRECIPITATION DATA

  9 PH                              DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
               ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
               5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                 .95    1.84    3.25    3.90    4.23    5.00    5.93    6.83     .00     .00     .00     .00

                                                 STORM AREA =       .03

 87 LS         SCS LOSS RATE
                  STRTL          .27  INITIAL ABSTRACTION
                 CRVNBR        88.00  CURVE NUMBER
                  RTIMP          .00  PERCENT IMPERVIOUS AREA

               KINEMATIC WAVE
 88 UK           OVERLAND-FLOW ELEMENT NO. 1
                      L         216.  OVERLAND FLOW LENGTH
                      S        .2500  SLOPE
                      N         .300  ROUGHNESS COEFFICIENT
                     PA        100.0  PERCENT OF SUBBASIN
                  DXMIN            5  MINIMUM NUMBER OF DX INTERVALS

               KINEMATIC WAVE
 89 RK           MAIN CHANNEL
                      L         506.  CHANNEL LENGTH
                      S        .0050  SLOPE
                      N         .030  CHANNEL ROUGHNESS COEFFICIENT
                     CA          .03  CONTRIBUTING AREA
                  SHAPE         TRAP  CHANNEL SHAPE
                     WD          .00  BOTTOM WIDTH OR DIAMETER
                      Z         2.00  SIDE SLOPE
                 NDXMIN            2  MINIMUM NUMBER OF DX INTERVALS
                 RUPSTQ           NO  ROUTE UPSTREAM HYDROGRAPH

                                                       ***
                                     COMPUTED KINEMATIC PARAMETERS
                                          VARIABLE TIME STEP
                                        (DT SHOWN IS A MINIMUM)

                 ELEMENT    ALPHA       M          DT          DX        PEAK     TIME TO      VOLUME      MAXIMUM
                                                                                    PEAK                   CELERITY
                                                 (MIN)        (FT)       (CFS)     (MIN)        (IN)        (FPS)

                 PLANE1      2.48      1.67         .94       43.20      158.56    725.28        5.40          .91
                 MAIN        1.63      1.33         .40      168.67      154.27    725.30        5.39         7.29

CONTINUITY SUMMARY (AC-FT) - INFLOW= .0000E+00  EXCESS= .7498E+01 OUTFLOW= .7443E+01 BASIN STORAGE= .4641E-01 PERCENT ERROR=    .1

                                        INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

                 MAIN        1.63      1.33        5.00                  152.30    725.00        5.41

       ***             ***         ***           ***           ***

                        HYDROGRAPH AT STATION       LD1

    TOTAL RAINFALL =     6.83, TOTAL LOSS =     1.40, TOTAL EXCESS =      5.43

  PEAK FLOW     TIME                              MAXIMUM AVERAGE FLOW
                                     6-HR         24-HR        72-HR       24.00-HR
+   (CFS)       (HR)
                           (CFS)
+     152.     12.08                   12.           4.           4.           4.
                         (INCHES)    4.394        5.408        5.408        5.408
                          (AC-FT)       6.           7.           7.           7.

                       CUMULATIVE AREA =      .03 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


            **************
            *            *
  90 KK     *    C/LD1   *
            *            *
            **************

  91 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           3  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           7  PUNCH COMPUTED HYDROGRAPH
                       IOUT          21  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         289  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT        .083  TIME INTERVAL IN HOURS


  92 HC          HYDROGRAPH COMBINATION
                      ICOMP           2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                       ***
```

```
                   QSCAL          0.  HYDROGRAPH PLOT SCALE
                   IPNCH          7  PUNCH COMPUTED HYDROGRAPH
                    IOUT         21  SAVE HYDROGRAPH ON THIS UNIT
                   ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                   ISAV2        289  LAST ORDINATE PUNCHED OR SAVED
                  TIMINT       .083  TIME INTERVAL IN HOURS


             SUBBASIN RUNOFF DATA

 100 BA        SUBBASIN CHARACTERISTICS
                   TAREA        .03  SUBBASIN AREA

               PRECIPITATION DATA

   9 PH                              DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
               ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
               5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                 .95    1.84    3.25    3.90    4.23    5.00    5.93    6.83     .00     .00     .00     .00

                                             STORM AREA =       .03

 101 LS        SCS LOSS RATE
                  STRTL         .00  INITIAL ABSTRACTION
                 CRVNBR      100.00  CURVE NUMBER
                  RTIMP         .00  PERCENT IMPERVIOUS AREA

 102 UD        SCS DIMENSIONLESS UNITGRAPH
                   TLAG         .00  LAG

                                                        ***

                                                   UNIT HYDROGRAPH
                                                 5 END-OF-PERIOD ORDINATES
             146.        41.         8.         2.         0.

     ***             ***             ***             ***             ***

                          HYDROGRAPH AT STATION         P1

    TOTAL RAINFALL =     6.83, TOTAL LOSS =      .00, TOTAL EXCESS =     6.83

  PEAK FLOW     TIME                            MAXIMUM AVERAGE FLOW
                                         6-HR        24-HR        72-HR      24.00-HR
 +   (CFS)       (HR)
                             (CFS)
 +      163.     12.08                    14.           5.           5.           5.
                           (INCHES)     5.000        6.826        6.826        6.826
                            (AC-FT)        7.           9.           9.           9.

                         CUMULATIVE AREA =       .03 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

            **************
            *            *
 103 KK     *     C/P1   *
            *            *
            **************

 104 KO        OUTPUT CONTROL VARIABLES
                   IPRNT          3  PRINT CONTROL
                   IPLOT          0  PLOT CONTROL
                   QSCAL          0.  HYDROGRAPH PLOT SCALE
                   IPNCH          7  PUNCH COMPUTED HYDROGRAPH
                    IOUT         21  SAVE HYDROGRAPH ON THIS UNIT
                   ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                   ISAV2        289  LAST ORDINATE PUNCHED OR SAVED
                  TIMINT       .083  TIME INTERVAL IN HOURS


 105 HC        HYDROGRAPH COMBINATION
                   ICOMP          4  NUMBER OF HYDROGRAPHS TO COMBINE
                                                        ***

     ***             ***             ***             ***             ***

                          HYDROGRAPH AT STATION       C/P1

  PEAK FLOW     TIME                            MAXIMUM AVERAGE FLOW
                                         6-HR        24-HR        72-HR      24.00-HR
 +   (CFS)       (HR)
                             (CFS)
 +      580.     12.17                    79.          25.          25.          25.
                           (INCHES)     4.390        5.488        5.488        5.488
                            (AC-FT)       39.          49.          49.          49.

                         CUMULATIVE AREA =       .17 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

            **************
            *            *
 106 KK     *     R/P1   *
            *            *
```

```
     ***               ***               ***               ***               ***

                                HYDROGRAPH AT STATION    C/LD1

   PEAK FLOW       TIME                              MAXIMUM AVERAGE FLOW
                                             6-HR          24-HR          72-HR        24.00-HR
 +     (CFS)        (HR)
                                 (CFS)
 +       179.       12.08                      17.             5.             5.              5.
                              (INCHES)      4.340          5.321          5.321           5.321
                                (AC-FT)         8.            10.            10.             10.

                                CUMULATIVE AREA =       .04 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

              **************
              *            *
   93 KK      *       O1   *
              *            *
              **************

   94 KO           OUTPUT CONTROL VARIABLES
                          IPRNT          3  PRINT CONTROL
                          IPLOT          0  PLOT CONTROL
                          QSCAL         0.  HYDROGRAPH PLOT SCALE
                          IPNCH          7  PUNCH COMPUTED HYDROGRAPH
                           IOUT         21  SAVE HYDROGRAPH ON THIS UNIT
                          ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                          ISAV2        289  LAST ORDINATE PUNCHED OR SAVED
                         TIMINT       .083  TIME INTERVAL IN HOURS

                 SUBBASIN RUNOFF DATA

   95 BA           SUBBASIN CHARACTERISTICS
                          TAREA        .01  SUBBASIN AREA

                   PRECIPITATION DATA

    9 PH                                DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                   ..... HYDRO-35 ......     ............... TP-40 ...............    ........... TP-49 ...........
                   5-MIN  15-MIN  60-MIN     2-HR    3-HR    6-HR   12-HR   24-HR    2-DAY   4-DAY   7-DAY  10-DAY
                     .95    1.84    3.25     3.90    4.23    5.00    5.93    6.83      .00     .00     .00     .00

                                                         STORM AREA =       .01

   96 LS           SCS LOSS RATE
                          STRTL        .38  INITIAL ABSTRACTION
                         CRVNBR      84.00  CURVE NUMBER
                          RTIMP        .00  PERCENT IMPERVIOUS AREA

   97 US           SNYDER UNITGRAPH
                             TP        .30  LAG
                             CP        .70  PEAKING COEFFICIENT

                   SYNTHETIC ACCUMULATED-AREA VS. TIME CURVE WILL BE USED

                                                                     ***

                                                     UNIT HYDROGRAPH PARAMETERS
                                                CLARK    TC=    .36 HR,        R=    .22 HR
                                               SNYDER    TP=    .30 HR,       CP=    .69

                                                               UNIT HYDROGRAPH
                                                      17 END-OF-PERIOD ORDINATES
                      2.         9.        15.        18.        16.        11.         8.         5.         4.         3.
                      2.         1.         1.         1.         0.         0.         0.

     ***               ***               ***               ***               ***

                                HYDROGRAPH AT STATION          O1

      TOTAL RAINFALL =     6.83, TOTAL LOSS =      1.85, TOTAL EXCESS =      4.98

   PEAK FLOW       TIME                              MAXIMUM AVERAGE FLOW
                                             6-HR          24-HR          72-HR        24.00-HR
 +     (CFS)        (HR)
                                 (CFS)
 +        33.       12.33                       5.             2.             2.              2.
                              (INCHES)      4.052          4.937          4.937           4.937
                                (AC-FT)         3.             3.             3.              3.

                                CUMULATIVE AREA =       .01 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

              **************
              *            *
   98 KK      *       P1   *
              *            *
              **************

   99 KO           OUTPUT CONTROL VARIABLES
                          IPRNT          3  PRINT CONTROL
                          IPLOT          0  PLOT CONTROL
```

```
              **************

107 KO            OUTPUT CONTROL VARIABLES
                        IPRNT          3  PRINT CONTROL
                        IPLOT          0  PLOT CONTROL
                        QSCAL         0.  HYDROGRAPH PLOT SCALE
                        IPNCH          7  PUNCH COMPUTED HYDROGRAPH
                         IOUT         21  SAVE HYDROGRAPH ON THIS UNIT
                        ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                        ISAV2        289  LAST ORDINATE PUNCHED OR SAVED
                       TIMINT       .083  TIME INTERVAL IN HOURS


                HYDROGRAPH ROUTING DATA

108 RS            STORAGE ROUTING
                        NSTPS          1  NUMBER OF SUBREACHES
                         ITYP       ELEV  TYPE OF INITIAL CONDITION
                       RSVRIC    1137.00  INITIAL CONDITION
                            X        .00 WORKING R AND D COEFFICIENT

109 SA                  AREA         .0       4.6       7.1       7.7       8.6      11.3      13.6

110 SE            ELEVATION    1137.00   1138.00   1140.00   1142.00   1144.00   1146.00   1148.00

111 SS            SPILLWAY
                         CREL    1147.00  SPILLWAY CREST ELEVATION
                        SPWID     100.00  SPILLWAY WIDTH
                         COQW       2.80  WEIR COEFFICIENT
                         EXPW       1.50  EXPONENT OF HEAD

                                                                ***

                                                    COMPUTED STORAGE-ELEVATION DATA

               STORAGE        .00      1.52     13.10     27.93     44.20     63.99     88.89
             ELEVATION    1137.00   1138.00   1140.00   1142.00   1144.00   1146.00   1148.00

                                                    COMPUTED OUTFLOW-ELEVATION DATA

               OUTFLOW        .00       .00       .05       .38      1.30      3.08      6.00     10.37     16.47     24.58
             ELEVATION    1137.00   1147.00   1147.00   1147.01   1147.03   1147.05   1147.08   1147.11   1147.15   1147.20

               OUTFLOW      35.00     48.00     63.89     82.97    105.48    131.76    162.04    196.67    235.87    280.00
             ELEVATION    1147.25   1147.31   1147.37   1147.44   1147.52   1147.60   1147.69   1147.79   1147.89   1148.00


                                                COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

               STORAGE        .00      1.52     13.10     27.93     44.20     63.99     75.85     76.01     76.20     76.47
               OUTFLOW        .00       .00       .00       .00       .00       .00       .00       .38      1.30      3.08
             ELEVATION    1137.00   1138.00   1140.00   1142.00   1144.00   1146.00   1147.00   1147.01   1147.03   1147.05

               STORAGE      76.82     77.24     77.75     78.33     79.00     79.75     80.58     81.50     82.50     83.60
               OUTFLOW       6.00     10.37     16.47     24.58     35.00     48.00     63.89     82.97    105.48    131.76
             ELEVATION    1147.08   1147.11   1147.15   1147.20   1147.25   1147.31   1147.37   1147.44   1147.52   1147.60

               STORAGE      84.78     86.05     87.42     88.89
               OUTFLOW     162.04    196.67    235.87    280.00
             ELEVATION    1147.69   1147.79   1147.89   1148.00

     ***             ***             ***             ***             ***

                          HYDROGRAPH AT STATION      R/P1

  PEAK FLOW       TIME                        MAXIMUM AVERAGE FLOW
                                      6-HR        24-HR        72-HR      24.00-HR
+    (CFS)        (HR)
                           (CFS)
+       0.         .00                  0.           0.           0.           0.
                        (INCHES)      .000         .000         .000         .000
                         (AC-FT)        0.           0.           0.           0.

 PEAK STORAGE     TIME                       MAXIMUM AVERAGE STORAGE
                                      6-HR        24-HR        72-HR      24.00-HR
+   (AC-FT)       (HR)
        49.      24.00                 47.          22.          22.          22.

  PEAK STAGE      TIME                        MAXIMUM AVERAGE STAGE
                                      6-HR        24-HR        72-HR      24.00-HR
+   (FEET)        (HR)
    1144.48      24.00             1144.29      1140.70      1140.70      1140.70

                         CUMULATIVE AREA =      .17 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


              **************
              *            *
112 KK        *      DA3   *
              *            *
              **************

113 KO            OUTPUT CONTROL VARIABLES
                        IPRNT          3  PRINT CONTROL
                        IPLOT          0  PLOT CONTROL
                        QSCAL         0.  HYDROGRAPH PLOT SCALE
                        IPNCH          7  PUNCH COMPUTED HYDROGRAPH
                         IOUT         21  SAVE HYDROGRAPH ON THIS UNIT
                        ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
```

```
                    ISAV2         289  LAST ORDINATE PUNCHED OR SAVED
                   TIMINT        .083  TIME INTERVAL IN HOURS

              SUBBASIN RUNOFF DATA

 114 BA         SUBBASIN CHARACTERISTICS
                    TAREA         .00  SUBBASIN AREA

                PRECIPITATION DATA

   9 PH                                DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
                5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                  .95    1.84    3.25    3.90    4.23    5.00    5.93    6.83     .00     .00     .00     .00

                                                  STORM AREA =       .00

 115 LS         SCS LOSS RATE
                    STRTL         .38  INITIAL ABSTRACTION
                   CRVNBR       84.00  CURVE NUMBER
                    RTIMP         .00  PERCENT IMPERVIOUS AREA

 116 US         SNYDER UNITGRAPH
                       TP         .16  LAG
                       CP         .73  PEAKING COEFFICIENT

                SYNTHETIC ACCUMULATED-AREA VS. TIME CURVE WILL BE USED

                                                                ***

                                                        UNIT HYDROGRAPH PARAMETERS
                                                    CLARK   TC=    .24 HR,        R=   .06 HR
                                                   SNYDER   TP=    .16 HR,       CP=   .73

                                                            UNIT HYDROGRAPH
                                                         6 END-OF-PERIOD ORDINATES
                1.         3.         3.         1.         0.         0.

     ***              ***              ***              ***              ***

                      HYDROGRAPH AT STATION        DA3

   TOTAL RAINFALL =     6.83, TOTAL LOSS =     1.85, TOTAL EXCESS =     4.98

  PEAK FLOW     TIME                             MAXIMUM AVERAGE FLOW
                                      6-HR          24-HR          72-HR       24.00-HR
+   (CFS)       (HR)
                          (CFS)
+        4.    12.25                    0.             0.             0.             0.
                        (INCHES)     4.063          4.960          4.960          4.960
                         (AC-FT)        0.             0.             0.             0.

                       CUMULATIVE AREA =      .00 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

            **************
            *            *
 117 KK     *     O10    *
            *            *
            **************

 118 KO         OUTPUT CONTROL VARIABLES
                    IPRNT           3  PRINT CONTROL
                    IPLOT           0  PLOT CONTROL
                    QSCAL          0.  HYDROGRAPH PLOT SCALE
                    IPNCH           7  PUNCH COMPUTED HYDROGRAPH
                     IOUT          21  SAVE HYDROGRAPH ON THIS UNIT
                    ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                    ISAV2         289  LAST ORDINATE PUNCHED OR SAVED
                   TIMINT        .083  TIME INTERVAL IN HOURS

              SUBBASIN RUNOFF DATA

 119 BA         SUBBASIN CHARACTERISTICS
                    TAREA         .00  SUBBASIN AREA

                PRECIPITATION DATA

   9 PH                                DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
                5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                  .95    1.84    3.25    3.90    4.23    5.00    5.93    6.83     .00     .00     .00     .00

                                                  STORM AREA =       .00

 120 LS         SCS LOSS RATE
                    STRTL         .38  INITIAL ABSTRACTION
                   CRVNBR       84.00  CURVE NUMBER
                    RTIMP         .00  PERCENT IMPERVIOUS AREA

 121 US         SNYDER UNITGRAPH
                       TP         .48  LAG
                       CP         .76  PEAKING COEFFICIENT

                SYNTHETIC ACCUMULATED-AREA VS. TIME CURVE WILL BE USED

                                                                ***
```

```
                                        UNIT HYDROGRAPH PARAMETERS
                                  CLARK   TC=   .59 HR,        R=   .29 HR
                                  SNYDER  TP=   .48 HR,       CP=   .75

                                             UNIT HYDROGRAPH
                                        23 END-OF-PERIOD ORDINATES
            0.        1.        1.        2.        2.        2.        2.        2.        1.        1.
            1.        1.        0.        0.        0.        0.        0.        0.        0.        0.
            0.        0.        0.

     ***            ***            ***            ***            ***

                    HYDROGRAPH AT STATION      010

   TOTAL RAINFALL =     6.83, TOTAL LOSS =     1.85, TOTAL EXCESS =     4.98

   PEAK FLOW     TIME                           MAXIMUM AVERAGE FLOW
                                      6-HR        24-HR       72-HR      24.00-HR
 +   (CFS)       (HR)
                             (CFS)
 +       5.     12.50                   1.          0.          0.          0.
                          (INCHES)   4.050       4.927       4.927       4.927
                           (AC-FT)      1.          1.          1.          1.

                          CUMULATIVE AREA =      .00 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

              **************
              *            *
   122 KK     *   C/CULV   *
              *            *
              **************

   123 KO          OUTPUT CONTROL VARIABLES
                         IPRNT           3  PRINT CONTROL
                         IPLOT           0  PLOT CONTROL
                         QSCAL          0.  HYDROGRAPH PLOT SCALE
                         IPNCH           7  PUNCH COMPUTED HYDROGRAPH
                          IOUT          21  SAVE HYDROGRAPH ON THIS UNIT
                         ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                         ISAV2         289  LAST ORDINATE PUNCHED OR SAVED
                        TIMINT        .083  TIME INTERVAL IN HOURS


   124 HC          HYDROGRAPH COMBINATION
                         ICOMP           2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                               ***

     ***            ***            ***            ***            ***

                    HYDROGRAPH AT STATION    C/CULV

   PEAK FLOW     TIME                           MAXIMUM AVERAGE FLOW
                                      6-HR        24-HR       72-HR      24.00-HR
 +   (CFS)       (HR)
                             (CFS)
 +       7.     12.25                   1.          0.          0.          0.
                          (INCHES)   4.052       4.937       4.937       4.937
                           (AC-FT)      1.          1.          1.          1.

                          CUMULATIVE AREA =      .00 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

              **************
              *            *
   125 KK     *    CH2B    *
              *            *
              **************

   126 KO          OUTPUT CONTROL VARIABLES
                         IPRNT           3  PRINT CONTROL
                         IPLOT           0  PLOT CONTROL
                         QSCAL          0.  HYDROGRAPH PLOT SCALE
                         IPNCH           7  PUNCH COMPUTED HYDROGRAPH
                          IOUT          21  SAVE HYDROGRAPH ON THIS UNIT
                         ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                         ISAV2         289  LAST ORDINATE PUNCHED OR SAVED
                        TIMINT        .083  TIME INTERVAL IN HOURS

                 SUBBASIN RUNOFF DATA

   127 BA          SUBBASIN CHARACTERISTICS
                         TAREA         .00  SUBBASIN AREA

                   PRECIPITATION DATA

     9 PH                               DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                   ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
                   5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                     .95    1.84    3.25    3.90    4.23    5.00    5.93    6.83     .00     .00     .00     .00
```

```
                                                   STORM AREA =      .00

 128 LS            SCS LOSS RATE
                       STRTL          .27  INITIAL ABSTRACTION
                       CRVNBR       88.00  CURVE NUMBER
                       RTIMP          .00  PERCENT IMPERVIOUS AREA

                   KINEMATIC WAVE
 129 UK              OVERLAND-FLOW ELEMENT NO. 1
                           L          32.  OVERLAND FLOW LENGTH
                           S        .2500  SLOPE
                           N         .300  ROUGHNESS COEFFICIENT
                           PA       100.0  PERCENT OF SUBBASIN
                        DXMIN           5  MINIMUM NUMBER OF DX INTERVALS

                   KINEMATIC WAVE
 130 RK              MAIN CHANNEL
                           L        1046.  CHANNEL LENGTH
                           S        .0060  SLOPE
                           N         .040  CHANNEL ROUGHNESS COEFFICIENT
                          CA          .00  CONTRIBUTING AREA
                       SHAPE         TRAP  CHANNEL SHAPE
                          WD        10.00  BOTTOM WIDTH OR DIAMETER
                           Z         3.00  SIDE SLOPE
                      NDXMIN            2  MINIMUM NUMBER OF DX INTERVALS
                      RUPSTQ           NO  ROUTE UPSTREAM HYDROGRAPH

                                                               ***
                                            COMPUTED KINEMATIC PARAMETERS
                                                VARIABLE TIME STEP
                                               (DT SHOWN IS A MINIMUM)

                     ELEMENT     ALPHA       M          DT         DX        PEAK    TIME TO      VOLUME     MAXIMUM
                                                                                       PEAK                  CELERITY
                                                       (MIN)      (FT)       (CFS)    (MIN)        (IN)       (FPS)

                     PLANE1       2.48      1.67         .37       6.40      26.88    724.75       5.42         .46
                     MAIN          .80      1.42        1.88     348.67      22.79    726.30       5.40        3.23

CONTINUITY SUMMARY (AC-FT) - INFLOW= .0000E+00  EXCESS= .1158E+01 OUTFLOW= .1151E+01 BASIN STORAGE= .6056E-02 PERCENT ERROR=     .1

                                               INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

                     MAIN          .80      1.42        5.00                 21.00    725.00       5.38

      ***           ***          ***           ***          ***

                        HYDROGRAPH AT STATION    CH2B

   TOTAL RAINFALL =    6.83, TOTAL LOSS =    1.40, TOTAL EXCESS =    5.43

  PEAK FLOW     TIME                            MAXIMUM AVERAGE FLOW
                                  6-HR        24-HR       72-HR      24.00-HR
+   (CFS)       (HR)
                          (CFS)
+      21.     12.08                 2.           1.          1.          1.
                        (INCHES)  4.363        5.382       5.382       5.382
                         (AC-FT)     1.           1.          1.          1.

                         CUMULATIVE AREA =      .00 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

            **************
            *            *
 131 KK     *      LD6   *
            *            *
            **************

 132 KO            OUTPUT CONTROL VARIABLES
                        IPRNT           3  PRINT CONTROL
                        IPLOT           0  PLOT CONTROL
                        QSCAL          0.  HYDROGRAPH PLOT SCALE
                        IPNCH           7  PUNCH COMPUTED HYDROGRAPH
                         IOUT          21  SAVE HYDROGRAPH ON THIS UNIT
                        ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                        ISAV2         289  LAST ORDINATE PUNCHED OR SAVED
                       TIMINT        .083  TIME INTERVAL IN HOURS

                 SUBBASIN RUNOFF DATA

 133 BA            SUBBASIN CHARACTERISTICS
                        TAREA         .03  SUBBASIN AREA

                   PRECIPITATION DATA

   9 PH                                 DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                   ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
                   5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                     .95    1.84    3.25    3.90    4.23    5.00    5.93    6.83     .00     .00     .00     .00

                                                   STORM AREA =      .03

 134 LS            SCS LOSS RATE
                       STRTL          .27  INITIAL ABSTRACTION
                       CRVNBR       88.00  CURVE NUMBER
```

```
                  RTIMP         .00  PERCENT IMPERVIOUS AREA

              KINEMATIC WAVE
 135 UK         OVERLAND-FLOW ELEMENT NO. 1
                      L        145.  OVERLAND FLOW LENGTH
                      S       .2500  SLOPE
                      N        .300  ROUGHNESS COEFFICIENT
                     PA       100.0  PERCENT OF SUBBASIN
                  DXMIN           5  MINIMUM NUMBER OF DX INTERVALS

              KINEMATIC WAVE
 136 RK         MAIN CHANNEL
                      L       1430.  CHANNEL LENGTH
                      S       .0050  SLOPE
                      N        .030  CHANNEL ROUGHNESS COEFFICIENT
                     CA         .03  CONTRIBUTING AREA
                  SHAPE        TRAP  CHANNEL SHAPE
                     WD         .00  BOTTOM WIDTH OR DIAMETER
                      Z        2.00  SIDE SLOPE
                 NDXMIN           2  MINIMUM NUMBER OF DX INTERVALS
                 RUPSTQ          NO  ROUTE UPSTREAM HYDROGRAPH

                                                       ***
                                   COMPUTED KINEMATIC PARAMETERS
                                         VARIABLE TIME STEP
                                       (DT SHOWN IS A MINIMUM)

                ELEMENT    ALPHA       M         DT        DX       PEAK    TIME TO    VOLUME    MAXIMUM
                                                                             PEAK                CELERITY
                                                (MIN)     (FT)     (CFS)    (MIN)      (IN)      (FPS)

               PLANE1       2.48      1.67        .76     29.00    194.30   724.40     5.40        .80
               MAIN         1.63      1.33       1.08    476.67    178.38   726.45     5.40       7.50

CONTINUITY SUMMARY (AC-FT) - INFLOW= .0000E+00  EXCESS= .8713E+01 OUTFLOW= .8666E+01 BASIN STORAGE= .5144E-01 PERCENT ERROR=    .0

                                      INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL


               MAIN         1.63      1.33       5.00              167.59   725.00     5.40

     ***           ***          ***           ***            ***

                      HYDROGRAPH AT STATION       LD6

    TOTAL RAINFALL =      6.83, TOTAL LOSS =      1.40, TOTAL EXCESS =      5.43

  PEAK FLOW      TIME                        MAXIMUM AVERAGE FLOW
                                    6-HR        24-HR        72-HR      24.00-HR
+   (CFS)        (HR)
                           (CFS)
+     168.      12.08                 14.          4.           4.           4.
                         (INCHES)   4.385       5.400        5.400        5.400
                          (AC-FT)      7.          9.           9.           9.

                      CUMULATIVE AREA =       .03 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

              **************
              *            *
 137 KK       *   C/CH2A   *
              *            *
              **************

 138 KO         OUTPUT CONTROL VARIABLES
                      IPRNT          3  PRINT CONTROL
                      IPLOT          0  PLOT CONTROL
                      QSCAL         0.  HYDROGRAPH PLOT SCALE
                      IPNCH          7  PUNCH COMPUTED HYDROGRAPH
                       IOUT         21  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2        289  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       .083  TIME INTERVAL IN HOURS


 139 HC         HYDROGRAPH COMBINATION
                      ICOMP          2  NUMBER OF HYDROGRAPHS TO COMBINE
                                                       ***

     ***           ***          ***           ***            ***

                      HYDROGRAPH AT STATION    C/CH2A

  PEAK FLOW      TIME                        MAXIMUM AVERAGE FLOW
                                    6-HR        24-HR        72-HR      24.00-HR
+   (CFS)        (HR)
                           (CFS)
+     189.      12.08                 16.          5.           5.           5.
                         (INCHES)   4.382       5.398        5.398        5.398
                          (AC-FT)      8.         10.          10.          10.

                      CUMULATIVE AREA =       .03 SQ MI
```

```
*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

           **************
           *            *
 140 KK    *   R/CH2A   *
           *            *
           **************

 141 KO         OUTPUT CONTROL VARIABLES
                     IPRNT          3  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE
                     IPNCH          7  PUNCH COMPUTED HYDROGRAPH
                      IOUT         21  SAVE HYDROGRAPH ON THIS UNIT
                     ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                     ISAV2        289  LAST ORDINATE PUNCHED OR SAVED
                    TIMINT       .083  TIME INTERVAL IN HOURS


             SUBBASIN RUNOFF DATA

 142 BA         SUBBASIN CHARACTERISTICS
                     TAREA        .00  SUBBASIN AREA

                PRECIPITATION DATA

   9 PH                              DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
                5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                  .95    1.84    3.25    3.90    4.23    5.00    5.93    6.83     .00     .00     .00     .00

                                              STORM AREA =      .00

 143 LS         SCS LOSS RATE
                     STRTL        .27  INITIAL ABSTRACTION
                    CRVNBR      88.00  CURVE NUMBER
                     RTIMP        .00  PERCENT IMPERVIOUS AREA

                KINEMATIC WAVE
 144 UK           OVERLAND-FLOW ELEMENT NO. 1
                         L        87.  OVERLAND FLOW LENGTH
                         S      .2500  SLOPE
                         N       .300  ROUGHNESS COEFFICIENT
                        PA      100.0  PERCENT OF SUBBASIN
                     DXMIN          5  MINIMUM NUMBER OF DX INTERVALS

                KINEMATIC WAVE
 145 RK           MAIN CHANNEL
                         L       755.  CHANNEL LENGTH
                         S      .0090  SLOPE
                         N       .040  CHANNEL ROUGHNESS COEFFICIENT
                        CA        .00  CONTRIBUTING AREA
                     SHAPE       TRAP  CHANNEL SHAPE
                        WD      50.00  BOTTOM WIDTH OR DIAMETER
                         Z       4.00  SIDE SLOPE
                    NDXMIN          2  MINIMUM NUMBER OF DX INTERVALS
                    RUPSTQ        YES  ROUTE UPSTREAM HYDROGRAPH

                                                       ***
                                   COMPUTED KINEMATIC PARAMETERS
                                        VARIABLE TIME STEP
                                      (DT SHOWN IS A MINIMUM)

                  ELEMENT    ALPHA        M         DT         DX       PEAK     TIME TO     VOLUME    MAXIMUM
                                                                                   PEAK                CELERITY
                                                   (MIN)      (FT)      (CFS)     (MIN)       (IN)      (FPS)

                 PLANE1       2.48       1.67        .62      17.40      33.54    724.77       5.41       .67
                 MAIN          .38       1.53        .86     251.67     211.98    727.05       5.40      5.32

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9817E+01  EXCESS= .1447E+01 OUTFLOW= .1125E+02 BASIN STORAGE= .2957E-01 PERCENT ERROR=   -.2

                                      INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL


                 MAIN          .38       1.53       5.00                185.99    725.00       5.40

      ***             ***           ***           ***            ***

                         HYDROGRAPH AT STATION   R/CH2A

    TOTAL RAINFALL =     6.83, TOTAL LOSS =     1.40, TOTAL EXCESS =     5.43

  PEAK FLOW     TIME                         MAXIMUM AVERAGE FLOW
                                    6-HR        24-HR        72-HR      24.00-HR
+   (CFS)       (HR)
                          (CFS)
+     186.     12.08                  18.           6.           6.           6.
                        (INCHES)    4.397        5.401        5.401        5.401
                         (AC-FT)       9.          11.          11.          11.

                        CUMULATIVE AREA =      .04 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

           **************
           *            *
```

```
146 KK    *    LD5T  *
          *          *
          ************

147 KO        OUTPUT CONTROL VARIABLES
                    IPRNT          3  PRINT CONTROL
                    IPLOT          0  PLOT CONTROL
                    QSCAL         0.  HYDROGRAPH PLOT SCALE
                    IPNCH          7  PUNCH COMPUTED HYDROGRAPH
                    IOUT          21  SAVE HYDROGRAPH ON THIS UNIT
                    ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                    ISAV2        289  LAST ORDINATE PUNCHED OR SAVED
                    TIMINT      .083  TIME INTERVAL IN HOURS

          SUBBASIN RUNOFF DATA

148 BA        SUBBASIN CHARACTERISTICS
                    TAREA        .01  SUBBASIN AREA

              PRECIPITATION DATA

  9 PH                       DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
              ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
              5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                .95    1.84    3.25    3.90    4.23    5.00    5.93    6.83     .00     .00     .00     .00

                                         STORM AREA =      .01

149 LS        SCS LOSS RATE
                    STRTL        .33  INITIAL ABSTRACTION
                    CRVNBR     86.00  CURVE NUMBER
                    RTIMP        .00  PERCENT IMPERVIOUS AREA

              KINEMATIC WAVE
150 UK          OVERLAND-FLOW ELEMENT NO. 1
                        L       347.  OVERLAND FLOW LENGTH
                        S      .0400  SLOPE
                        N       .300  ROUGHNESS COEFFICIENT
                        PA     100.0  PERCENT OF SUBBASIN
                    DXMIN          5  MINIMUM NUMBER OF DX INTERVALS

              KINEMATIC WAVE
151 RK          MAIN CHANNEL
                        L       553.  CHANNEL LENGTH
                        S      .0050  SLOPE
                        N       .030  CHANNEL ROUGHNESS COEFFICIENT
                        CA       .01  CONTRIBUTING AREA
                    SHAPE       TRAP  CHANNEL SHAPE
                       WD        .00  BOTTOM WIDTH OR DIAMETER
                        Z       2.00  SIDE SLOPE
                   NDXMIN          2  MINIMUM NUMBER OF DX INTERVALS
                   RUPSTQ         NO  ROUTE UPSTREAM HYDROGRAPH

                                                       ***
                                 COMPUTED KINEMATIC PARAMETERS
                                      VARIABLE TIME STEP
                                     (DT SHOWN IS A MINIMUM)

               ELEMENT   ALPHA      M        DT        DX       PEAK    TIME TO    VOLUME   MAXIMUM
                                                                          PEAK               CELERITY
                                           (MIN)     (FT)      (CFS)    (MIN)       (IN)     (FPS)

               PLANE1      .99     1.67     2.33     69.40     32.83    730.00      5.12       .52
               MAIN       1.63     1.33      .70    184.33     32.72    729.69      5.12      4.97

CONTINUITY SUMMARY (AC-FT) - INFLOW= .0000E+00  EXCESS= .2386E+01 OUTFLOW= .2347E+01 BASIN STORAGE= .3483E-01 PERCENT ERROR=    .2

                                 INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

               MAIN       1.63     1.33     5.00               32.64    730.00      5.12

     ***           ***         ***         ***         ***

                      HYDROGRAPH AT STATION     LD5T

   TOTAL RAINFALL =     6.83, TOTAL LOSS =     1.63, TOTAL EXCESS =     5.20

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                    6-HR        24-HR       72-HR      24.00-HR
+   (CFS)       (HR)
                           (CFS)
+      33.     12.17                   4.          1.          1.          1.
                         (INCHES)   4.217       5.120       5.120       5.120
                          (AC-FT)      2.          2.          2.          2.

                       CUMULATIVE AREA =      .01 SQ MI

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
152 KK    *     LD5    *
          *            *
          **************

153 KO        OUTPUT CONTROL VARIABLES
```

```
                   IPRNT          3  PRINT CONTROL
                   IPLOT          0  PLOT CONTROL
                   QSCAL          0.  HYDROGRAPH PLOT SCALE
                   IPNCH          7  PUNCH COMPUTED HYDROGRAPH
                   IOUT          21  SAVE HYDROGRAPH ON THIS UNIT
                   ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                   ISAV2        289  LAST ORDINATE PUNCHED OR SAVED
                  TIMINT       .083  TIME INTERVAL IN HOURS

             SUBBASIN RUNOFF DATA

154 BA          SUBBASIN CHARACTERISTICS
                   TAREA        .06  SUBBASIN AREA

                PRECIPITATION DATA

  9 PH                           DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                ..... HYDRO-35 ......  ............... TP-40 ...............  ........... TP-49 ...........
                5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                  .95    1.84    3.25    3.90    4.23    5.00    5.93    6.83     .00     .00     .00     .00

                                             STORM AREA =      .06

155 LS          SCS LOSS RATE
                   STRTL        .27  INITIAL ABSTRACTION
                  CRVNBR      88.00  CURVE NUMBER
                   RTIMP        .00  PERCENT IMPERVIOUS AREA

                KINEMATIC WAVE
156 UK            OVERLAND-FLOW ELEMENT NO. 1
                       L       145.  OVERLAND FLOW LENGTH
                       S      .2500  SLOPE
                       N       .300  ROUGHNESS COEFFICIENT
                      PA      100.0  PERCENT OF SUBBASIN
                   DXMIN          5  MINIMUM NUMBER OF DX INTERVALS

                KINEMATIC WAVE
157 RK            MAIN CHANNEL
                       L      1378.  CHANNEL LENGTH
                       S      .0050  SLOPE
                       N       .030  CHANNEL ROUGHNESS COEFFICIENT
                      CA        .06  CONTRIBUTING AREA
                   SHAPE       TRAP  CHANNEL SHAPE
                      WD        .00  BOTTOM WIDTH OR DIAMETER
                       Z       2.00  SIDE SLOPE
                  NDXMIN          2  MINIMUM NUMBER OF DX INTERVALS
                  RUPSTQ         NO  ROUTE UPSTREAM HYDROGRAPH

                                                          ***
                                       COMPUTED KINEMATIC PARAMETERS
                                            VARIABLE TIME STEP
                                          (DT SHOWN IS A MINIMUM)

                  ELEMENT    ALPHA       M        DT        DX      PEAK   TIME TO    VOLUME   MAXIMUM
                                                                            PEAK                CELERITY
                                                 (MIN)     (FT)     (CFS)   (MIN)      (IN)     (FPS)

                 PLANE1       2.48      1.67      .77     29.00    355.55   724.40     5.40      .80
                 MAIN         1.63      1.33      .90    459.33    334.87   726.12     5.40     8.79

CONTINUITY SUMMARY (AC-FT) - INFLOW= .0000E+00  EXCESS= .1595E+02 OUTFLOW= .1587E+02 BASIN STORAGE= .8818E-01 PERCENT ERROR=    .0

                                         INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

                 MAIN         1.63      1.33      5.00              318.80   725.00     5.40

     ***            ***            ***            ***            ***

                        HYDROGRAPH AT STATION       LD5

   TOTAL RAINFALL =     6.83, TOTAL LOSS =     1.40, TOTAL EXCESS =     5.43

  PEAK FLOW      TIME                       MAXIMUM AVERAGE FLOW
                                   6-HR        24-HR       72-HR      24.00-HR
+   (CFS)       (HR)
                            (CFS)
+    319.      12.08                 26.          8.          8.          8.
                         (INCHES)   4.383       5.400       5.400       5.400
                          (AC-FT)     13.         16.         16.         16.

                        CUMULATIVE AREA =      .06 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

             **************
             *            *
 158 KK      *    C/LD5   *
             *            *
             **************

 159 KO         OUTPUT CONTROL VARIABLES
                   IPRNT          3  PRINT CONTROL
                   IPLOT          0  PLOT CONTROL
                   QSCAL          0.  HYDROGRAPH PLOT SCALE
                   IPNCH          7  PUNCH COMPUTED HYDROGRAPH
                    IOUT         21  SAVE HYDROGRAPH ON THIS UNIT
```

```
                    ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                    ISAV2        289  LAST ORDINATE PUNCHED OR SAVED
                   TIMINT       .083  TIME INTERVAL IN HOURS


 160 HC          HYDROGRAPH COMBINATION
                    ICOMP          2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                        ***

     ***           ***          ***          ***          ***

                      HYDROGRAPH AT STATION    C/LD5

 PEAK FLOW     TIME                      MAXIMUM AVERAGE FLOW
                                   6-HR       24-HR      72-HR     24.00-HR
+   (CFS)      (HR)
                         (CFS)
+    345.     12.08                 30.         9.          9.          9.
                       (INCHES)   4.359      5.362       5.362      5.362
                        (AC-FT)     15.         18.         18.         18.

                      CUMULATIVE AREA =      .06 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

             **************
             *            *
 161 KK      *    R/CH3   *
             *            *
             **************

 162 KO          OUTPUT CONTROL VARIABLES
                    IPRNT          3  PRINT CONTROL
                    IPLOT          0  PLOT CONTROL
                    QSCAL         0.  HYDROGRAPH PLOT SCALE
                    IPNCH          7  PUNCH COMPUTED HYDROGRAPH
                     IOUT         21  SAVE HYDROGRAPH ON THIS UNIT
                    ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                    ISAV2        289  LAST ORDINATE PUNCHED OR SAVED
                   TIMINT       .083  TIME INTERVAL IN HOURS


             SUBBASIN RUNOFF DATA

 163 BA          SUBBASIN CHARACTERISTICS
                    TAREA        .00  SUBBASIN AREA

                 PRECIPITATION DATA

   9 PH                                 DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                 ..... HYDRO-35 ......  ............... TP-40 ...............  ........... TP-49 ...........
                 5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                   .95    1.84    3.25    3.90    4.23    5.00    5.93    6.83     .00     .00     .00     .00

                                                 STORM AREA =       .00

 164 LS          SCS LOSS RATE
                    STRTL        .27  INITIAL ABSTRACTION
                   CRVNBR      88.00  CURVE NUMBER
                    RTIMP        .00  PERCENT IMPERVIOUS AREA

                 KINEMATIC WAVE
 165 UK            OVERLAND-FLOW ELEMENT NO. 1
                        L        42.  OVERLAND FLOW LENGTH
                        S      .1300  SLOPE
                        N       .300  ROUGHNESS COEFFICIENT
                       PA      100.0  PERCENT OF SUBBASIN
                    DXMIN          5  MINIMUM NUMBER OF DX INTERVALS

                 KINEMATIC WAVE
 166 RK            MAIN CHANNEL
                        L       965.  CHANNEL LENGTH
                        S      .0080  SLOPE
                        N       .040  CHANNEL ROUGHNESS COEFFICIENT
                       CA        .00  CONTRIBUTING AREA
                    SHAPE       TRAP  CHANNEL SHAPE
                       WD      18.00  BOTTOM WIDTH OR DIAMETER
                        Z       3.00  SIDE SLOPE
                  NDXMIN           2  MINIMUM NUMBER OF DX INTERVALS
                   RUPSTQ        YES  ROUTE UPSTREAM HYDROGRAPH

                                                        ***
                                      COMPUTED KINEMATIC PARAMETERS
                                           VARIABLE TIME STEP
                                          (DT SHOWN IS A MINIMUM)

                  ELEMENT    ALPHA       M         DT        DX       PEAK    TIME TO    VOLUME    MAXIMUM
                                                                              PEAK                 CELERITY
                                                  (MIN)     (FT)     (CFS)     (MIN)      (IN)      (FPS)

                 PLANE1       1.79     1.67       .51       8.40     20.84    724.77      5.41        .42
                 MAIN          .69     1.47       .81     321.67    355.47    726.44      5.36       7.37

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1822E+02  EXCESS= .8974E+00 OUTFLOW= .1910E+02 BASIN STORAGE= .3441E-01 PERCENT ERROR=   -.1

                                        INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL
```

```
              MAIN            .69       1.47        5.00              309.89    725.00       5.37

      ***             ***            ***             ***             ***

                            HYDROGRAPH AT STATION    R/CH3

   TOTAL RAINFALL =    6.83, TOTAL LOSS =    1.40, TOTAL EXCESS =    5.43

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                    6-HR         24-HR        72-HR      24.00-HR
+   (CFS)       (HR)
                           (CFS)
+     310.     12.08                 31.          10.          10.          10.
                          (INCHES)  4.375        5.370        5.370        5.370
                          (AC-FT)    16.          19.          19.          19.

                          CUMULATIVE AREA =     .07 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

           **************
           *            *
  167 KK   *       O9   *
           *            *
           **************

  168 KO        OUTPUT CONTROL VARIABLES
                      IPRNT           3  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           7  PUNCH COMPUTED HYDROGRAPH
                       IOUT          21  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         289  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT        .083  TIME INTERVAL IN HOURS


              SUBBASIN RUNOFF DATA

  169 BA        SUBBASIN CHARACTERISTICS
                      TAREA         .00  SUBBASIN AREA

                PRECIPITATION DATA

    9 PH                               DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
                5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                  .95    1.84    3.25    3.90    4.23    5.00    5.93    6.83     .00     .00     .00     .00

                                                   STORM AREA =      .00

  170 LS        SCS LOSS RATE
                      STRTL         .38  INITIAL ABSTRACTION
                     CRVNBR       84.00  CURVE NUMBER
                      RTIMP         .00  PERCENT IMPERVIOUS AREA

  171 US        SNYDER UNITGRAPH
                         TP         .16  LAG
                         CP         .70  PEAKING COEFFICIENT

                SYNTHETIC ACCUMULATED-AREA VS. TIME CURVE WILL BE USED

                                                                 ***

                                                       UNIT HYDROGRAPH PARAMETERS
                                                  CLARK    TC=    .23 HR,        R=   .08 HR
                                                 SNYDER    TP=    .16 HR,       CP=   .70

                                                             UNIT HYDROGRAPH
                                                         7 END-OF-PERIOD ORDINATES
                   2.         5.         5.         3.         1.         0.         0.

      ***             ***            ***             ***             ***

                            HYDROGRAPH AT STATION        O9

   TOTAL RAINFALL =    6.83, TOTAL LOSS =    1.85, TOTAL EXCESS =    4.98

  PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                    6-HR         24-HR        72-HR      24.00-HR
+   (CFS)       (HR)
                           (CFS)
+       8.     12.25                  1.           0.           0.           0.
                          (INCHES)  4.064        4.960        4.960        4.960
                          (AC-FT)     0.           1.           1.           1.

                          CUMULATIVE AREA =     .00 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

           **************
           *            *
  172 KK   *       P2   *
           *            *
           **************
```

```
173 KO          OUTPUT CONTROL VARIABLES
                      IPRNT          3  PRINT CONTROL
                      IPLOT          0  PLOT CONTROL
                      QSCAL         0.  HYDROGRAPH PLOT SCALE
                      IPNCH          7  PUNCH COMPUTED HYDROGRAPH
                       IOUT         21  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2        289  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       .083  TIME INTERVAL IN HOURS


               SUBBASIN RUNOFF DATA

174 BA          SUBBASIN CHARACTERISTICS
                      TAREA        .01  SUBBASIN AREA

                PRECIPITATION DATA

  9 PH                                 DEPTHS FOR  0-PERCENT HYPOTHETICAL STORM
                ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
                5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                  .95    1.84    3.25    3.90    4.23    5.00    5.93    6.83     .00     .00     .00     .00

                                              STORM AREA =      .01

175 LS          SCS LOSS RATE
                      STRTL        .00  INITIAL ABSTRACTION
                     CRVNBR     100.00  CURVE NUMBER
                      RTIMP        .00  PERCENT IMPERVIOUS AREA

176 UD          SCS DIMENSIONLESS UNITGRAPH
                       TLAG        .00  LAG

                                                          ***

                                                     UNIT HYDROGRAPH
                                                 5 END-OF-PERIOD ORDINATES
               77.        22.         4.         1.         0.

     ***             ***             ***             ***             ***

                        HYDROGRAPH AT STATION       P2

   TOTAL RAINFALL =    6.83, TOTAL LOSS =      .00, TOTAL EXCESS =     6.83

 PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                      6-HR         24-HR        72-HR      24.00-HR
+   (CFS)      (HR)
                              (CFS)
+      86.    12.08                     7.           2.           2.           2.
                           (INCHES)  5.000        6.826        6.826        6.826
                            (AC-FT)     4.           5.           5.           5.

                           CUMULATIVE AREA =      .01 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


            **************
            *            *
177 KK      *     C/P2   *
            *            *
            **************

178 KO          OUTPUT CONTROL VARIABLES
                      IPRNT          3  PRINT CONTROL
                      IPLOT          0  PLOT CONTROL
                      QSCAL         0.  HYDROGRAPH PLOT SCALE
                      IPNCH          7  PUNCH COMPUTED HYDROGRAPH
                       IOUT         21  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2        289  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       .083  TIME INTERVAL IN HOURS


179 HC          HYDROGRAPH COMBINATION
                      ICOMP          4  NUMBER OF HYDROGRAPHS TO COMBINE

                                                          ***

     ***             ***             ***             ***             ***

                        HYDROGRAPH AT STATION      C/P2

 PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                      6-HR         24-HR        72-HR      24.00-HR
+   (CFS)      (HR)
                              (CFS)
+     587.    12.08                    58.          18.          18.          18.
                           (INCHES)  4.439        5.533        5.533        5.533
                            (AC-FT)    29.          36.          36.          36.

                           CUMULATIVE AREA =      .12 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***
```

```
              **************
              *            *
 180 KK       *     R/P2   *
              *            *
              **************

 181 KO            OUTPUT CONTROL VARIABLES
                          IPRNT          3  PRINT CONTROL
                          IPLOT          0  PLOT CONTROL
                          QSCAL         0.  HYDROGRAPH PLOT SCALE
                          IPNCH          7  PUNCH COMPUTED HYDROGRAPH
                           IOUT         21  SAVE HYDROGRAPH ON THIS UNIT
                          ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                          ISAV2        289  LAST ORDINATE PUNCHED OR SAVED
                         TIMINT       .083  TIME INTERVAL IN HOURS


                 HYDROGRAPH ROUTING DATA

 182 RS            STORAGE ROUTING
                          NSTPS          1  NUMBER OF SUBREACHES
                           ITYP       ELEV  TYPE OF INITIAL CONDITION
                         RSVRIC    1142.00  INITIAL CONDITION
                              X        .00 WORKING R AND D COEFFICIENT

 183 SA                  AREA          .0         2.7         3.0         3.4         3.8         4.5         5.3

 184 SE            ELEVATION     1141.80     1142.00     1144.00     1146.00     1148.00     1150.00     1152.00

 185 SS            SPILLWAY
                           CREL    1149.90  SPILLWAY CREST ELEVATION
                          SPWID      75.00  SPILLWAY WIDTH
                           COQW       2.60  WEIR COEFFICIENT
                           EXPW       1.50  EXPONENT OF HEAD

                                                                 ***

                                                 COMPUTED STORAGE-ELEVATION DATA

          STORAGE         .00         .18        5.96       12.42       19.64       27.91       37.61
        ELEVATION     1141.80     1142.00     1144.00     1146.00     1148.00     1150.00     1152.00

                                                 COMPUTED OUTFLOW-ELEVATION DATA

          OUTFLOW         .00         .00         .10         .81        2.75        6.52       12.71       21.97       34.91       52.09
        ELEVATION     1141.80     1149.90     1149.91     1149.93     1149.96     1150.00     1150.06     1150.13     1150.22     1150.31

          OUTFLOW       74.18      101.76      135.44      175.83      223.54      279.21      343.43      416.75      499.92      593.41
        ELEVATION     1150.43     1150.55     1150.68     1150.83     1151.00     1151.17     1151.36     1151.56     1151.77     1152.00


                                              COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

          STORAGE         .00         .18        5.96       12.42       19.64       27.47       27.58       27.73       27.91       28.19
          OUTFLOW         .00         .00         .00         .00         .00         .00         .81        2.75        6.16       12.71
        ELEVATION     1141.80     1142.00     1144.00     1146.00     1148.00     1149.90     1149.93     1149.96     1150.00     1150.06

          STORAGE       28.51       28.89       29.34       29.84       30.42       31.06       31.76       32.54       33.40       34.33
          OUTFLOW       21.97       34.91       52.09       74.18      101.76      135.44      175.83      223.54      279.21      343.43
        ELEVATION     1150.13     1150.22     1150.31     1150.43     1150.55     1150.68     1150.83     1151.00     1151.17     1151.36

          STORAGE       35.34       36.43       37.61
          OUTFLOW      416.75      499.92      593.41
        ELEVATION     1151.56     1151.77     1152.00

     ***              ***               ***                ***                 ***

                        HYDROGRAPH AT STATION      R/P2

  PEAK FLOW        TIME                                MAXIMUM AVERAGE FLOW
                                              6-HR         24-HR          72-HR        24.00-HR
+   (CFS)          (HR)
                                 (CFS)
+      18.        14.75                        12.            4.             4.             4.
                              (INCHES)       .949         1.262          1.262          1.262
                               (AC-FT)         6.            8.             8.             8.

 PEAK STORAGE      TIME                              MAXIMUM AVERAGE STORAGE
                                              6-HR         24-HR          72-HR        24.00-HR
+   (AC-FT)        (HR)
        28.       14.67                        28.           14.            14.            14.

  PEAK STAGE       TIME                                MAXIMUM AVERAGE STAGE
                                              6-HR         24-HR          72-HR        24.00-HR
+   (FEET)         (HR)
    1150.10       14.67                    1150.06       1146.12        1146.12        1146.12

                             CUMULATIVE AREA =       .12 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


              **************
              *            *
 186 KK       *      LD4   *
              *            *
              **************

 187 KO            OUTPUT CONTROL VARIABLES
                          IPRNT          3  PRINT CONTROL
                          IPLOT          0  PLOT CONTROL
```

```
                QSCAL          0.  HYDROGRAPH PLOT SCALE
                IPNCH          7   PUNCH COMPUTED HYDROGRAPH
                 IOUT         21   SAVE HYDROGRAPH ON THIS UNIT
                ISAV1          1   FIRST ORDINATE PUNCHED OR SAVED
                ISAV2        289   LAST ORDINATE PUNCHED OR SAVED
               TIMINT       .083   TIME INTERVAL IN HOURS

          SUBBASIN RUNOFF DATA

188 BA      SUBBASIN CHARACTERISTICS
                TAREA        .04   SUBBASIN AREA

            PRECIPITATION DATA

  9 PH                        DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
            ..... HYDRO-35 ......  ............... TP-40 ...............  ........... TP-49 ...........
            5-MIN  15-MIN  60-MIN   2-HR   3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
             .95    1.84    3.25    3.90   4.23    5.00    5.93    6.83     .00     .00     .00     .00

                                        STORM AREA =      .04

189 LS      SCS LOSS RATE
                STRTL        .27   INITIAL ABSTRACTION
               CRVNBR      88.00   CURVE NUMBER
                RTIMP        .00   PERCENT IMPERVIOUS AREA

            KINEMATIC WAVE
190 UK        OVERLAND-FLOW ELEMENT NO. 1
                    L       119.   OVERLAND FLOW LENGTH
                    S      .2500   SLOPE
                    N       .300   ROUGHNESS COEFFICIENT
                   PA      100.0   PERCENT OF SUBBASIN
                DXMIN          5   MINIMUM NUMBER OF DX INTERVALS

            KINEMATIC WAVE
191 RK        MAIN CHANNEL
                    L      1615.   CHANNEL LENGTH
                    S      .0050   SLOPE
                    N       .030   CHANNEL ROUGHNESS COEFFICIENT
                   CA        .04   CONTRIBUTING AREA
                SHAPE       TRAP   CHANNEL SHAPE
                   WD        .00   BOTTOM WIDTH OR DIAMETER
                    Z       2.00   SIDE SLOPE
               NDXMIN          2   MINIMUM NUMBER OF DX INTERVALS
               RUPSTQ         NO   ROUTE UPSTREAM HYDROGRAPH

                                                          ***
                                    COMPUTED KINEMATIC PARAMETERS
                                          VARIABLE TIME STEP
                                        (DT SHOWN IS A MINIMUM)

              ELEMENT    ALPHA       M         DT        DX       PEAK    TIME TO    VOLUME    MAXIMUM
                                                                            PEAK                CELERITY
                                              (MIN)      (FT)     (CFS)    (MIN)      (IN)      (FPS)

             PLANE1      2.48      1.67        .67     23.80    281.10    724.61      5.41        .75
             MAIN        1.63      1.33       1.16    538.33    254.07    726.39      5.40       8.21

CONTINUITY SUMMARY (AC-FT) - INFLOW= .0000E+00  EXCESS= .1227E+02 OUTFLOW= .1221E+02 BASIN STORAGE= .6474E-01 PERCENT ERROR=     .0

                                       INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL


             MAIN          1.63      1.33       5.00               242.29    725.00      5.40

    ***           ***           ***           ***           ***

                   HYDROGRAPH AT STATION        LD4

   TOTAL RAINFALL =     6.83, TOTAL LOSS =     1.40, TOTAL EXCESS =     5.43

  PEAK FLOW      TIME                        MAXIMUM AVERAGE FLOW
                                    6-HR        24-HR       72-HR      24.00-HR
+   (CFS)        (HR)
                             (CFS)
+     242.      12.08                20.          6.          6.          6.
                          (INCHES)  4.386       5.404       5.404       5.404
                           (AC-FT)    10.         12.         12.         12.

                    CUMULATIVE AREA =     .04 SQ MI



*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


          **************
          *            *
192 KK    *     CH4A   *
          *            *
          **************

193 KO      OUTPUT CONTROL VARIABLES
                IPRNT          3   PRINT CONTROL
                IPLOT          0   PLOT CONTROL
                QSCAL          0.  HYDROGRAPH PLOT SCALE
                IPNCH          7   PUNCH COMPUTED HYDROGRAPH
                 IOUT         21   SAVE HYDROGRAPH ON THIS UNIT
                ISAV1          1   FIRST ORDINATE PUNCHED OR SAVED
                ISAV2        289   LAST ORDINATE PUNCHED OR SAVED
```

```
                   TIMINT        .083  TIME INTERVAL IN HOURS

              SUBBASIN RUNOFF DATA

   194 BA       SUBBASIN CHARACTERISTICS
                      TAREA         .01  SUBBASIN AREA

                PRECIPITATION DATA

     9 PH                              DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
                5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR    2-DAY   4-DAY   7-DAY  10-DAY
                  .95    1.84    3.25    3.90    4.23    5.00    5.93    6.83      .00     .00     .00     .00

                                             STORM AREA =       .01

   195 LS       SCS LOSS RATE
                      STRTL         .27  INITIAL ABSTRACTION
                     CRVNBR       88.00  CURVE NUMBER
                      RTIMP         .00  PERCENT IMPERVIOUS AREA

                KINEMATIC WAVE
   196 UK         OVERLAND-FLOW ELEMENT NO. 1
                          L        375.  OVERLAND FLOW LENGTH
                          S       .0480  SLOPE
                          N        .300  ROUGHNESS COEFFICIENT
                         PA       100.0  PERCENT OF SUBBASIN
                      DXMIN           5  MINIMUM NUMBER OF DX INTERVALS

                KINEMATIC WAVE
   197 RK         MAIN CHANNEL
                          L        930.  CHANNEL LENGTH
                          S       .0040  SLOPE
                          N        .040  CHANNEL ROUGHNESS COEFFICIENT
                         CA         .01  CONTRIBUTING AREA
                      SHAPE        TRAP  CHANNEL SHAPE
                         WD        5.00  BOTTOM WIDTH OR DIAMETER
                          Z        3.00  SIDE SLOPE
                     NDXMIN           2  MINIMUM NUMBER OF DX INTERVALS
                     RUPSTQ          NO  ROUTE UPSTREAM HYDROGRAPH

                                                     ***
                                     COMPUTED KINEMATIC PARAMETERS
                                           VARIABLE TIME STEP
                                          (DT SHOWN IS A MINIMUM)

                  ELEMENT    ALPHA       M         DT        DX        PEAK    TIME TO     VOLUME    MAXIMUM
                                                                                PEAK                  CELERITY
                                                 (MIN)      (FT)      (CFS)    (MIN)       (IN)      (FPS)

                  PLANE1      1.09     1.67       2.26     75.00      45.09    727.32      5.35        .57
                  MAIN         .82     1.37       1.51    310.00      43.89    730.56      5.34       3.60

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .0000E+00  EXCESS= .3271E+01 OUTFLOW= .3216E+01 BASIN STORAGE= .5122E-01 PERCENT ERROR=    .1

                                     INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

                  MAIN          .82     1.37       5.00               43.46    730.00      5.33

       ***            ***           ***           ***           ***

                         HYDROGRAPH AT STATION      CH4A

     TOTAL RAINFALL =     6.83, TOTAL LOSS =     1.40, TOTAL EXCESS =     5.43

     PEAK FLOW      TIME                          MAXIMUM AVERAGE FLOW
                                        6-HR        24-HR       72-HR      24.00-HR
 +    (CFS)         (HR)
                              (CFS)
 +      43.        12.17                   5.          2.          2.          2.
                            (INCHES)    4.363       5.332       5.332       5.332
                             (AC-FT)       3.          3.          3.          3.

                          CUMULATIVE AREA =      .01 SQ MI


 *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

            **************
            *            *
   198 KK   *     CH4B   *
            *            *
            **************

   199 KO        OUTPUT CONTROL VARIABLES
                       IPRNT          3  PRINT CONTROL
                       IPLOT          0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                       IPNCH          7  PUNCH COMPUTED HYDROGRAPH
                        IOUT         21  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         289  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT        .083  TIME INTERVAL IN HOURS

              SUBBASIN RUNOFF DATA
```

```
200 BA          SUBBASIN CHARACTERISTICS
                      TAREA          .01  SUBBASIN AREA

                PRECIPITATION DATA

  9 PH                                DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
                5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                  .95    1.84    3.25    3.90    4.23    5.00    5.93    6.83     .00     .00     .00     .00

                                                 STORM AREA =      .01

201 LS          SCS LOSS RATE
                      STRTL          .27  INITIAL ABSTRACTION
                     CRVNBR        88.00  CURVE NUMBER
                      RTIMP          .00  PERCENT IMPERVIOUS AREA

                KINEMATIC WAVE
202 UK            OVERLAND-FLOW ELEMENT NO. 1
                          L          72.  OVERLAND FLOW LENGTH
                          S        .0690  SLOPE
                          N         .300  ROUGHNESS COEFFICIENT
                         PA        100.0  PERCENT OF SUBBASIN
                      DXMIN            5  MINIMUM NUMBER OF DX INTERVALS

                KINEMATIC WAVE
203 RK            MAIN CHANNEL
                          L        1276.  CHANNEL LENGTH
                          S        .0120  SLOPE
                          N         .040  CHANNEL ROUGHNESS COEFFICIENT
                         CA          .01  CONTRIBUTING AREA
                      SHAPE         TRAP  CHANNEL SHAPE
                         WD        10.00  BOTTOM WIDTH OR DIAMETER
                          Z         4.00  SIDE SLOPE
                     NDXMIN            2  MINIMUM NUMBER OF DX INTERVALS
                     RUPSTQ          YES  ROUTE UPSTREAM HYDROGRAPH

                                                               ***
                                        COMPUTED KINEMATIC PARAMETERS
                                            VARIABLE TIME STEP
                                           (DT SHOWN IS A MINIMUM)

                  ELEMENT    ALPHA      M          DT        DX       PEAK    TIME TO     VOLUME    MAXIMUM
                                                                               PEAK                 CELERITY
                                                  (MIN)      (FT)     (CFS)    (MIN)       (IN)      (FPS)

                 PLANE1       1.30      1.67        .73     14.40     50.91    725.00      5.41       .42
                 MAIN         1.13      1.40       1.37    425.33     72.34    727.23      5.35      5.37

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3213E+01  EXCESS= .2229E+01 OUTFLOW= .5420E+01 BASIN STORAGE= .2185E-01 PERCENT ERROR=     .0

                                          INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL


                 MAIN         1.13      1.40       5.00                66.57    730.00      5.34

      ***           ***           ***           ***           ***

                       HYDROGRAPH AT STATION     CH4B

   TOTAL RAINFALL =     6.83, TOTAL LOSS =     1.40, TOTAL EXCESS =     5.43

  PEAK FLOW      TIME                          MAXIMUM AVERAGE FLOW
                                       6-HR        24-HR        72-HR      24.00-HR
+    (CFS)       (HR)
                              (CFS)
+       67.      12.17                   9.           3.           3.           3.
                           (INCHES)   4.358        5.339        5.339        5.339
                            (AC-FT)      4.           5.           5.           5.

                       CUMULATIVE AREA =      .02 SQ MI



*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

            **************
            *            *
204 KK      *        O6  *
            *            *
            **************

205 KO          OUTPUT CONTROL VARIABLES
                      IPRNT            3  PRINT CONTROL
                      IPLOT            0  PLOT CONTROL
                      QSCAL           0.  HYDROGRAPH PLOT SCALE
                      IPNCH            7  PUNCH COMPUTED HYDROGRAPH
                       IOUT           21  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1            1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2          289  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT         .083  TIME INTERVAL IN HOURS


               SUBBASIN RUNOFF DATA

206 BA          SUBBASIN CHARACTERISTICS
                      TAREA          .00  SUBBASIN AREA

                PRECIPITATION DATA
```

```
  9 PH                               DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                    ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
                    5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                      .95    1.84    3.25    3.90    4.23    5.00    5.93    6.83     .00     .00     .00     .00

                                                     STORM AREA =       .00

 207 LS             SCS LOSS RATE
                          STRTL         .38  INITIAL ABSTRACTION
                         CRVNBR       84.00  CURVE NUMBER
                          RTIMP         .00  PERCENT IMPERVIOUS AREA

 208 US             SNYDER UNITGRAPH
                             TP         .91  LAG
                             CP         .73  PEAKING COEFFICIENT

                    SYNTHETIC ACCUMULATED-AREA VS. TIME CURVE WILL BE USED

                                                                ***

                                                        UNIT HYDROGRAPH PARAMETERS
                                                    CLARK   TC=  1.07 HR,        R=   .60 HR
                                                   SNYDER   TP=   .91 HR,       CP=   .73

                                                              UNIT HYDROGRAPH
                                                        46 END-OF-PERIOD ORDINATES
                    0.        0.        1.        1.        1.        2.        2.        2.        2.        3.
                    3.        3.        2.        2.        2.        2.        1.        1.        1.        1.
                    1.        1.        1.        1.        0.        0.        0.        0.        0.        0.
                    0.        0.        0.        0.        0.        0.        0.        0.        0.        0.
                    0.        0.        0.        0.        0.        0.

      ***            ***           ***            ***            ***

                          HYDROGRAPH AT STATION       O6

   TOTAL RAINFALL =    6.83, TOTAL LOSS =    1.85, TOTAL EXCESS =     4.98

  PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                      6-HR         24-HR        72-HR      24.00-HR

+   (CFS)       (HR)
                           (CFS)
+        7.     12.92                   2.           1.           1.           1.
                         (INCHES)    4.034        4.891        4.891        4.891
                          (AC-FT)       1.           1.           1.           1.

                         CUMULATIVE AREA =      .00 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

               **************
               *            *
 209 KK        *        O7  *
               *            *
               **************

 210 KO             OUTPUT CONTROL VARIABLES
                          IPRNT           3  PRINT CONTROL
                          IPLOT           0  PLOT CONTROL
                          QSCAL          0.  HYDROGRAPH PLOT SCALE
                          IPNCH           7  PUNCH COMPUTED HYDROGRAPH
                           IOUT          21  SAVE HYDROGRAPH ON THIS UNIT
                          ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                          ISAV2         289  LAST ORDINATE PUNCHED OR SAVED
                         TIMINT        .083  TIME INTERVAL IN HOURS


               SUBBASIN RUNOFF DATA

 211 BA             SUBBASIN CHARACTERISTICS
                          TAREA         .00  SUBBASIN AREA

                    PRECIPITATION DATA

  9 PH                               DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                    ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
                    5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                      .95    1.84    3.25    3.90    4.23    5.00    5.93    6.83     .00     .00     .00     .00

                                                     STORM AREA =       .00

 212 LS             SCS LOSS RATE
                          STRTL         .38  INITIAL ABSTRACTION
                         CRVNBR       84.00  CURVE NUMBER
                          RTIMP         .00  PERCENT IMPERVIOUS AREA

 213 US             SNYDER UNITGRAPH
                             TP         .29  LAG
                             CP         .73  PEAKING COEFFICIENT

                    SYNTHETIC ACCUMULATED-AREA VS. TIME CURVE WILL BE USED

                                                                ***

                                                        UNIT HYDROGRAPH PARAMETERS
                                                    CLARK   TC=   .36 HR,        R=   .19 HR
                                                   SNYDER   TP=   .29 HR,       CP=   .72

                                                              UNIT HYDROGRAPH
                                                        15 END-OF-PERIOD ORDINATES
```

```
              1.        3.        5.        6.        5.        3.        2.        1.        1.        1.
              0.        0.        0.        0.        0.

    ***            ***            ***            ***            ***

                       HYDROGRAPH AT STATION      O7

   TOTAL RAINFALL =     6.83, TOTAL LOSS =     1.85, TOTAL EXCESS =     4.98

  PEAK FLOW    TIME                          MAXIMUM AVERAGE FLOW
                                    6-HR        24-HR       72-HR      24.00-HR
+   (CFS)      (HR)
                          (CFS)
+      10.     12.33                   2.          0.          0.          0.
                        (INCHES)    4.053       4.939       4.939       4.939
                         (AC-FT)       1.          1.          1.          1.

                       CUMULATIVE AREA =      .00 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

            **************
            *            *
  214 KK    *        P3  *
            *            *
            **************

  215 KO          OUTPUT CONTROL VARIABLES
                        IPRNT          3  PRINT CONTROL
                        IPLOT          0  PLOT CONTROL
                        QSCAL         0.  HYDROGRAPH PLOT SCALE
                        IPNCH          7  PUNCH COMPUTED HYDROGRAPH
                         IOUT         21  SAVE HYDROGRAPH ON THIS UNIT
                        ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                        ISAV2        289  LAST ORDINATE PUNCHED OR SAVED
                       TIMINT       .083  TIME INTERVAL IN HOURS


                 SUBBASIN RUNOFF DATA

  216 BA          SUBBASIN CHARACTERISTICS
                        TAREA        .02  SUBBASIN AREA

                  PRECIPITATION DATA

    9 PH                              DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                  ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
                  5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                    .95    1.84    3.25    3.90    4.23    5.00    5.93    6.83     .00     .00     .00     .00

                                                STORM AREA =       .02

  217 LS          SCS LOSS RATE
                        STRTL        .00  INITIAL ABSTRACTION
                       CRVNBR     100.00  CURVE NUMBER
                        RTIMP        .00  PERCENT IMPERVIOUS AREA

  218 UD          SCS DIMENSIONLESS UNITGRAPH
                         TLAG        .00  LAG

                                                       ***

                                                  UNIT HYDROGRAPH
                                              5 END-OF-PERIOD ORDINATES
             108.       30.        6.        1.        0.

    ***            ***            ***            ***            ***

                       HYDROGRAPH AT STATION      P3

   TOTAL RAINFALL =     6.83, TOTAL LOSS =      .00, TOTAL EXCESS =     6.83

  PEAK FLOW    TIME                          MAXIMUM AVERAGE FLOW
                                    6-HR        24-HR       72-HR      24.00-HR
+   (CFS)      (HR)
                          (CFS)
+     120.     12.08                  10.          3.          3.          3.
                        (INCHES)    5.000       6.826       6.826       6.826
                         (AC-FT)       5.          7.          7.          7.

                       CUMULATIVE AREA =      .02 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

            **************
            *            *
  219 KK    *      C/P3  *
            *            *
            **************

  220 KO          OUTPUT CONTROL VARIABLES
                        IPRNT          3  PRINT CONTROL
                        IPLOT          0  PLOT CONTROL
                        QSCAL         0.  HYDROGRAPH PLOT SCALE
                        IPNCH          7  PUNCH COMPUTED HYDROGRAPH
                         IOUT         21  SAVE HYDROGRAPH ON THIS UNIT
```

```
                    ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                    ISAV2        289  LAST ORDINATE PUNCHED OR SAVED
                   TIMINT       .083  TIME INTERVAL IN HOURS


 221 HC        HYDROGRAPH COMBINATION
                    ICOMP          5  NUMBER OF HYDROGRAPHS TO COMBINE

                                                            ***

      ***            ***            ***            ***            ***

                       HYDROGRAPH AT STATION     C/P3

 PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     24.00-HR
+   (CFS)      (HR)
                          (CFS)
+     429.    12.08                    43.         13.         13.         13.
                        (INCHES)    4.460       5.643       5.643       5.643
                         (AC-FT)      21.         27.         27.         27.

                       CUMULATIVE AREA =      .09 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


          **************
          *            *
 222 KK   *     R/P3   *
          *            *
          **************

 223 KO        OUTPUT CONTROL VARIABLES
                    IPRNT          3  PRINT CONTROL
                    IPLOT          0  PLOT CONTROL
                    QSCAL         0.  HYDROGRAPH PLOT SCALE
                    IPNCH          7  PUNCH COMPUTED HYDROGRAPH
                     IOUT         21  SAVE HYDROGRAPH ON THIS UNIT
                    ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                    ISAV2        289  LAST ORDINATE PUNCHED OR SAVED
                   TIMINT       .083  TIME INTERVAL IN HOURS


          HYDROGRAPH ROUTING DATA

 224 RS        STORAGE ROUTING
                    NSTPS          1  NUMBER OF SUBREACHES
                     ITYP       ELEV  TYPE OF INITIAL CONDITION
                   RSVRIC    1141.10  INITIAL CONDITION
                        X        .00 WORKING R AND D COEFFICIENT

 225 SA              AREA        .0       1.6       2.3       3.6       5.0       6.0       4.0       4.3       4.7

 226 SE         ELEVATION   1141.10   1142.00   1144.00   1146.00   1148.00   1150.00   1152.00   1154.00   1156.00

 227 SS        SPILLWAY
                     CREL    1149.80  SPILLWAY CREST ELEVATION
                    SPWID      35.00  SPILLWAY WIDTH
                     COQW       2.60  WEIR COEFFICIENT
                     EXPW       1.50  EXPONENT OF HEAD

                                                            ***

                                                 COMPUTED STORAGE-ELEVATION DATA

          STORAGE        .00       .49      4.39     10.22     18.81     29.82     39.70     47.96     57.00
        ELEVATION    1141.10   1142.00   1144.00   1146.00   1148.00   1150.00   1152.00   1154.00   1156.00

                                                 COMPUTED OUTFLOW-ELEVATION DATA

          OUTFLOW        .00       .00       .24      1.93      6.50     15.42     30.11     52.03     82.62    123.34
        ELEVATION    1141.10   1149.80   1149.82   1149.88   1149.97   1150.11   1150.28   1150.49   1150.74   1151.02

          OUTFLOW     175.59    240.88    320.62    416.24    529.21    660.99    812.99    986.64   1183.44   1404.83
        ELEVATION    1151.35   1151.71   1152.12   1152.56   1153.03   1153.55   1154.11   1154.70   1155.33   1156.00


                                             COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

          STORAGE        .00       .49      4.39     10.22     18.81     28.63     28.75     29.09     29.65     29.82
          OUTFLOW        .00       .00       .00       .00       .00       .00       .24      1.93      6.50      8.14
        ELEVATION    1141.10   1142.00   1144.00   1146.00   1148.00   1149.80   1149.82   1149.88   1149.97   1150.00

          STORAGE      30.45     31.45     32.62     33.94     35.39     36.93     38.53     39.70     40.16     41.93
          OUTFLOW      15.42     30.11     52.03     82.62    123.34    175.59    240.88    296.93    320.62    416.24
        ELEVATION    1150.11   1150.28   1150.49   1150.74   1151.02   1151.35   1151.71   1152.00   1152.12   1152.56

          STORAGE      43.88     46.04     47.96     48.41     51.02     53.87     57.00
          OUTFLOW     529.21    660.99    783.26    812.99    986.64   1183.44   1404.83
        ELEVATION    1153.03   1153.55   1154.00   1154.11   1154.70   1155.33   1156.00

      ***            ***            ***            ***            ***

                       HYDROGRAPH AT STATION     R/P3

 PEAK FLOW     TIME                        MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     24.00-HR
+   (CFS)      (HR)
                          (CFS)
+       0.      .00                     0.          0.          0.          0.
```

```
                       (INCHES)      .000         .000         .000         .000
                       (AC-FT)        0.           0.           0.           0.

  PEAK STORAGE   TIME                        MAXIMUM AVERAGE STORAGE
                                     6-HR        24-HR       72-HR     24.00-HR
+   (AC-FT)      (HR)
      27.       24.00                26.          12.         12.          12.

   PEAK STAGE    TIME                        MAXIMUM AVERAGE STAGE
                                     6-HR        24-HR       72-HR     24.00-HR
+    (FEET)      (HR)
    1149.44     24.00              1149.26     1145.45     1145.45     1145.45

                        CUMULATIVE AREA =      .09 SQ MI
```

```
*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

            **************
            *            *
   228 KK   *      DA1   *
            *            *
            **************

   229 KO        OUTPUT CONTROL VARIABLES
                       IPRNT          3  PRINT CONTROL
                       IPLOT          0  PLOT CONTROL
                       QSCAL         0.  HYDROGRAPH PLOT SCALE
                       IPNCH          7  PUNCH COMPUTED HYDROGRAPH
                        IOUT         21  SAVE HYDROGRAPH ON THIS UNIT
                       ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                       ISAV2        289  LAST ORDINATE PUNCHED OR SAVED
                      TIMINT       .083  TIME INTERVAL IN HOURS


                SUBBASIN RUNOFF DATA

   230 BA        SUBBASIN CHARACTERISTICS
                       TAREA        .01  SUBBASIN AREA

                 PRECIPITATION DATA

     9 PH                             DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                 ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
                 5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                   .95    1.84    3.25    3.90    4.23    5.00    5.93    6.83     .00     .00     .00     .00

                                                     STORM AREA =       .01

   231 LS        SCS LOSS RATE
                       STRTL        .38  INITIAL ABSTRACTION
                      CRVNBR      84.00  CURVE NUMBER
                       RTIMP        .00  PERCENT IMPERVIOUS AREA

   232 US        SNYDER UNITGRAPH
                          TP        .52  LAG
                          CP        .73  PEAKING COEFFICIENT

                 SYNTHETIC ACCUMULATED-AREA VS. TIME CURVE WILL BE USED

                                                                 ***

                                                    UNIT HYDROGRAPH PARAMETERS
                                              CLARK    TC=    .64 HR,        R=    .33 HR
                                             SNYDER    TP=    .52 HR,       CP=    .72

                                                         UNIT HYDROGRAPH
                                                    26 END-OF-PERIOD ORDINATES
                 0.         1.         3.         4.         5.         6.         6.         6.         5.         4.
                 3.         2.         2.         1.         1.         1.         1.         0.         0.         0.
                 0.         0.         0.         0.         0.         0.

      ***             ***             ***             ***             ***

                         HYDROGRAPH AT STATION       DA1

      TOTAL RAINFALL =     6.83, TOTAL LOSS =     1.85, TOTAL EXCESS =     4.98

   PEAK FLOW      TIME                          MAXIMUM AVERAGE FLOW
                                      6-HR        24-HR       72-HR     24.00-HR
+    (CFS)        (HR)
                          (CFS)
+      14.       12.58                 3.           1.          1.           1.
                        (INCHES)     4.047        4.921       4.921        4.921
                        (AC-FT)        1.           2.          2.           2.

                         CUMULATIVE AREA =      .01 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

            **************
            *            *
   233 KK   *       O8   *
            *            *
            **************

   234 KO        OUTPUT CONTROL VARIABLES
```

```
                    IPRNT          3  PRINT CONTROL
                    IPLOT          0  PLOT CONTROL
                    QSCAL         0.  HYDROGRAPH PLOT SCALE
                    IPNCH          7  PUNCH COMPUTED HYDROGRAPH
                     IOUT         21  SAVE HYDROGRAPH ON THIS UNIT
                    ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                    ISAV2        289  LAST ORDINATE PUNCHED OR SAVED
                   TIMINT       .083  TIME INTERVAL IN HOURS

              SUBBASIN RUNOFF DATA

 235 BA         SUBBASIN CHARACTERISTICS
                    TAREA        .00  SUBBASIN AREA

                PRECIPITATION DATA

   9 PH                             DEPTHS FOR  0-PERCENT HYPOTHETICAL STORM
                ..... HYDRO-35 ......  ............... TP-40 ...............  ........... TP-49 ...........
                5-MIN  15-MIN  60-MIN   2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                  .95    1.84    3.25   3.90    4.23    5.00    5.93    6.83     .00     .00     .00     .00

                                             STORM AREA =      .00

 236 LS         SCS LOSS RATE
                   STRTL         .38  INITIAL ABSTRACTION
                  CRVNBR       84.00  CURVE NUMBER
                   RTIMP         .00  PERCENT IMPERVIOUS AREA

 237 US         SNYDER UNITGRAPH
                      TP         .29  LAG
                      CP         .75  PEAKING COEFFICIENT

                SYNTHETIC ACCUMULATED-AREA VS. TIME CURVE WILL BE USED

                                                         ***

                                              UNIT HYDROGRAPH PARAMETERS
                                          CLARK   TC=    .37 HR,        R=    .17 HR
                                         SNYDER   TP=    .29 HR,       CP=    .75

                                                   UNIT HYDROGRAPH
                                              14 END-OF-PERIOD ORDINATES
                0.         1.         2.         3.         2.         2.         1.         1.         0.         0.
                0.         0.         0.         0.

     ***            ***            ***            ***            ***

                        HYDROGRAPH AT STATION       O8

    TOTAL RAINFALL =     6.83, TOTAL LOSS =     1.85, TOTAL EXCESS =     4.98

  PEAK FLOW      TIME                       MAXIMUM AVERAGE FLOW
                                    6-HR        24-HR       72-HR      24.00-HR
+   (CFS)        (HR)
                            (CFS)
+        5.      12.33                 1.          0.          0.          0.
                          (INCHES)  4.053       4.940       4.940       4.940
                           (AC-FT)     0.          0.          0.          0.

                         CUMULATIVE AREA =      .00 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


             **************
             *            *
 238 KK      *    C/DA1   *
             *            *
             **************

 239 KO         OUTPUT CONTROL VARIABLES
                    IPRNT          3  PRINT CONTROL
                    IPLOT          0  PLOT CONTROL
                    QSCAL         0.  HYDROGRAPH PLOT SCALE
                    IPNCH          7  PUNCH COMPUTED HYDROGRAPH
                     IOUT         21  SAVE HYDROGRAPH ON THIS UNIT
                    ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                    ISAV2        289  LAST ORDINATE PUNCHED OR SAVED
                   TIMINT       .083  TIME INTERVAL IN HOURS


 240 HC         HYDROGRAPH COMBINATION
                    ICOMP          2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                         ***

     ***            ***            ***            ***            ***

                        HYDROGRAPH AT STATION    C/DA1

  PEAK FLOW      TIME                       MAXIMUM AVERAGE FLOW
                                    6-HR        24-HR       72-HR      24.00-HR
+   (CFS)        (HR)
                            (CFS)
+       17.      12.50                 4.          1.          1.          1.
                          (INCHES)  4.048       4.925       4.925       4.925
                           (AC-FT)     2.          2.          2.          2.

                         CUMULATIVE AREA =      .01 SQ MI
```

```
*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

           **************
           *            *
 241 KK    *      O4    *
           *            *
           **************

 242 KO        OUTPUT CONTROL VARIABLES
                     IPRNT          3  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE
                     IPNCH          7  PUNCH COMPUTED HYDROGRAPH
                      IOUT         21  SAVE HYDROGRAPH ON THIS UNIT
                     ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                     ISAV2        289  LAST ORDINATE PUNCHED OR SAVED
                    TIMINT       .083  TIME INTERVAL IN HOURS

            SUBBASIN RUNOFF DATA

 243 BA        SUBBASIN CHARACTERISTICS
                     TAREA        .01  SUBBASIN AREA

               PRECIPITATION DATA

   9 PH                        DEPTHS FOR  0-PERCENT HYPOTHETICAL STORM
               ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
               5-MIN  15-MIN  60-MIN    2-HR   3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                 .95    1.84    3.25    3.90   4.23    5.00    5.93    6.83     .00     .00     .00     .00

                                                 STORM AREA =      .01

 244 LS        SCS LOSS RATE
                     STRTL        .38  INITIAL ABSTRACTION
                    CRVNBR      84.00  CURVE NUMBER
                     RTIMP        .00  PERCENT IMPERVIOUS AREA

 245 US        SNYDER UNITGRAPH
                        TP        .49  LAG
                        CP        .73  PEAKING COEFFICIENT

               SYNTHETIC ACCUMULATED-AREA VS. TIME CURVE WILL BE USED

                                                             ***

                                                   UNIT HYDROGRAPH PARAMETERS
                                              CLARK   TC=    .58 HR,        R=   .32 HR
                                             SNYDER   TP=    .49 HR,       CP=   .72

                                                        UNIT HYDROGRAPH
                                                   25 END-OF-PERIOD ORDINATES
               0.        1.        3.        4.        5.        5.        5.        4.        3.        3.
               2.        2.        1.        1.        1.        1.        0.        0.        0.        0.
               0.        0.        0.        0.        0.

      ***           ***           ***           ***           ***

                     HYDROGRAPH AT STATION       O4

   TOTAL RAINFALL =    6.83, TOTAL LOSS =    1.85, TOTAL EXCESS =    4.98

  PEAK FLOW     TIME                             MAXIMUM AVERAGE FLOW
                                     6-HR        24-HR        72-HR      24.00-HR
+   (CFS)       (HR)
                          (CFS)
+       11.     12.50                  2.          1.           1.           1.
                        (INCHES)    4.047       4.923        4.923        4.923
                         (AC-FT)       1.          1.           1.           1.

                      CUMULATIVE AREA =      .01 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

           **************
           *            *
 246 KK    *      O5    *
           *            *
           **************

 247 KO        OUTPUT CONTROL VARIABLES
                     IPRNT          3  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE
                     IPNCH          7  PUNCH COMPUTED HYDROGRAPH
                      IOUT         21  SAVE HYDROGRAPH ON THIS UNIT
                     ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                     ISAV2        289  LAST ORDINATE PUNCHED OR SAVED
                    TIMINT       .083  TIME INTERVAL IN HOURS

            SUBBASIN RUNOFF DATA

 248 BA        SUBBASIN CHARACTERISTICS
                     TAREA        .00  SUBBASIN AREA
```

```
                  PRECIPITATION DATA

   9 PH                                 DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                  ..... HYDRO-35 ......   ............... TP-40 ...............  ........... TP-49 ...........
                  5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                    .95    1.84    3.25    3.90    4.23    5.00    5.93    6.83     .00     .00     .00     .00

                                                      STORM AREA =       .00

 249 LS           SCS LOSS RATE
                       STRTL          .38  INITIAL ABSTRACTION
                       CRVNBR       84.00  CURVE NUMBER
                       RTIMP          .00  PERCENT IMPERVIOUS AREA

 250 US           SNYDER UNITGRAPH
                          TP          .11  LAG
                          CP          .69  PEAKING COEFFICIENT

                  SYNTHETIC ACCUMULATED-AREA VS. TIME CURVE WILL BE USED

                                                                ***

                                                       UNIT HYDROGRAPH PARAMETERS
                                                  CLARK    TC=    .15 HR,        R=   .06 HR
                                                  SNYDER   TP=    .11 HR,        CP=  .69

                                                           UNIT HYDROGRAPH
                                                       5 END-OF-PERIOD ORDINATES
                  1.         2.         1.         0.         0.

    ***              ***              ***              ***              ***

                          HYDROGRAPH AT STATION        O5

   TOTAL RAINFALL =     6.83, TOTAL LOSS =     1.85, TOTAL EXCESS =     4.98

  PEAK FLOW     TIME                            MAXIMUM AVERAGE FLOW
                                          6-HR        24-HR        72-HR      24.00-HR
+    (CFS)      (HR)
                          (CFS)
+        2.    12.17                       0.           0.           0.           0.
                          (INCHES)     4.065        4.964        4.964        4.964
                           (AC-FT)        0.           0.           0.           0.

                          CUMULATIVE AREA =      .00 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

              **************
              *            *
 251 KK       *      P5    *
              *            *
              **************

 252 KO           OUTPUT CONTROL VARIABLES
                        IPRNT           3  PRINT CONTROL
                        IPLOT           0  PLOT CONTROL
                        QSCAL          0.  HYDROGRAPH PLOT SCALE
                        IPNCH           7  PUNCH COMPUTED HYDROGRAPH
                         IOUT          21  SAVE HYDROGRAPH ON THIS UNIT
                        ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                        ISAV2         289  LAST ORDINATE PUNCHED OR SAVED
                       TIMINT        .083  TIME INTERVAL IN HOURS


                 SUBBASIN RUNOFF DATA

 253 BA           SUBBASIN CHARACTERISTICS
                        TAREA         .01  SUBBASIN AREA

                  PRECIPITATION DATA

   9 PH                                 DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                  ..... HYDRO-35 ......   ............... TP-40 ...............  ........... TP-49 ...........
                  5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                    .95    1.84    3.25    3.90    4.23    5.00    5.93    6.83     .00     .00     .00     .00

                                                      STORM AREA =       .01

 254 LS           SCS LOSS RATE
                       STRTL          .00  INITIAL ABSTRACTION
                       CRVNBR      100.00  CURVE NUMBER
                       RTIMP          .00  PERCENT IMPERVIOUS AREA

 255 UD           SCS DIMENSIONLESS UNITGRAPH
                        TLAG          .00  LAG

                                                                ***

                                                           UNIT HYDROGRAPH
                                                       5 END-OF-PERIOD ORDINATES
                 75.        21.         4.         1.         0.

    ***              ***              ***              ***              ***

                          HYDROGRAPH AT STATION        P5

   TOTAL RAINFALL =     6.83, TOTAL LOSS =      .00, TOTAL EXCESS =     6.83

  PEAK FLOW     TIME                            MAXIMUM AVERAGE FLOW
```

```
                                            6-HR       24-HR       72-HR     24.00-HR
+   (CFS)       (HR)
                              (CFS)
+      84.     12.08                          7.          2.          2.           2.
                            (INCHES)       5.000       6.826       6.826        6.826
                             (AC-FT)          3.          5.          5.           5.

                             CUMULATIVE AREA =      .01 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

            **************
            *            *
  256 KK    *      C/P5  *
            *            *
            **************

  257 KO        OUTPUT CONTROL VARIABLES
                       IPRNT            3  PRINT CONTROL
                       IPLOT            0  PLOT CONTROL
                       QSCAL           0.  HYDROGRAPH PLOT SCALE
                       IPNCH            7  PUNCH COMPUTED HYDROGRAPH
                        IOUT           21  SAVE HYDROGRAPH ON THIS UNIT
                       ISAV1            1  FIRST ORDINATE PUNCHED OR SAVED
                       ISAV2          289  LAST ORDINATE PUNCHED OR SAVED
                      TIMINT         .083  TIME INTERVAL IN HOURS


  258 HC        HYDROGRAPH COMBINATION
                       ICOMP            3  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                  ***

      ***             ***             ***             ***             ***

                           HYDROGRAPH AT STATION      C/P5

  PEAK FLOW     TIME                                 MAXIMUM AVERAGE FLOW
                                            6-HR       24-HR       72-HR     24.00-HR
+   (CFS)       (HR)
                              (CFS)
+      89.     12.08                         10.          3.          3.           3.
                            (INCHES)       4.672       6.229       6.229        6.229
                             (AC-FT)          5.          6.          6.           6.

                             CUMULATIVE AREA =      .02 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

            **************
            *            *
  259 KK    *      R/P5  *
            *            *
            **************

  260 KO        OUTPUT CONTROL VARIABLES
                       IPRNT            3  PRINT CONTROL
                       IPLOT            0  PLOT CONTROL
                       QSCAL           0.  HYDROGRAPH PLOT SCALE
                       IPNCH            7  PUNCH COMPUTED HYDROGRAPH
                        IOUT           21  SAVE HYDROGRAPH ON THIS UNIT
                       ISAV1            1  FIRST ORDINATE PUNCHED OR SAVED
                       ISAV2          289  LAST ORDINATE PUNCHED OR SAVED
                      TIMINT         .083  TIME INTERVAL IN HOURS


              HYDROGRAPH ROUTING DATA

  261 RS        STORAGE ROUTING
                       NSTPS            1  NUMBER OF SUBREACHES
                        ITYP         ELEV  TYPE OF INITIAL CONDITION
                      RSVRIC      1139.60  INITIAL CONDITION
                           X          .00 WORKING R AND D COEFFICIENT

  262 SA               AREA           .0          .0          .1          .6         1.1         1.5         1.7         1.9         2.2         2.4


  263 SE          ELEVATION      1139.60     1140.00     1142.00     1144.00     1146.00     1148.00     1150.00     1152.00     1154.00     1156.00


  264 SS        SPILLWAY
                        CREL      1155.00  SPILLWAY CREST ELEVATION
                       SPWID       100.00  SPILLWAY WIDTH
                        COQW         2.60  WEIR COEFFICIENT
                        EXPW         1.50  EXPONENT OF HEAD

                                                                  ***

                                             COMPUTED STORAGE-ELEVATION DATA

           STORAGE         .00         .00         .10         .68        2.37        4.96        8.12       11.75       15.83       20.40
         ELEVATION     1139.60     1140.00     1142.00     1144.00     1146.00     1148.00     1150.00     1152.00     1154.00     1156.00


                                             COMPUTED OUTFLOW-ELEVATION DATA
```

OUTFLOW	.00	.00	.04	.36	1.21	2.86	5.57	9.63	15.29	22.82
ELEVATION	1139.60	1155.00	1155.00	1155.01	1155.03	1155.05	1155.08	1155.11	1155.15	1155.20
OUTFLOW	32.50	44.57	59.33	77.04	97.95	122.34	150.47	182.62	219.03	260.00
ELEVATION	1155.25	1155.31	1155.37	1155.44	1155.52	1155.60	1155.69	1155.79	1155.89	1156.00

COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

STORAGE	.00	.00	.10	.68	2.37	4.96	8.12	11.75	15.83	18.06
OUTFLOW	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
ELEVATION	1139.60	1140.00	1142.00	1144.00	1146.00	1148.00	1150.00	1152.00	1154.00	1155.00
STORAGE	18.08	18.12	18.17	18.23	18.31	18.40	18.51	18.63	18.77	18.92
OUTFLOW	.36	1.21	2.86	5.57	9.63	15.29	22.82	32.50	44.57	59.33
ELEVATION	1155.01	1155.03	1155.05	1155.08	1155.11	1155.15	1155.20	1155.25	1155.31	1155.37
STORAGE	19.08	19.26	19.46	19.67	19.90	20.14	20.40			
OUTFLOW	77.04	97.95	122.34	150.47	182.62	219.03	260.00			
ELEVATION	1155.44	1155.52	1155.60	1155.69	1155.79	1155.89	1156.00			

*** *** *** *** ***

HYDROGRAPH AT STATION R/P5

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 0.	.00		0.	0.	0.	0.
		(INCHES)	.000	.000	.000	.000
		(AC-FT)	0.	0.	0.	0.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	24.00-HR
+ (AC-FT)	(HR)				
6.	24.00	6.	3.	3.	3.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	24.00-HR
+ (FEET)	(HR)				
1148.88	24.00	1148.74	1145.62	1145.62	1145.62

CUMULATIVE AREA = .02 SQ MI

*** ***

```
           **************
           *            *
 265 KK    *      DA2   *
           *            *
           **************

 266 KO         OUTPUT CONTROL VARIABLES
                     IPRNT          3  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE
                     IPNCH          7  PUNCH COMPUTED HYDROGRAPH
                      IOUT         21  SAVE HYDROGRAPH ON THIS UNIT
                     ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                     ISAV2        289  LAST ORDINATE PUNCHED OR SAVED
                    TIMINT       .083  TIME INTERVAL IN HOURS

              SUBBASIN RUNOFF DATA

 267 BA         SUBBASIN CHARACTERISTICS
                     TAREA        .00  SUBBASIN AREA

                PRECIPITATION DATA

   9 PH                                DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
                5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                  .95    1.84    3.25    3.90    4.23    5.00    5.93    6.83     .00     .00     .00     .00

                                                  STORM AREA =      .00

 268 LS         SCS LOSS RATE
                    STRTL         .38  INITIAL ABSTRACTION
                   CRVNBR       84.00  CURVE NUMBER
                    RTIMP         .00  PERCENT IMPERVIOUS AREA

 269 US         SNYDER UNITGRAPH
                       TP         .15  LAG
                       CP         .67  PEAKING COEFFICIENT

                SYNTHETIC ACCUMULATED-AREA VS. TIME CURVE WILL BE USED

                                                          ***

                                                 UNIT HYDROGRAPH PARAMETERS
                                            CLARK    TC=    .20 HR,         R=    .08 HR
                                           SNYDER    TP=    .15 HR,        CP=    .66

                                                         UNIT HYDROGRAPH
                                                   7 END-OF-PERIOD ORDINATES
                    4.        11.        10.        4.         1.          1.          0.

       ***            ***            ***            ***            ***
```

```
                           HYDROGRAPH AT STATION       DA2

        TOTAL RAINFALL =     6.83, TOTAL LOSS =     1.85, TOTAL EXCESS =     4.98

      PEAK FLOW     TIME                           MAXIMUM AVERAGE FLOW
                                          6-HR        24-HR        72-HR      24.00-HR
  +    (CFS)        (HR)
                                  (CFS)
  +      15.       12.17                    2.           1.           1.            1.
                                (INCHES)  4.059        4.954        4.954         4.954
                                 (AC-FT)    1.           1.           1.            1.

                                CUMULATIVE AREA =      .00 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

               **************
               *            *
   270 KK      *       OP1  *
               *            *
               **************

   271 KO           OUTPUT CONTROL VARIABLES
                          IPRNT           3  PRINT CONTROL
                          IPLOT           0  PLOT CONTROL
                          QSCAL          0.  HYDROGRAPH PLOT SCALE
                          IPNCH           7  PUNCH COMPUTED HYDROGRAPH
                           IOUT          21  SAVE HYDROGRAPH ON THIS UNIT
                          ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                          ISAV2         289  LAST ORDINATE PUNCHED OR SAVED
                         TIMINT        .083  TIME INTERVAL IN HOURS


                  SUBBASIN RUNOFF DATA

   272 BA           SUBBASIN CHARACTERISTICS
                          TAREA         .01  SUBBASIN AREA

                    PRECIPITATION DATA

     9 PH                                 DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                    ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
                    5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                      .95    1.84    3.25    3.90    4.23    5.00    5.93    6.83     .00     .00     .00     .00

                                                          STORM AREA =      .01

   273 LS           SCS LOSS RATE
                          STRTL         .00  INITIAL ABSTRACTION
                         CRVNBR      100.00  CURVE NUMBER
                          RTIMP         .00  PERCENT IMPERVIOUS AREA

   274 UD           SCS DIMENSIONLESS UNITGRAPH
                           TLAG         .00  LAG

                                                                     ***

                                                                UNIT HYDROGRAPH
                                                            5 END-OF-PERIOD ORDINATES
                  64.       18.        4.        1.        0.

       ***              ***              ***              ***              ***

                           HYDROGRAPH AT STATION       OP1

        TOTAL RAINFALL =     6.83, TOTAL LOSS =      .00, TOTAL EXCESS =     6.83

      PEAK FLOW     TIME                           MAXIMUM AVERAGE FLOW
                                          6-HR        24-HR        72-HR      24.00-HR
  +    (CFS)        (HR)
                                  (CFS)
  +      72.       12.08                    6.           2.           2.            2.
                                (INCHES)  5.000        6.826        6.826         6.826
                                 (AC-FT)    3.           4.           4.            4.

                                CUMULATIVE AREA =      .01 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

               **************
               *            *
   275 KK      *     R/OP1  *
               *            *
               **************

   276 KO           OUTPUT CONTROL VARIABLES
                          IPRNT           3  PRINT CONTROL
                          IPLOT           0  PLOT CONTROL
                          QSCAL          0.  HYDROGRAPH PLOT SCALE
                          IPNCH           7  PUNCH COMPUTED HYDROGRAPH
                           IOUT          21  SAVE HYDROGRAPH ON THIS UNIT
                          ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                          ISAV2         289  LAST ORDINATE PUNCHED OR SAVED
                         TIMINT        .083  TIME INTERVAL IN HOURS
```

```
                    HYDROGRAPH ROUTING DATA

 277 RS             STORAGE ROUTING
                         NSTPS           1  NUMBER OF SUBREACHES
                          ITYP        ELEV  TYPE OF INITIAL CONDITION
                        RSVRIC     1146.00  INITIAL CONDITION
                             X         .00  WORKING R AND D COEFFICIENT

 278 SA                  AREA          .0        5.1        5.7

 279 SE             ELEVATION     1146.00    1146.10    1147.00

 280 SS             SPILLWAY
                          CREL     1146.90  SPILLWAY CREST ELEVATION
                         SPWID      100.00  SPILLWAY WIDTH
                          COQW        2.60  WEIR COEFFICIENT
                          EXPW        1.50  EXPONENT OF HEAD

                                                                ***

                                                   COMPUTED STORAGE-ELEVATION DATA

        STORAGE        .00       .17      5.00
      ELEVATION    1146.00   1146.10   1147.00

                                                   COMPUTED OUTFLOW-ELEVATION DATA

        OUTFLOW        .00       .00       .00       .01       .04       .09       .18       .30       .48       .72
      ELEVATION    1146.00   1146.90   1146.90   1146.90   1146.90   1146.90   1146.91   1146.91   1146.92   1146.92

        OUTFLOW       1.03      1.41      1.88      2.44      3.09      3.86      4.76      5.77      6.93      8.22
      ELEVATION    1146.93   1146.93   1146.94   1146.94   1146.95   1146.96   1146.97   1146.98   1146.99   1147.00


                                                COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

        STORAGE        .00       .17      4.44      4.50      4.58      4.65      4.73      4.83      4.94      5.00
        OUTFLOW        .00       .00       .00       .30      1.03      1.88      3.09      4.76      6.93      8.22
      ELEVATION    1146.00   1146.10   1146.90   1146.91   1146.93   1146.94   1146.95   1146.97   1146.99   1147.00


     ***            ***             ***              ***              ***

                           HYDROGRAPH AT STATION     R/OP1

 PEAK FLOW       TIME                          MAXIMUM AVERAGE FLOW
                                       6-HR         24-HR        72-HR       24.00-HR
+    (CFS)       (HR)
                               (CFS)
+        0.       .00                    0.            0.           0.            0.
                            (INCHES)   .000          .000         .000          .000
                             (AC-FT)     0.            0.           0.            0.

PEAK STORAGE     TIME                        MAXIMUM AVERAGE STORAGE
                                       6-HR         24-HR        72-HR       24.00-HR
+  (AC-FT)       (HR)
         4.     24.00                    4.            2.           2.            2.

 PEAK STAGE      TIME                         MAXIMUM AVERAGE STAGE
                                       6-HR         24-HR        72-HR       24.00-HR
+    (FEET)      (HR)
    1146.83     24.00               1146.81       1146.44      1146.44       1146.44

                          CUMULATIVE AREA =       .01 SQ MI

1
                                                          RUNOFF SUMMARY
                                                   FLOW IN CUBIC FEET PER SECOND
                                                 TIME IN HOURS,  AREA IN SQUARE MILES

                                             PEAK    TIME OF       AVERAGE FLOW FOR MAXIMUM PERIOD         BASIN      MAXIMUM      TIME OF
              OPERATION          STATION     FLOW      PEAK                                                AREA       STAGE     MAX STAGE
+                                                               6-HOUR       24-HOUR       72-HOUR

              HYDROGRAPH AT
+                                    LD3     294.     12.08         23.           7.            7.          .05

              HYDROGRAPH AT
+                                   LD3T      42.     12.17          5.           2.            2.          .01

              2 COMBINED AT
+                                  C/LD3     324.     12.08         29.           9.            9.          .06

              HYDROGRAPH AT
+                                     P4     120.     12.08         10.           3.            3.          .02

              2 COMBINED AT
+                                   C/P4     444.     12.08         39.          12.           12.          .08

              ROUTED TO
+                                   R/P4       0.       .00          0.           0.            0.          .08
+                                                                                                                   1146.57        24.00

              HYDROGRAPH AT
+                                     O3      11.     12.67          3.           1.            1.          .01

              HYDROGRAPH AT
+                                 R/CH1B      51.     12.25         10.           3.            3.          .02

              HYDROGRAPH AT
+                                   LD2T      35.     12.17          5.           1.            1.          .01

              HYDROGRAPH AT
```

+		LD2	211.	12.08	20.	6.	6.	.04		
+	2 COMBINED AT	C/LD2	236.	12.08	25.	8.	8.	.05		
+	HYDROGRAPH AT	O2	18.	12.33	3.	1.	1.	.01		
+	3 COMBINED AT	C/CH1A	276.	12.08	37.	11.	11.	.08		
+	HYDROGRAPH AT	R/CH1A	333.	12.17	43.	13.	13.	.09		
+	HYDROGRAPH AT	LD1T	32.	12.17	5.	1.	1.	.01		
+	HYDROGRAPH AT	LD1	152.	12.08	12.	4.	4.	.03		
+	2 COMBINED AT	C/LD1	179.	12.08	17.	5.	5.	.04		
+	HYDROGRAPH AT	O1	33.	12.33	5.	2.	2.	.01		
+	HYDROGRAPH AT	P1	163.	12.08	14.	5.	5.	.03		
+	4 COMBINED AT	C/P1	580.	12.17	79.	25.	25.	.17		
+	ROUTED TO	R/P1	0.	.00	0.	0.	0.	.17		
+									1144.48	24.00
+	HYDROGRAPH AT	DA3	4.	12.25	0.	0.	0.	.00		
+	HYDROGRAPH AT	O10	5.	12.50	1.	0.	0.	.00		
+	2 COMBINED AT	C/CULV	7.	12.25	1.	0.	0.	.00		
+	HYDROGRAPH AT	CH2B	21.	12.08	2.	1.	1.	.00		
+	HYDROGRAPH AT	LD6	168.	12.08	14.	4.	4.	.03		
+	2 COMBINED AT	C/CH2A	189.	12.08	16.	5.	5.	.03		
+	HYDROGRAPH AT	R/CH2A	186.	12.08	18.	6.	6.	.04		
+	HYDROGRAPH AT	LD5T	33.	12.17	4.	1.	1.	.01		
+	HYDROGRAPH AT	LD5	319.	12.08	26.	8.	8.	.06		
+	2 COMBINED AT	C/LD5	345.	12.08	30.	9.	9.	.06		
+	HYDROGRAPH AT	R/CH3	310.	12.08	31.	10.	10.	.07		
+	HYDROGRAPH AT	O9	8.	12.25	1.	0.	0.	.00		
+	HYDROGRAPH AT	P2	86.	12.08	7.	2.	2.	.01		
+	4 COMBINED AT	C/P2	587.	12.08	58.	18.	18.	.12		
+	ROUTED TO	R/P2	18.	14.75	12.	4.	4.	.12		
+									1150.10	14.67
+	HYDROGRAPH AT	LD4	242.	12.08	20.	6.	6.	.04		
+	HYDROGRAPH AT	CH4A	43.	12.17	5.	2.	2.	.01		
+	HYDROGRAPH AT	CH4B	67.	12.17	9.	3.	3.	.02		
+	HYDROGRAPH AT	O6	7.	12.92	2.	1.	1.	.00		
+	HYDROGRAPH AT	O7	10.	12.33	2.	0.	0.	.00		
+	HYDROGRAPH AT	P3	120.	12.08	10.	3.	3.	.02		
+	5 COMBINED AT	C/P3	429.	12.08	43.	13.	13.	.09		
	ROUTED TO									

+		R/P3	0.	.00	0.	0.	0.	.09		
+									1149.44	24.00
+	HYDROGRAPH AT	DA1	14.	12.58	3.	1.	1.	.01		
+	HYDROGRAPH AT	O8	5.	12.33	1.	0.	0.	.00		
+	2 COMBINED AT	C/DA1	17.	12.50	4.	1.	1.	.01		
+	HYDROGRAPH AT	O4	11.	12.50	2.	1.	1.	.01		
+	HYDROGRAPH AT	O5	2.	12.17	0.	0.	0.	.00		
+	HYDROGRAPH AT	P5	84.	12.08	7.	2.	2.	.01		
+	3 COMBINED AT	C/P5	89.	12.08	10.	3.	3.	.02		
+	ROUTED TO	R/P5	0.	.00	0.	0.	0.	.02		
+									1148.88	24.00
+	HYDROGRAPH AT	DA2	15.	12.17	2.	1.	1.	.00		
+	HYDROGRAPH AT	OP1	72.	12.08	6.	2.	2.	.01		
+	ROUTED TO	R/OP1	0.	.00	0.	0.	0.	.01		
+									1146.83	24.00

1

SUMMARY OF KINEMATIC WAVE - MUSKINGUM-CUNGE ROUTING
(FLOW IS DIRECT RUNOFF WITHOUT BASE FLOW)

						INTERPOLATED TO COMPUTATION INTERVAL			
ISTAQ	ELEMENT	DT	PEAK	TIME TO PEAK	VOLUME	DT	PEAK	TIME TO PEAK	VOLUME
		(MIN)	(CFS)	(MIN)	(IN)	(MIN)	(CFS)	(MIN)	(IN)
LD3	MANE	.84	303.76	725.88	5.40	5.00	294.46	725.00	5.41
CONTINUITY SUMMARY (AC-FT) - INFLOW= .0000E+00 EXCESS= .1439E+02 OUTFLOW= .1430E+02 BASIN STORAGE= .7372E-01 PERCENT ERROR= .1									
LD3T	MANE	1.38	42.02	731.43	5.12	5.00	41.72	730.00	5.11
CONTINUITY SUMMARY (AC-FT) - INFLOW= .0000E+00 EXCESS= .3135E+01 OUTFLOW= .3084E+01 BASIN STORAGE= .4911E-01 PERCENT ERROR= .1									
R/CH1B	MANE	1.14	51.31	735.55	5.18	5.00	51.24	735.00	5.18
CONTINUITY SUMMARY (AC-FT) - INFLOW= .1599E+01 EXCESS= .4487E+01 OUTFLOW= .5969E+01 BASIN STORAGE= .9397E-01 PERCENT ERROR= .4									
LD2T	MANE	1.02	35.69	732.08	5.09	5.00	34.77	730.00	5.09
CONTINUITY SUMMARY (AC-FT) - INFLOW= .0000E+00 EXCESS= .2996E+01 OUTFLOW= .2934E+01 BASIN STORAGE= .5032E-01 PERCENT ERROR= .4									
LD2	MANE	1.10	235.73	726.60	5.39	5.00	211.47	725.00	5.39
CONTINUITY SUMMARY (AC-FT) - INFLOW= .0000E+00 EXCESS= .1216E+02 OUTFLOW= .1207E+02 BASIN STORAGE= .8751E-01 PERCENT ERROR= .0									
R/CH1A	MANE	2.17	333.70	729.89	5.25	5.00	333.21	730.00	5.26
CONTINUITY SUMMARY (AC-FT) - INFLOW= .2271E+02 EXCESS= .3416E+01 OUTFLOW= .2599E+02 BASIN STORAGE= .1330E+00 PERCENT ERROR= .0									
LD1T	MANE	.50	33.32	732.69	5.09	5.00	32.21	730.00	5.11
CONTINUITY SUMMARY (AC-FT) - INFLOW= .0000E+00 EXCESS= .2913E+01 OUTFLOW= .2851E+01 BASIN STORAGE= .5246E-01 PERCENT ERROR= .3									
LD1	MANE	.40	154.27	725.30	5.39	5.00	152.30	725.00	5.41
CONTINUITY SUMMARY (AC-FT) - INFLOW= .0000E+00 EXCESS= .7498E+01 OUTFLOW= .7443E+01 BASIN STORAGE= .4641E-01 PERCENT ERROR= .1									
CH2B	MANE	1.88	22.79	726.30	5.40	5.00	21.00	725.00	5.38
CONTINUITY SUMMARY (AC-FT) - INFLOW= .0000E+00 EXCESS= .1158E+01 OUTFLOW= .1151E+01 BASIN STORAGE= .6056E-02 PERCENT ERROR= .1									
LD6	MANE	1.08	178.38	726.45	5.40	5.00	167.59	725.00	5.40

```
CONTINUITY SUMMARY (AC-FT) - INFLOW= .0000E+00 EXCESS= .8713E+01 OUTFLOW= .8666E+01 BASIN STORAGE= .5144E-01 PERCENT ERROR=    .0

            R/CH2A  MANE         .86    211.98    727.05      5.40      5.00    185.99    725.00       5.40

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9817E+01 EXCESS= .1447E+01 OUTFLOW= .1125E+02 BASIN STORAGE= .2957E-01 PERCENT ERROR=   -.2

              LD5T  MANE         .70     32.72    729.69      5.12      5.00     32.64    730.00       5.12

CONTINUITY SUMMARY (AC-FT) - INFLOW= .0000E+00 EXCESS= .2386E+01 OUTFLOW= .2347E+01 BASIN STORAGE= .3483E-01 PERCENT ERROR=    .2

               LD5  MANE         .90    334.87    726.12      5.40      5.00    318.80    725.00       5.40

CONTINUITY SUMMARY (AC-FT) - INFLOW= .0000E+00 EXCESS= .1595E+02 OUTFLOW= .1587E+02 BASIN STORAGE= .8818E-01 PERCENT ERROR=    .0

             R/CH3  MANE         .81    355.47    726.44      5.36      5.00    309.89    725.00       5.37

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1822E+02 EXCESS= .8974E+00 OUTFLOW= .1910E+02 BASIN STORAGE= .3441E-01 PERCENT ERROR=   -.1

               LD4  MANE        1.16    254.07    726.39      5.40      5.00    242.29    725.00       5.40

CONTINUITY SUMMARY (AC-FT) - INFLOW= .0000E+00 EXCESS= .1227E+02 OUTFLOW= .1221E+02 BASIN STORAGE= .6474E-01 PERCENT ERROR=    .0

              CH4A  MANE        1.51     43.89    730.56      5.34      5.00     43.46    730.00       5.33

CONTINUITY SUMMARY (AC-FT) - INFLOW= .0000E+00 EXCESS= .3271E+01 OUTFLOW= .3216E+01 BASIN STORAGE= .5122E-01 PERCENT ERROR=    .1

              CH4B  MANE        1.37     72.34    727.23      5.35      5.00     66.57    730.00       5.34

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3213E+01 EXCESS= .2229E+01 OUTFLOW= .5420E+01 BASIN STORAGE= .2185E-01 PERCENT ERROR=    .0


*** NORMAL END OF HEC-1 ***
```

APPENDIX H-3

FINAL COVER EROSION CONTROL STRUCTURE DESIGN

Includes pages H-3-ii through H-3-21

LICENSED PROFESSIONAL ENGINEER
Charles R.
Marsh
24599
OKLAHOMA

6-5-15

CONTENTS

LICENSED PROFESSIONAL ENGINEER
Charles R.
Marsh
24599
OKLAHOMA

6.5.15

1 DRAINAGE SWALE DESIGN

LANDFILL COVER SWALES

- Landfill cover drainage swale layout is shown on Figure H-1-1. A swale detail is provided on Figure H-1-6.
- Landfill Cover Swale Design Summary:
  - Drainage areas analyzed are shown on Sheet H-3-7.
  - Swale peak flow calculations are summarized on page H-3-2.
  - Swale design calculations are provided on pages H-3-3 through H-3-5. Maximum normal depth is 1.75 feet. Swale design depth is 2 feet.
  - Maximum flow velocity is 3.08 fps. Given that the velocity is less than 5 fps, the swale will be lined with vegetation.
  - The swales are adequately designed to convey the 25-year, 24-hour intensity storm run-off.

Required: Analyze the critical swales for each letdown to determine the adequacy of the swale design.

Method:
1. Determine the 25-year frequency flow rates for the swale drainage areas by the Wright-McLaughlin Method.
2. Determine the size of the swales.

Reference:
1. State of Oklahoma, Department of Transportation, Drainage Design Manual, February 1988.

Solution:
1. Determine the 25-year frequency flow rates using the Wright-McLaughlin Method.

$$\boxed{Q = C \cdot C_f \cdot I \cdot A}$$

Where:
C= 0.7 (runoff coefficient)
C_f= 1.1 (runoff correction factor, from Ref 1 for 25-yr design storm frequency)
I = intensity in/hr
A= drainage area, ac

$$I = \frac{a}{(t_d + b)^c}$$

a = 95 From Ref 1, for Oklahoma County (Zone II)
b = 15.0 25-year storm event
c = 0.80

t_d is assumed to be 10 min. for all cases

I = 7.23 in/hr

Swale	Area (ac)	Flow Rate (cfs)	Normal Depth for Design Flow (ft)
SW1	3.23	18.0	0.97
SW2	4.91	27.3	0.97
SW3	4.19	23.3	1.63
SW4	2.90	16.2	1.42
SW5	5.07	28.2	1.75
SW6	2.61	14.5	1.36

EAST OAK RDF
0086-356-11-40-06
FINAL COVER EROSION CONTROL STRUCTURE DESIGN
DRAINAGE SWALE ANALYSIS

Channel	Flow Rate (cfs)	Bottom Slope (ft/ft)[1]	n-value	Side Slope[2] (left)	Side Slope[2] (right)	Bottom Width (ft)	Normal Depth (ft)	Flow Vel. (fps)	Froude No.	Velocity Head (ft)	Energy Head (ft)	Flow Area (sq. ft.)	Top Width of Flow (ft)
SW1	18.0	0.005	0.03	2	16	0	0.97	2.14	0.543	0.07	1.04	8.41	17.40
SW2	27.3	0.005	0.03	2	25	0	0.97	2.15	0.544	0.07	1.04	12.58	26.07
SW3	23.3	0.005	0.03	2	4	0	1.63	2.94	0.574	0.13	1.76	7.93	9.76
SW4	16.2	0.005	0.03	2	4	0	1.42	2.68	0.560	0.11	1.53	6.05	8.52
SW5	28.2	0.005	0.03	2	4	0	1.75	3.08	0.581	0.15	1.89	9.15	10.48
SW6	14.5	0.005	0.03	2	4	0	1.36	2.60	0.556	0.11	1.47	5.57	8.17

[1] Swales will have a minimum 0.5 percent slope.

[2] Swale side slope is 2 Horizontal(H) to 1 Vertical(V) on berm and 16H:1V on landfill top slope for SW1.
Swale side slope is 2 Horizontal(H) to 1 Vertical(V) on berm and 25H:1V on landfill top slope for SW2.
Swale side slopes are 2 Horizontal(H) to 1 Vertical(V) on berm and 4H:1V on landfill side slopes for SW3 through SW6.

[3] Calculations were performed using the HYDROCALC HYDRAULICS program developed by Dodson and Associates (Version 1.2a, 1996).

Maximum flow depth is 1.75 ft < 2.0 ft (channel depth)

Design is acceptable.

Example Calculation: Calculate the normal depth for the channel for drainage area SW1

List of Symbols

Q = flow rate calculated using Manning's Equation, cfs
Q_d = design flow rate for channel, cfs
R = hydraulic radius, ft
n = Manning's roughness coefficient
S = channel slope, ft/ft
b = bottom width of channel, ft
z_r = z-ratio (ratio of run to rise for channel sideslope) for right sideslope of channel
z_l = z-ratio (ratio of run to rise for channel sideslope) for left sideslope of channel
A_f = flow area, sf
g = gravitational acceleration = 32.2 ft/s^2
T = top width of flow, ft
d = normal depth of channel, ft

The program uses an iterative process to calculate the normal depth of the channel to satisfy Manning's Equation

$$Q = \frac{1.486}{n} A R^{0.67} S^{0.5}$$

Design Inputs:

Q_d =	18.0	cfs (from page H-3-3)
S =	0.005	ft/ft
b =	0	ft
z_r =	2	(H) : 1 (V)
z_l =	16	(H) : 1 (V)
n =	0.03	

Step 1 - Based on the geometry of the channel cross-section, solve for R and Af

$$R = \frac{bd + 1/2d^2(z_r + z_l)}{b + d((z_l^2 + 1)^{0.5} + (z_r^2 + 1)^{0.5})}$$

$$A_f = bd + 1/2d^2(z_r + z_l)$$

assume: $d = 0.97$ ft

$R = 0.478$ ft

$A_f = 8.41$ sf

solve for Q: $Q = 18.0$ cfs

if Q is not equal to Q_d, select a new d and repeat calculations

Step 2 - Solve for velocity, T (wet perimeter), Froude number, velocity head, and energy head

$Q = VA \Rightarrow \quad V = Q/A$

$V = 2.14$ ft/s

$T = b + d(z_l + z_r)$

$T = 17.40$ ft

$$F_r = \frac{V}{(gA/T)^{0.5}}$$

$F_r = 0.543$

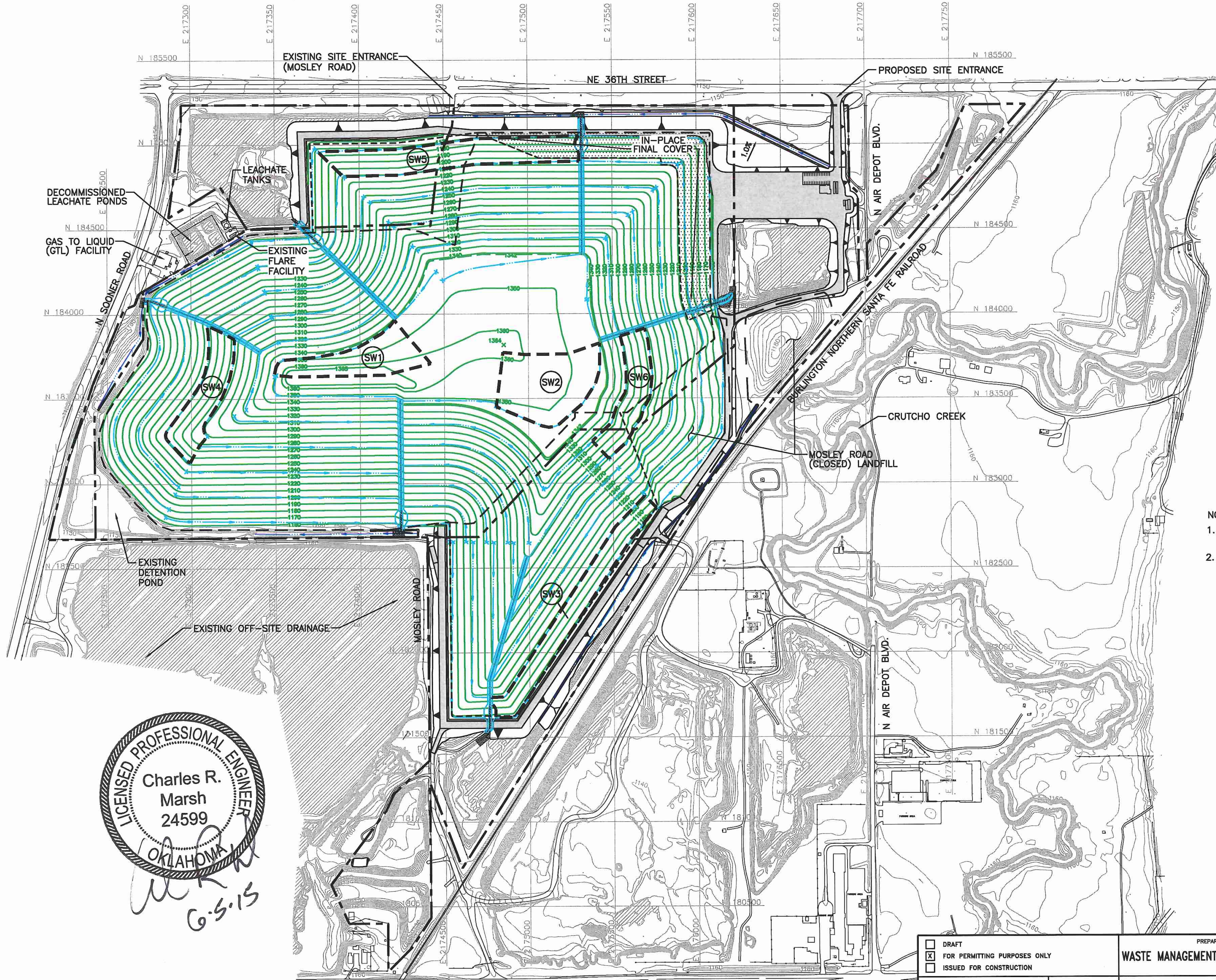
$$\text{Velocity Head} = \frac{V^2}{2g}$$

Velocity Head = 0.07 ft

Energy Head = water elevation + velocity head

Energy Head = 1.04 ft

SWALE DRAINAGE AREAS



N

0 300 600
SCALE IN FEET

LEGEND

- EXISTING PERMIT BOUNDARY
- PROPOSED PERMIT BOUNDARY
- PERMITTED LIMITS OF WASTE
- PROPOSED LIMITS OF WASTE
- MOSLEY ROAD LANDFILL LIMITS OF WASTE
- N 183000 — STATE PLANE GRID COORDINATE
- 1180 — EXISTING CONTOUR
- 1280 — PROPOSED FINAL COVER CONTOUR
- PROPOSED DRAINAGE SWALE
- PROPOSED DRAINAGE CHUTE
- PERIMETER DRAINAGE CHANNEL
- IN-PLACE FINAL COVER
- DRAINAGE AREA BOUNDARY
- SW6 — DRAINAGE AREA DESIGNATION

NOTE:

1. EXISTING CONTOURS AND ELEVATIONS PROVIDED BY DALLAS AERIAL SURVEYS, INC. FROM AERIAL PHOTOGRAPHY FLOWN JANUARY 19, 2014.
2. TYPICAL LANDFILL SIDE SLOPES ARE 4(H):1(V) AND TYPICAL TOP SLOPE IS 4 PERCENT.

SWALE DRAINAGE AREAS

DRAINAGE AREA	AREA (ACRES)
SW1	3.23
SW2	4.91
SW3	4.19
SW4	2.90
SW5	5.07
SW6	2.61

☐ DRAFT
☒ FOR PERMITTING PURPOSES ONLY
☐ ISSUED FOR CONSTRUCTION

DATE: 06/2015
FILE: 0086-356-11
CAD: H-3-7-DRAINAGE.DWG

DRAWN BY: SRF
DESIGN BY: CRM
REVIEWED BY: JVQ

PREPARED FOR
WASTE MANAGEMENT OF OKLAHOMA, INC.

REVISIONS

NO.	DATE	DESCRIPTION

Weaver Consultants Group
CA 3804 PE-06/30/2015

TIER III PERMIT MODIFICATION SWALE DRAINAGE AREAS

EAST OAK RDF
OKLAHOMA COUNTY, OKLAHOMA

WWW.WCGRP.COM

SHEET H-3-7

O:\0086\356\EXPANSION 2015\APPENDIX H\SHEET H-3-7-SWALE DRAINAGE AREAS.dwg, uacholonu, 1:2

2 DRAINAGE LETDOWN (CHUTE) DESIGN

The letdown structures are designed using geomembrane as chute armoring. The geomembrane is placed along the entire chute in order to protect the chute bottom and the final cover from erosion due to potential erosive velocities.

- Chute layout is shown on Figure H-1-1. Chute details are provided on Figure H-1-5 through H-1-8.
- Chute Design Summary:
  - Chute drainage areas are shown on Sheet H-3-21.
  - Peak flow calculations are presented on page H-3-9.
  - As shown on pages H-3-10 and H-3-11, the maximum normal depth is 0.55 feet. The chutes have a minimum of two feet of depth.
  - As shown on page H-3-10 and H-3-11, maximum flow velocity is 45.47 fps.

Required: Provide design for a geomembrane-lined letdown structure (or chute), with energy dissipators, to convey the 25-year intensity peak flow from the final cover system.

Method:

1. Obtain the 25-year, frequency flow rates for the chute drainage areas.
2. Design the upper portion of the geomembrane lined chutes.
3. Design the lower portion of the geomembrane chutes.
4. Design the lower portion of the geomembrane lined chutes with energy dissipator system at the downstream end.
5. Design anchor trench spacing and depths.
6. Design upstream end anchor trench.

Assumptions:

1. The geomembrane-lined chute will transition to its maximum width for the energy dissipater design where maximum total flow for chute is expected to occur.
2. Concrete weir will be designed for a typical height of 3 1/2 feet.

References:

1. State of Oklahoma, Department of Transportation, Drainage Design Manual, February 1988.
2. Gamelsky, S.G., *Innovations in Stormwater Management for Landfill Closure* Technical Paper
3. Koerner, R.M., *Designing with Geosynthetics*, 5th Edition, Prentice-Hall, Inc, 2005.
4. Morris, H.M., *Hydraulics of Energy Dissipators in Steep Rough Channels*, Bulletin 19, Research Division, Virginia Polytechnic Institute, Blacksburg, Virginia.

Solution: **1. Determine the 25-year, frequency flow rates.**

$$\boxed{Q = C \cdot C_f \cdot I \cdot A}$$

Where:

$C =$ 0.7 (runoff coefficient)
$C_f =$ 1.1 (runoff correction factor, from Ref 1 for 25-yr design storm frequency)
$I =$ intensity in/hr
$A =$ drainage area, ac

$$I = \frac{a}{(t_d + b)^c}$$

$a =$ 95
$b =$ 15.0
$c =$ 0.80

From Ref 1, for Oklahoma County 25-year storm event

t_d is assumed to be 10 minutes for all cases, which results in a higher intensity thus a more conservative design.

$I =$ 7.23 in/hr

Chute	Area (ac)	Flow Rate (cfs)
LD1	23.28	129.7
LD2	33.81	188.3
LD3	39.02	217.3
LD4	27.14	151.2
LD5	40.74	226.9
LD6	19.24	107.2

2. Uniform flow design for the upper portion of the geomembrane-lined chutes above the dissapator.

Letdown	Flow Rate (cfs)	Bottom Slope (ft/ft)	Manning's n	Side Slope (left)	Side Slope (right)	Bottom Width (ft)	Normal Depth (ft)	Flow Vel. (fps)	Froude Number	Velocity Head (ft)	Energy Head (ft)	Flow Area (sf)	Flow Top Width (ft)
LD1	129.7	0.25	0.01	2.0	2.0	8.0	0.39	37.39	10.955	21.73	22.12	3.47	9.58
LD2	188.3	0.25	0.01	2.0	2.0	8.0	0.49	42.63	11.290	28.24	28.74	4.42	9.97
LD3	217.3	0.25	0.01	2.0	2.0	8.0	0.53	44.80	11.419	31.19	31.72	4.85	10.14
LD4	151.2	0.25	0.01	2.0	2.0	8.0	0.43	39.48	11.093	24.22	24.65	3.83	9.73
LD5	226.9	0.25	0.01	2.0	2.0	8.0	0.55	45.47	11.458	32.13	32.68	4.99	10.19
LD6	107.2	0.25	0.01	2.0	2.0	8.0	0.35	34.86	10.750	18.88	19.23	3.08	9.41

1. Calculations were performed using the HYDROCALC Hydraulics for Windows program developed by Dodson and Associates (Version 1.2a, 1996).

Conclusions: Maximum normal depth for the upper portion of the geomembrane-lined chute is 0.55 feet. Chute design depth is 2.0 feet.
Maximum flow velocity for the upper portion of the geomembrane-lined chute is 45.47 fps.

Summary of Bottom Widths and Element Lengths.

Letdown	W1 - Bottom Width Above Dissipator (ft)	W2 - Bottom Width At Dissipator (ft)	L1 - Transition Length (ft)	L2 - Distance to Weir (ft)
LD1	8.0	24.0	40.0	32.0
LD2	8.0	34.0	65.0	52.0
LD3	8.0	40.0	80.0	64.0
LD4	8.0	28.0	50.0	40.0
LD5	8.0	42.0	85.0	68.0
LD6	8.0	20.0	30.0	24.0

1. Refer to Detail on Figure H-1-5 for locations of W1, W2, L1, and L2.

3. Chute flow design for the lower portion of the geomembraned-lined chutes (dissapator width).

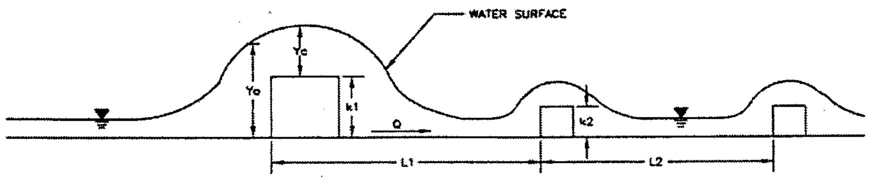
Letdown	Flow Rate (cfs)	Bottom Slope (ft/ft)	Manning's n	Side Slope (left)	Side Slope (right)	Bottom Width (ft)	Normal Depth (ft)	Flow Vel. (fps)	Froude Number	Velocity Head (ft)	Energy Head (ft)	Flow Area (sf)	Flow Top Width (ft)
LD1	129.7	0.25	0.01	2	2	24	0.21	25.67	10.032	10.24	10.45	5.05	24.83
LD2	188.3	0.25	0.01	2	2	34	0.21	26.03	10.073	10.53	10.74	7.23	34.84
LD3	217.3	0.25	0.01	2	2	40	0.21	25.88	10.060	10.41	10.61	8.40	40.83
LD4	151.2	0.25	0.01	2	2	28	0.21	25.72	10.039	10.28	10.48	5.88	28.83
LD5	226.9	0.25	0.01	2	2	42	0.21	25.83	10.056	10.37	10.58	8.78	42.83
LD6	107.2	0.25	0.01	2	2	20	0.21	25.51	10.013	10.11	10.32	4.20	20.82

1. Calculations were performed using the HYDROCALC Hydraulics for Windows program developed by Dodson and Associates (Version 1.2a, 1996).
2. The bottom width of the geomembrane chutes are designed to accommodate the energy dissipater design given in Section 4 of these calculations.

Conclusions: Maximum normal depth for the lower portion of the geomembrane-lined chute is 0.21 feet. Chute design depth is 2.0 feet.
Maximum flow velocity for the lower portion of the geomembrane-lined chute is 25.88 fps.

4. Energy Dissipater Design

Tumbling Flow Energy Dissipators



Definition of Terms/Variables:

Q =	flow rate (cfs)
q =	unit flow (cfs/ft width)
Y_C =	critical depth (ft)
Y_O =	approach depth (ft)
k_1 =	height of initial element (ft) (weir)
k_2 =	height of secondary elements (ft)
L_1 =	distance between initial and secondary elements (ft)
L_2 =	distance between secondary elements (ft)
W =	bottom width of chute (ft)
g =	acceleration due to gravity, 32.2 ft/s^2
S =	slope of channel (percent)
x =	slope of channel (degrees)
n =	Manning's Coefficient

Design Equations:

$q = Q/W$

$Y_C = (q^2/g)^{1/3}$ (Ref 4, page 6.19, Item 2)

$Y_o = (nq/(1.5\tan(x)^{0.5}))^{3/5}$ (Ref 4, page 28, Eqn 24)

$y_1 = 0.35\, q^{2/3}$ (Ref 2, page 6.19, Item 3)

$K_1 = Y_o\{[(2/(1 - 0.01S)^2)(Y_c/Y_o)]^{0.5} - (1 - 0.01S)^2$ (Ref 4, page 28, Eqn 23)

$K_2 = \dfrac{Y_C}{(3-0.037S)^{2/3}}$ (Ref 4, page 32, Eqn 26)

$L_1 = (1 + 0.01S)K_1 + Y_c(K_1/g\cos(x))^{0.5}$ (Ref 4, page 42, Eqn 31)

$L_2 = 8.5\, K_2$ (Ref 2, page 6.19, Item 5)

Note: use the greater of L_1 and L_2

Chute parameters:

Slope (S) =	25	%
Manning's coefficient (n) =	0.01	
Slope (x) =	14.04	deg
g =	32.2	ft/s^2

Letdown	Q	W	q	Y_C	Y_O	y_1	K_1	K_2
LD1	129.7	24	5.40	0.97	0.21	1.08	3.41	0.59
LD2	188.3	34	5.54	0.98	0.21	1.10	3.47	0.60
LD3	217.3	40	5.43	0.97	0.21	1.08	3.42	0.60
LD4	151.2	28	5.40	0.97	0.21	1.08	3.41	0.59
LD5	226.9	42	5.40	0.97	0.21	1.08	3.41	0.59
LD6	107.2	20	5.36	0.96	0.21	1.07	3.39	0.59

Letdown	L_1	L_2	L_2 Used
LD1	4.6	5.5	5.5
LD2	4.7	5.6	5.6
LD3	4.6	5.5	5.5
LD4	4.6	5.5	5.5
LD5	4.6	5.5	5.5
LD6	4.6	5.5	5.5

Design Summary

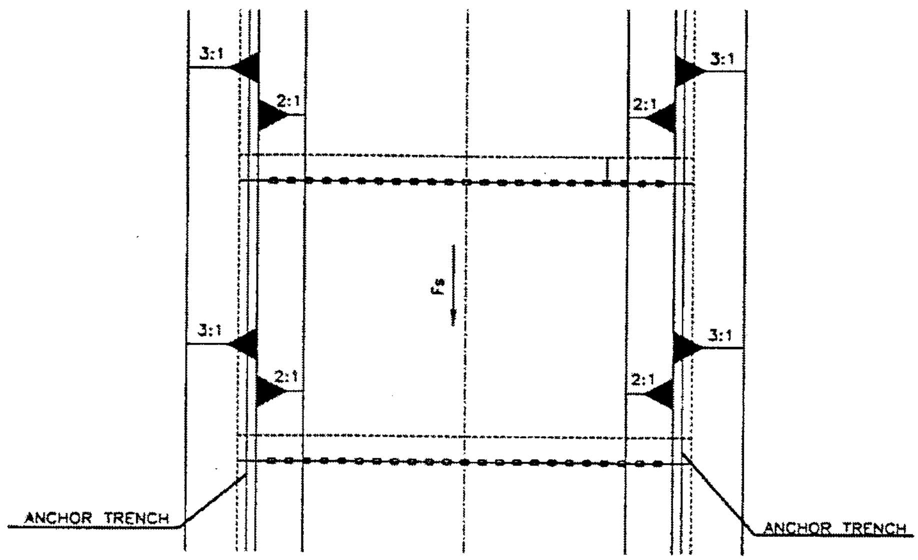
Calculated

Letdown	Height of Concrete Weir (ft)	Height of Secondary Element (ft)	Length Between Elements (ft)
LD1	3.4	0.59	5.5
LD2	3.5	0.60	5.6
LD3	3.4	0.60	5.5
LD4	3.4	0.59	5.5
LD5	3.4	0.59	5.5
LD6	3.4	0.59	5.5

Used

Letdown	Height of Concrete Weir (ft)	Height of Secondary Element (ft)	Length Between Elements (L used) (ft)
LD1	3.5	0.60	5.6
LD2	3.5	0.60	5.6
LD3	3.5	0.60	5.6
LD4	3.5	0.60	5.6
LD5	3.5	0.60	5.6
LD6	3.5	0.60	5.6

5. Side Anchor Trench Design



Shear force pulling on geomembrane due to water:

The shear force acting on the geomembrane per square foot of water in the chute:

$T = \gamma_w \times D \times S$ where: γ_w = unit weight of water (lb/cf)
D = maximum water depth (ft)
S = hydraulic gradient (ft/ft)

Shear force acting on the geomembrane per foot of anchor trench:

$F_{s1} = T \times P$

where:
P = wetted perimeter of the chute = $(W + 2 \times (a^2+D^2)^{1/2})$
a = h x D = horizontal distance from bottom of chute to the depth submerged on the sideslopes
h = Slope of sidewalls = 2 (H) : 1 (V)
W = Minimum bottom width of flow = 8 ft

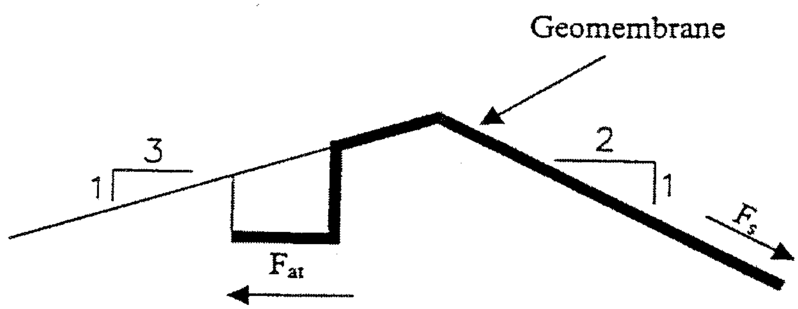
Conservatively, the maximum calculated water depth in the chutes will be used to verify the design. Thus, the water depth in the narrowest part of the chute with the highest depth will be used.

Letdown	Maximum Water Depth (ft)[1]	Hydraulic Gradient (ft/ft)	T (lb/sf)	a (ft)	F_{s1} (lb/ft)
LD1	0.39	0.25	6.08	0.78	59
LD2	0.49	0.25	7.64	0.98	78
LD3	0.53	0.25	8.27	1.06	86
LD4	0.43	0.25	6.71	0.86	67
LD5	0.55	0.25	8.58	1.1	90
LD6	0.35	0.25	5.46	0.7	52

[1] See design depths on page H-3-10.

Pullout Resistance from Edges, F_{at1}[2]

Assuming pullout only opposed by trench (conservative assumption)



$$F_{at} = 2[\{K_o\gamma(D/2)\}\{\tan\zeta\}\{D\} + \{\gamma D\}\{\tan\zeta\}\{w\}] \quad \text{(Ref 3)}$$

where:
ζ = interface friction angle
K_o = 1 - sin ζ
γ = unit weight of soil (lb/cf)
D = depth of anchor trench (ft)
w = bottom width of anchor trench (ft)

soil friction angle =	15	degrees
soil/geomembrane friction angle =	15	degrees
unit weight =	120	lb/ft^3
depth of anchor trench =	1	ft
bottom width of anchor trench =	1	ft

[2]See detail D6 - Anchor Trench Type 2 on Figure H-1-6 for dimensions.

$K_o =$ 0.74

$F_{at1} =$	88	lb/ft width	on one side

Factor of Safety = $2F_{at1}/F_{s1}$ =	$\frac{176}{90}$	FS =	2.0

6. Upstream End Anchor Trench Design

Shear force pulling on geomembrane due to water:

$F_{s2} = T \times A$

where: T = Maximum shear force acting on the geomembrane per square foot of water in the chute (lb/sf)

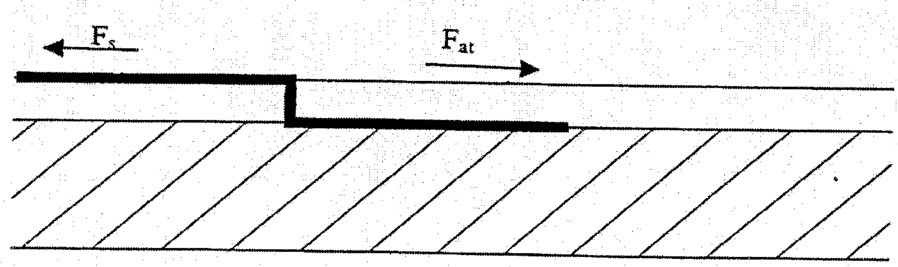
A = area of geomembrane at the top of the chute (ft^2)

Area of geomembrane at top of chute = 117 ft x 9 ft = 1,053 sf

Conservatively, use the maximum shear force per square foot calculated in Part 2

$F_{s2} =$	9,035	lbs

Pullout resistance of upstream end, F_{at2}[3]



[3]See detail D6 - Anchor Trench Type 1 on Figure H-1-6 for dimensions.

$F_{at} = 2[\{K_o\gamma(D/2)\}\{\tan\zeta\}\{D\} + \{\gamma D\}\{\tan\zeta\}\{w\}]$ (Ref 3)

where:

ζ = interface friction angle
K_o = 1 - sin ζ
γ = unit weight of soil (lb/cf)
D = depth of anchor trench (ft)
w = bottom width of anchor trench (ft)

friction angle =	15	degrees
anchor trench soil unit weight =	120	lb/ft^3
depth of anchor trench =	0.5	ft
bottom width of anchor trench =	3	ft

K_o = 0.74

F_{at2}= 102 lb/ft width

Total End Anchor Length (L_T)[4] = 145 ft

F_{pr} = Pullout Resistance (End) = $F_{at2} \times L_T$ =	14,851	lbs

Factor of Safety = F_{pr}/F_{s2} =	$\frac{14,851}{9,035}$	FS =	1.6

[4]See detail D5 on Figure H-1-5 for total of anchor trench length (LT=[14+117+14]feet) for Pullout resistance of upstream end.

Summary of Results

Side Anchor Trench Pullout resistance:

$$FS = \frac{2F_{AT2}}{F_{S1}} \implies FS = 2.0$$

Upstream End Anchor Trench Pullout resistance:

$$FS = \frac{F_{pr}}{F_{s2}} \implies FS = 1.6$$

As it is stated on page 557 of Reference 3, the typical factors of safety for the proposed anchor trenches are between 0.7 to 5.0. Therefore, the design is acceptable.

Example Calculation: Calculate the normal depth for the channel for drainage area LD1

List of Symbols

Q = flow rate calculated using Manning's Equation, cfs
Q_d = design flow rate for channel, cfs
R = hydraulic radius, ft
n = Manning's roughness coefficient
S = channel slope, ft/ft
b = bottom width of channel, ft
z_r = z-ratio (ratio of run to rise for channel sideslope) for right sideslope of channel
z_l = z-ratio (ratio of run to rise for channel sideslope) for left sideslope of channel
A_f = flow area, sf
g = gravitational acceleration = 32.2 ft/s^2
T = top width of flow, ft
d = normal depth of channel, ft

The program uses an iterative process to calculate the normal depth of the channel to satisfy Manning's Equation

$$Q = \frac{1.486}{n} A R^{0.67} S^{0.5}$$

Design Inputs:

Q_d =	129.7	cfs (from page H-3-9)
S =	0.25	ft/ft
b =	8	ft
z_r =	2	(H) : 1 (V)
z_l =	2	(H) : 1 (V)
n =	0.01	

Step 1 - Based on the geometry of the channel cross-section, solve for R and Af

$$R = \frac{bd + 1/2d^2(z_r + z_l)}{b + d((z_l^2 + 1)^{0.5} + (z_r^2 + 1)^{0.5})}$$

$$A_f = bd + 1/2d^2(z_r + z_l)$$

assume: d = 0.39 ft

R = 0.351 ft

A_f = 3.47 sf

solve for Q: Q = 129.7 cfs

if Q is not equal to Q_d, select a new d and repeat calculations

Step 2 - solve for velocity, T (wet perimeter), Froude number, velocity head, and energy head

$Q = VA \Rightarrow \quad V = Q/A$

$V = 37.39$ ft/s

$T = b + d(z_l + z_r)$

$T = 9.58$ ft

$$F_r = \frac{V}{(gA/T)^{0.5}}$$

$F_r = 10.955$

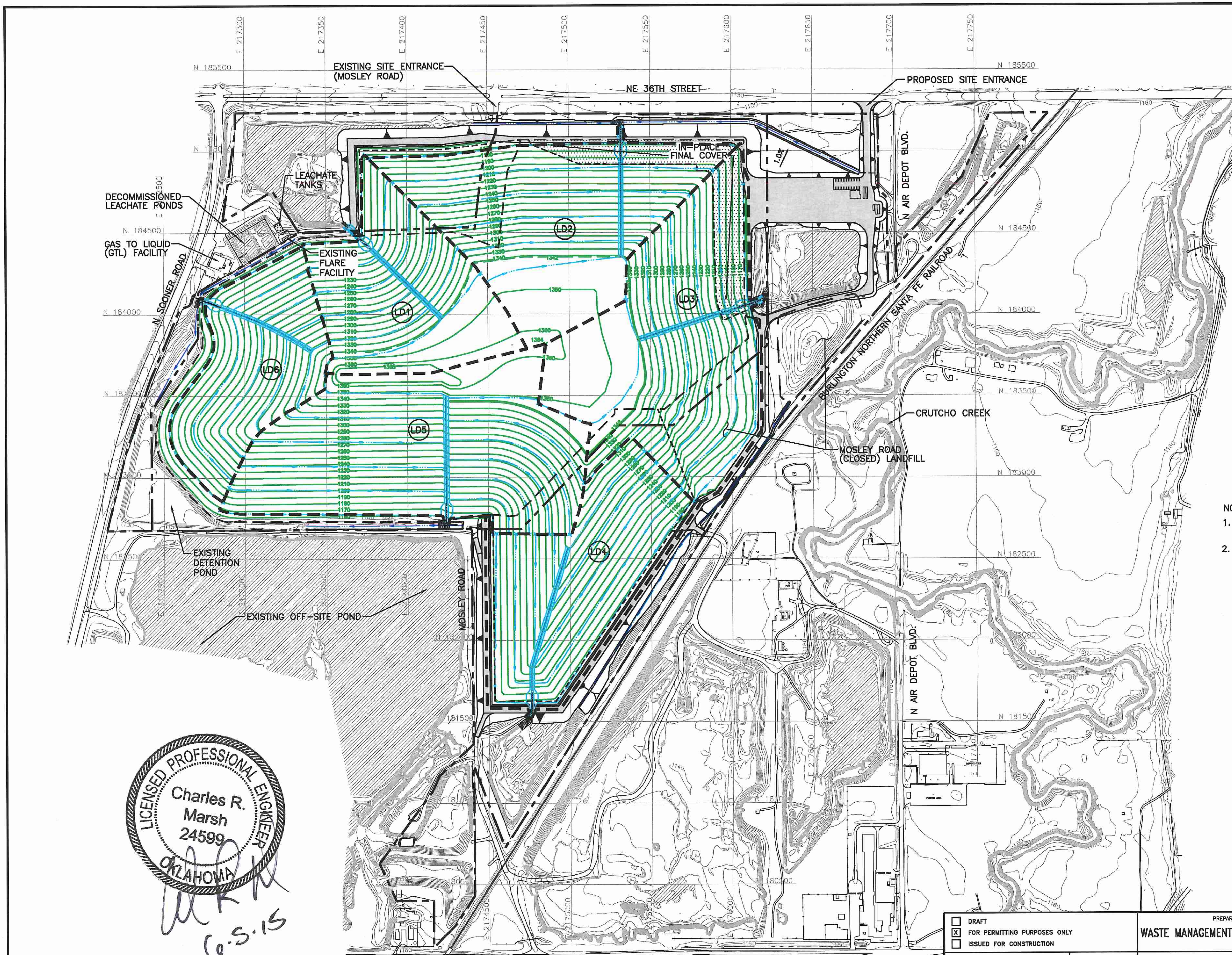
$$\text{Velocity Head} = \frac{V^2}{2g}$$

Velocity Head = 21.73 ft

Energy Head = water elevation + velocity head

Energy Head = 22.12 ft

CHUTE DRAINAGE AREAS



0 300 600
SCALE IN FEET

LEGEND

— · —	EXISTING PERMIT BOUNDARY
— · · —	PROPOSED PERMIT BOUNDARY
— — —	PERMITTED LIMITS OF WASTE
- - - -	PROPOSED LIMITS OF WASTE
—— ——	MOSLEY ROAD LANDFILL LIMITS OF WASTE
N 183000	STATE PLANE GRID COORDINATE
1180	EXISTING CONTOUR
1280	PROPOSED FINAL COVER CONTOUR
	PROPOSED DRAINAGE SWALE
	PROPOSED DRAINAGE CHUTE
	PERIMETER DRAINAGE CHANNEL
	IN-PLACE FINAL COVER
	DRAINAGE AREA BOUNDARY
LD6	DRAINAGE AREA DESIGNATION

NOTE:

1. EXISTING CONTOURS AND ELEVATIONS PROVIDED BY DALLAS AERIAL SURVEYS, INC. FROM AERIAL PHOTOGRAPHY FLOWN JANUARY 19, 2014.
2. TYPICAL LANDFILL SIDE SLOPES ARE 4(H):1(V) AND TYPICAL TOP SLOPE IS 4 PERCENT.

CHUTE DRAINAGE AREAS

DRAINAGE AREA	AREA (ACRES)
LD1	23.28
LD2	33.81
LD3	39.02
LD4	27.14
LD5	40.74
LD6	19.24

LICENSED PROFESSIONAL ENGINEER
Charles R. Marsh
24599
OKLAHOMA
6-5-15

☐ DRAFT
☒ FOR PERMITTING PURPOSES ONLY
☐ ISSUED FOR CONSTRUCTION

DATE: 06/2015
FILE: 0086-356-11
CAD: H-3-21-DRAINAGE.DWG

DRAWN BY: SRF
DESIGN BY: CRM
REVIEWED BY: JVQ

Weaver Consultants Group
CA 3804 PE-06/30/2015

PREPARED FOR
WASTE MANAGEMENT OF OKLAHOMA, INC.

REVISIONS

NO.	DATE	DESCRIPTION

TIER III PERMIT MODIFICATION
CHUTE DRAINAGE AREAS

EAST OAK RDF
OKLAHOMA COUNTY, OKLAHOMA

WWW.WCGRP.COM

SHEET H-3-21

O:\0086\356\EXPANSION 2013\APPENDIX H\SHEET H-3-21-CHUTE DRAINAGE AREAS.dwg, ucholonu, 1:2

APPENDIX H-4

PERIMETER CHANNEL, CULVERT, AND STORMWATER DESIGN

Includes pages H-4-ii through H-4-12

LICENSED PROFESSIONAL ENGINEER
Charles R.
Marsh
24599
OKLAHOMA

6-5-15

CONTENTS

LICENSED PROFESSIONAL ENGINEER
Charles R.
Marsh
24599
OKLAHOMA

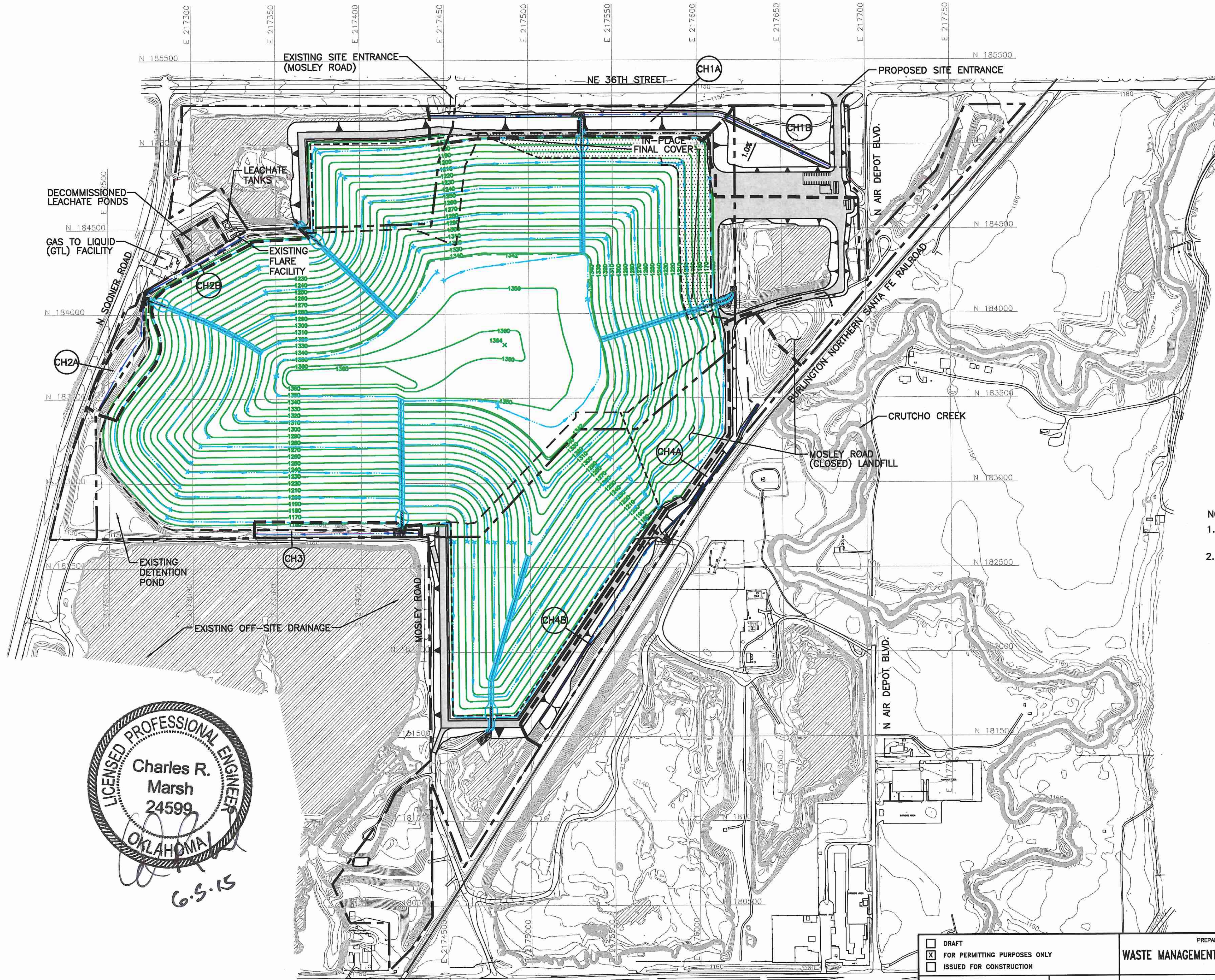
6-5-15

PERIMETER CHANNEL DESIGN

This appendix evaluates the adequacy of the existing and proposed perimeter channels proposed at the site. The existing and proposed perimeter channels are designed to carry run-off from the landfill area to the discharge points.

- Perimeter Channel Design Summary:
  - Drainage areas analyzed are shown on Figure H-4-3.
  - Perimeter channel design information is shown on Figure H-1-4.
  - Perimeter channel calculations are presented on page H-4-4.
  - The maximum channel depths in the existing and proposed perimeter channels are given on page H-4-4. The minimum channel bottom widths are also given on page H-4-4.
  - Calculations on page H-4-4 show that the maximum flow velocity in the perimeter channels is 7.18 fps.
  - Perimeter channels were designed to convey the run-off generated by the 25-year, 24-hour frequency rainfall intensity.
  - Perimeter Channel Erosion Control Design is included on page H-4-5.

PERIMETER CHANNEL DRAINAGE AREAS



N

0 300 600

SCALE IN FEET

LEGEND

- EXISTING PERMIT BOUNDARY
- PROPOSED PERMIT BOUNDARY
- PERMITTED LIMITS OF WASTE
- PROPOSED LIMITS OF WASTE
- MOSLEY ROAD LANDFILL LIMITS OF WASTE
- N 183000 — STATE PLANE GRID COORDINATE
- 1180 — EXISTING CONTOUR
- 1280 — PROPOSED FINAL COVER CONTOUR
- PROPOSED DRAINAGE SWALE
- PROPOSED DRAINAGE CHUTE
- PERIMETER DRAINAGE CHANNEL
- IN-PLACE FINAL COVER
- DRAINAGE AREA BOUNDARY
- CH1A — DRAINAGE AREA DESIGNATION

NOTE:

1. EXISTING CONTOURS AND ELEVATIONS PROVIDED BY DALLAS AERIAL SURVEYS, INC. FROM AERIAL PHOTOGRAPHY FLOWN JANUARY 19, 2014.
2. TYPICAL LANDFILL SIDE SLOPES ARE 4(H):1(V) AND TYPICAL TOP SLOPE IS 4 PERCENT.

CHANNEL DRAINAGE AREAS

DRAINAGE AREA	AREA (ACRES)
CH1B	9.95
CH1A	7.54
CH2B	2.56
CH2A	3.23
CH3	1.97
CH4A	5.85
CH4B	4.90

☐ DRAFT
☒ FOR PERMITTING PURPOSES ONLY
☐ ISSUED FOR CONSTRUCTION

DATE: 06/2015
FILE: 0086-356-11
CAD: H-4-3-DRAINAGE.DWG

DRAWN BY: SRF
DESIGN BY: CRM
REVIEWED BY: JVQ

PREPARED FOR
WASTE MANAGEMENT OF OKLAHOMA, INC.

REVISIONS

NO.	DATE	DESCRIPTION

Weaver Consultants Group
CA 3804 PE-06/30/2015

TIER III PERMIT MODIFICATION
PERIMETER CHANNEL DRAINAGE AREAS

EAST OAK RDF
OKLAHOMA COUNTY, OKLAHOMA

WWW.WCGRP.COM

SHEET H-4-3

O:\0086\356\EXPANSION 2013\APPENDIX H\SHEET H-4-3-CHANNEL DRAINAGE AREAS.dwg, uacholonu, 1:2

EAST OAK RDF
0086-356-11-40-06
PROPOSED PERIMETER CHANNEL DESIGN
HYDRAULIC ANALYSIS

Channel	Station		Flow Rate (cfs)	Bottom Slope (ft/ft)	Bottom Width (ft)	Side Slope (ft/ft)		Normal Depth (ft)	Flow Vel. (fps)	Froude No.	Vel. Head (ft)	Energy Head (ft)	Flow Area (sq.ft.)	Top width of Flow (ft)
						Right	Left							
CH1	0+00	8+86.8	333.0	0.002	15	3	3	3.92	3.17	0.339	0.16	4.08	105.00	38.54
	8+86.8	17+33.5	333.0	0.002	25	3	3	3.19	3.01	0.336	0.14	3.34	110.49	44.17
	17+33.5	24+46.3	51.0	0.003	25	3	3	0.98	1.86	0.349	0.05	1.03	27.35	30.87
CH2	0+00	1+75.7	186.0	0.011	50	4	4	0.96	3.61	0.673	0.20	1.16	51.53	57.66
	1+75.7	3+99.1	186.0	0.009	60	4	4	0.91	3.19	0.605	0.16	1.07	58.24	67.32
	3+99.1	5+70.1	186.0	0.012	45	4	4	0.99	3.83	0.705	0.23	1.22	48.55	52.93
	5+70.1	6+56.6	186.0	0.023	15	2	6	1.46	6.10	1.006	0.58	2.04	30.50	26.70
	6+56.6	7+23.2	21.0	0.013	0	3.5	5	1.27	3.07	0.679	0.15	1.42	6.85	10.79
	7+23.2	8+08.2	21.0	0.013	0	3.5	8	1.13	2.87	0.672	0.13	1.26	7.33	12.98
	8+08.2	10+81.3	21.0	0.008	0	3	11	1.13	2.26	0.529	0.08	1.21	9.29	16.42
	10+81.3	14+18.4	21.0	0.003	0	5	8	1.42	1.60	0.335	0.04	1.46	13.10	18.46
CH3	0+00	6+16.7	310.0	0.003	20	4	4	2.93	3.34	0.403	0.17	3.10	93.84	43.42
	6+16.7	6+83.9	310.0	0.030	25	4	4	1.41	7.18	1.159	0.80	2.21	43.20	36.28
	6+83.9	9+63.3	310.0	0.007	35	3	3	1.82	4.22	0.587	0.28	2.09	73.51	45.90
CH4	0+00	2+74.6	67.0	0.007	10	3	3	1.44	3.26	0.548	0.17	1.60	20.53	18.61
	2+74.6	5+26.6	67.0	0.012	10	3	3	1.24	3.94	0.703	0.24	1.48	17.00	17.44
	5+26.6	7+78.6	67.0	0.016	10	3	3	1.15	4.35	0.804	0.29	1.44	15.39	16.87
	7+78.6	10+30.7	67.0	0.012	10	3	3	1.24	3.94	0.703	0.24	1.48	17.00	17.44
	10+30.7	11+98.3	67.0	0.013	10	3	3	1.21	4.05	0.730	0.26	1.47	16.54	17.28
	11+98.3	12+75.5	67.0	0.013	10	3	3	1.21	4.05	0.730	0.26	1.47	16.54	17.28
	12+75.5	13+60.3	43.0	0.013	4	3	3	1.37	3.88	0.717	0.23	1.60	11.09	12.21
	13+60.3	15+74.4	43.0	0.005	5	3	3	1.61	2.71	0.458	0.11	1.73	15.89	14.69
	15+74.4	20+58.0	43.0	0.002	5	3	3	2.02	1.93	2.980	0.06	2.07	22.26	17.09
	20+58.0	21+06.7	43.0	0.004	5	3	3	1.71	2.49	0.413	0.10	1.80	17.25	15.23
	21+06.7	22+89.5	43.0	0.004	5	3	3	1.71	2.49	0.413	0.10	1.80	17.25	15.23

Note:
1. Calculations were performed using the HYDROCALC Computer Program developed by Dodson and Associates (Version 2.0, 2000).
2. n = 0.04 (Manning Coefficient) is used for the calculations.

PERIMETER CHANNEL EROSION CONTROL DESIGN

Channel erosion controls have been designed for flow velocities resulting from the 25-year, 24-hour storm frequency flow rates. As shown on page H-4-4, velocities in the perimeter channels range from 1.60 fps to 7.18 fps for the 25-year storm event. The channel lining needed to protect against erosive velocities is detailed below.

The following was used to select the type of channel lining material.

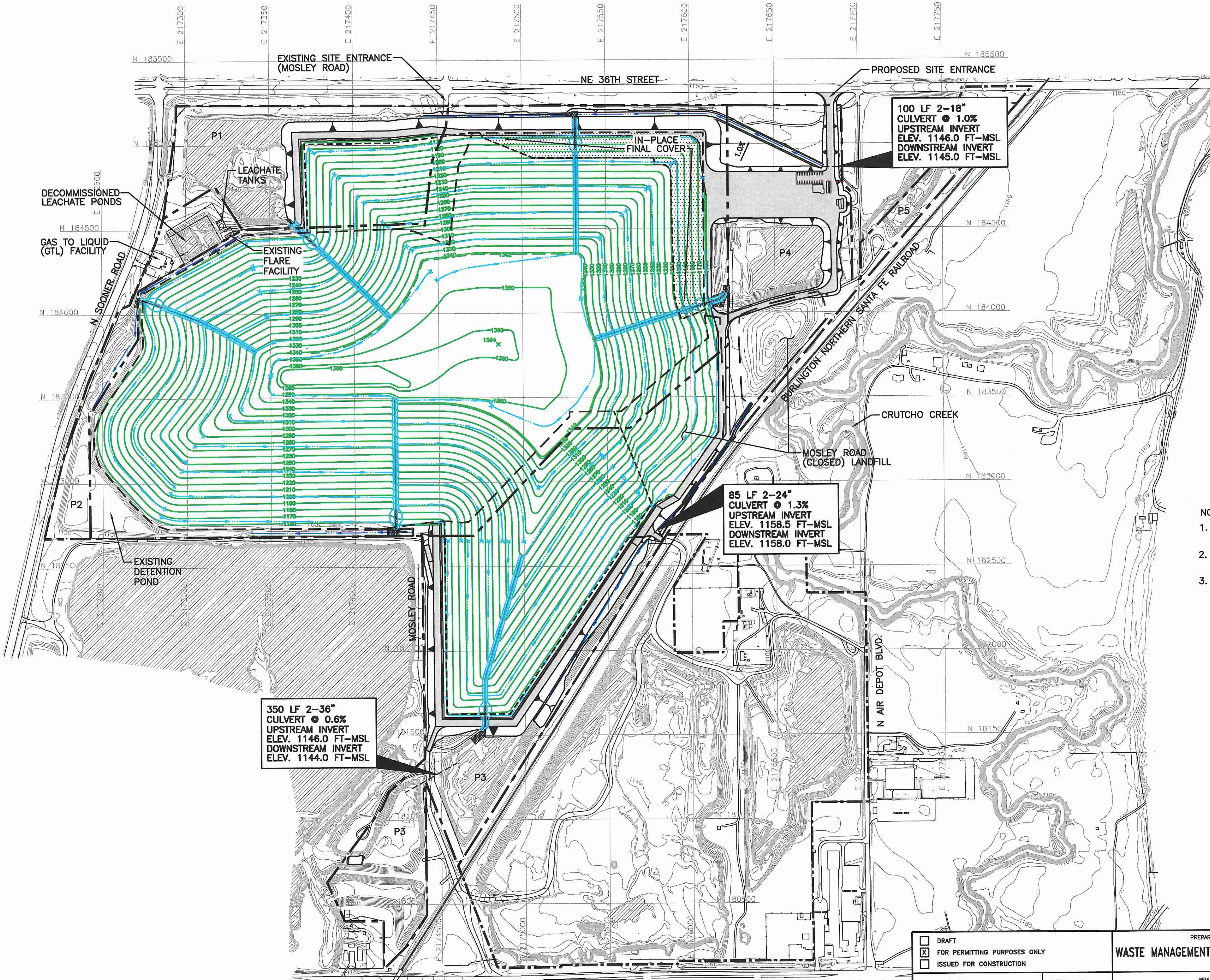
- Vegetation – used in all areas where velocities are less than 5 fps for channels.
- Turf Reinforcement Matting – used in channels for velocities between 5 fps and 10 fps.
- Channel sections with velocities more than 10 fps will be lined with riprap. 6-inch to 18-inch rock riprap – used at locations where chutes discharge into the channels and the detention pond.

CULVERT DESIGN

This section evaluates the adequacy of the stormwater culverts proposed, as shown on Sheet H-4-7. HEC-1 and Hydrocalc were used to design the culverts as noted below.

- Culvert Design Summary:
  - The hydraulic analysis is summarized below. The peak flow through each culvert was taken from HEC-1 analysis in Appendix H-2.
  - Upstream and downstream ends of the stormwater culverts will be designed with riprap to prevent erosion.

The output from Hydrocalc for the proposed culvert is summarized on page H-4-8 and H-4-9.



LEGEND

- PROPERTY BOUNDARY
- EXISTING PERMIT BOUNDARY
- PROPOSED PERMIT BOUNDARY
- PERMITTED LIMITS OF WASTE
- PROPOSED LIMITS OF WASTE
- MOSLEY ROAD LANDFILL LIMITS OF WASTE
- N 183000 STATE PLANE GRID COORDINATE
- 1180 EXISTING CONTOUR
- 1280 PROPOSED FINAL COVER CONTOUR
- PROPOSED DRAINAGE SWALE
- PROPOSED DRAINAGE CHUTE
- PROPOSED DRAINAGE CHANNEL
- IN-PLACE FINAL COVER

NOTE:

1. EXISTING CONTOURS AND ELEVATIONS PROVIDED BY DALLAS AERIAL SURVEYS, INC. FROM AERIAL PHOTOGRAPHY FLOWN JANUARY 19, 2014.
2. TYPICAL LANDFILL SIDE SLOPES ARE 4(H):1(V) AND TYPICAL TOP SLOPE IS 4 PERCENT.
3. THE PURPOSE OF THE CULVERTS IN POND 3 IS TO CONNECT THE TWO POND AREAS. A CULVERT ANALYSIS WAS NOT CONDUCTED FOR THE CULVERTS IN POND 3.

LICENSED PROFESSIONAL ENGINEER Charles R. Marsh 24599 OKLAHOMA

6-5-15

☐ DRAFT
☒ FOR PERMITTING PURPOSES ONLY
☐ ISSUED FOR CONSTRUCTION

DATE: 06/2015
FILE: 0086-356-11
CAD: FIG H-4-7- CULVERTS.DWG

DRAWN BY: SRF
DESIGN BY: CRM
REVIEWED BY: JVQ

PREPARED FOR
WASTE MANAGEMENT OF OKLAHOMA, INC.

REVISIONS		
NO.	DATE	DESCRIPTION

Weaver Consultants Group
CA 3804 PE-06/30/2015

TIER III PERMIT MODIFICATION CULVERTS LOCATION

EAST OAK RDF
OKLAHOMA COUNTY, OKLAHOMA

WWW.WCGRP.COM

FIGURE H-4-7

O:\0086\356\EXPANSION 2013\APPENDIX H\SHEET H-4-7-CULVERT LOCATIONS.dwg, ucholonu, 1:2

Required: Design culverts to convey the flow.

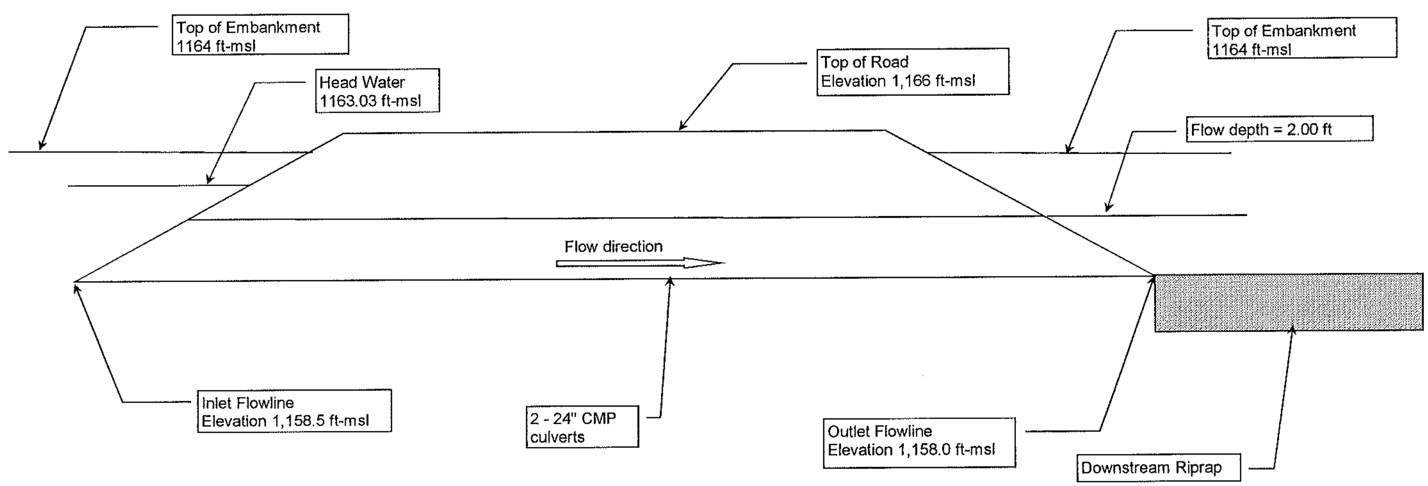
Method: Use HYDROCALC Hydraulics for Windows computer program to determine number and size of the culverts.
Use total 25-year frequency storm event flow estimated by HEC-1 included in Appendix H-2.

For culverts under road in Channel 4:

Total Flow=	43 cfs	cfs
No. of Culverts=	2	
Culvert Span=	-- inches	inches
Culvert Rise=	-- inches	inches
Culvert Diameter=	24 inches	inches

Culvert	Culvert Span (ft)	Culvert Span (ft)	FHWA Chart Number	FHWA Scale Number	Culvert Diameter (ft)	Manning's Coefficient	Entrance Loss Coefficient	Culvert Length (ft)	Downstream Invert Elevation (ft msl)	Upstream Invert Elevation (ft msl)	Flow Rate (cfs)	Tailwater Depth[2] (ft)	Headwater Inlet Control (ft)	Headwater Outlet Control (ft)	Normal Depth (ft)	Critical Depth (ft)	Depth at Outlet (ft)	Outlet Velocity (fps)
CH4	--	--	1	1	2	0.024	0.8	85.0	1,158.0	1,158.5	21.5	1.20	3.15	4.53	2.00	1.66	1.66	7.72

1. Calculations were performed using the HYDROCALC Hydraulics for Windows program developed by Dodson and Associates (Version 1.2a, 1996).
2. Tailwater depth is assumed to be the 25-year, 24-hour storm event flow depth in CH4B (see page H-4-4 for flow depths).



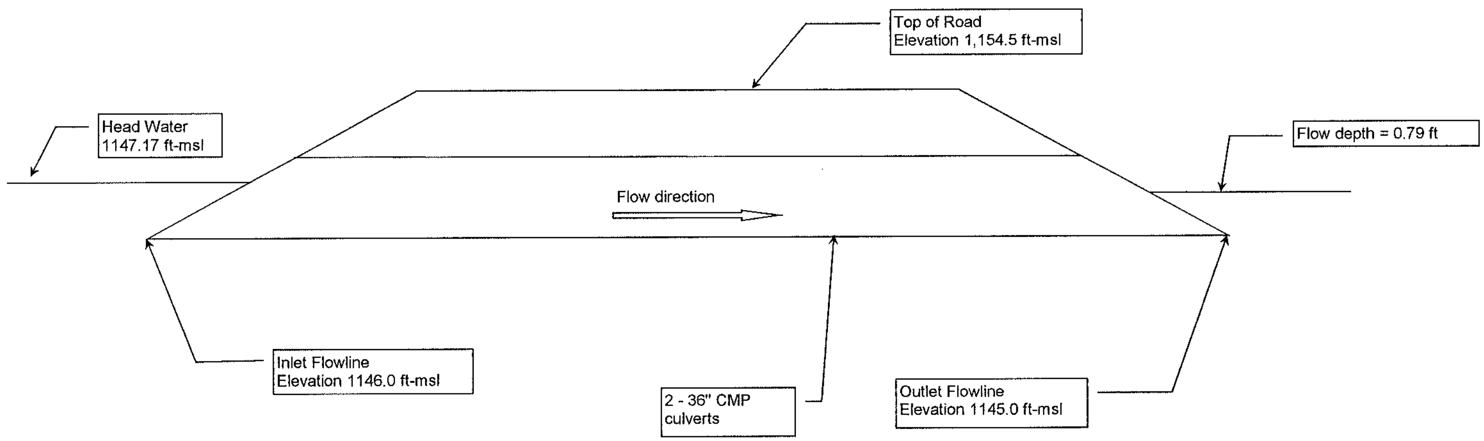
EAST OAK RDF
0086-356-11-40-06
CULVERT DESIGN

For culverts under road in Channel 1:

Total Flow= 11 cfs
No. of Culverts= 2
Culvert Span= -- inches
Culvert Rise= -- inches
Culvert Diameter= 36 inches

Culvert	Culvert Span (ft)	Culvert Span (ft)	FHWA Chart Number	FHWA Scale Number	Culvert Diameter (ft)	Manning's Coefficient	Entrance Loss Coefficient	Culvert Length (ft)	Downstream Invert Elevation (ft msl)	Upstream Invert Elevation (ft msl)	Flow Rate (cfs)	Tailwater Depth[2] (ft)	Headwater Inlet Control (ft)	Headwater Outlet Control (ft)	Normal Depth (ft)	Critical Depth (ft)	Depth at Outlet (ft)	Outlet Velocity (fps)
CH1	--	--	1	1	3	0.024	0.8	100.0	1,145.0	1,146.0	11.0	1.11	0.99	1.17	0.79	0.74	1.11	2.31

1. Calculations were performed using the HYDROCALC Hydraulics for Windows program developed by Dodson and Associates (Version 1.2a, 1996).
2. Tailwater depth is assumed to be the 25-year, 24-hour storm event flow depth in CH4B (see page H-4-4 for flow depths).



STORMWATER POND DESIGN

The purpose of the stormwater ponds is to manage stormwater runoff within the permit boundary and provide a controlled discharge of runoff from the permit boundary. The site has both detention and retention ponds. The stormwater ponds were analyzed by using HEC-1 storage routing method. The input parameters for the models are presented in Appendix H-2. A summary of the HEC-1 results are presented on page H-4-12. As shown in the table, the stormwater ponds P1, P3, P4 and P5 do not have flow over the spillways. Therefore, no spillway reinforcement will be required for the stormwater ponds mentioned above. Pond 2 has an existing spillway that is well vegetated and has been in place since 1990. This spillway will continue to be utilized in the proposed condition and will be inspected periodically for signs of erosion.

Purpose: Demonstrate that the detention pond outlet structure design is adequate to convey runoff from the subbasins to the discharge point.

Method:
1. Use the 25-year, 24-hour flow rate and peak flood stage water surface elevation from the the HEC-1 analysis (see Appendix H-2).
2. Use the Weir Equation to calculate the flow rate over the spillway as appropriate.

Solution:

	Pond 1	Pond 2	Pond 3	Pond 4	Pond 5
Bottom ELEV, ft	1137	1142	1141.1	1139.8	1139.6
Spillway ELEV, ft	1148	1150	1156	1148	1156
Spillway Length, ft	--	100	--	--	
Top of Road/Berm, ft	1148	1150	1156	1148	1156
Peak Inflow Q_{25}, cfs	452	583	376	387	125
Peak Outflow Q_{25}, cfs	0	30	0	0	0
Peak Stage in Pond, ft	1144.57	1149.80	1149.44	1146.57	1148.88
Est. Flow (Q_{25}) over Spillway, cfs	--	18.0	--	--	--
Velocity (V_{25}) over Spillway, fps	--	0.97	--	--	--

Required: Determine the minimum length and median diameter of riprap required at the detention pond outlet structures and creek culverts to control erosion in the detention pond outlet channels.

Reference:

1. Haan, Barfield, and Hayes, *Design Hydrology and Sedimentology for Small Catchments*, 1994.
2. Dodson's and Associates, Inc., *ProHec-1 Plus Program Documentation,* 1995.
3. Freeman, Gary E., J. Craig Fischenich, Gabion for Streambank Erosion Control, 2000. EMRRP Technical Notes Collection (ERDC TN-EMRRP-SR-22), U.S. Army Engineer Research and Development Center, Vicksburg, MS.

Solution: The riprap will be designed for the 25-year flow rates at the detention pond outlet structures and culverts. The flow at the outlet structures and culverts can be divided into two categories:

1. Flow over the Spillway/Road

As shown on page H-4-11 detention Pond 2 is expected to have flow over the spillway. The expected flow rate over the spillways is calculated based on the water surface elevation provided in the HEC-1 analysis. The design of the outlet structures is provided on Sheet H-4-11 The flow rate, unit flow rate, and flow velocity over the spillways is summarized below.

Flow Structure Spillway Topslope	25-Year Flow Rate (cfs)	25-Year Velocity (ft/s)	25-Year Flow Depth (ft)	25-Year Foude Number	25-Year Velocity Head (ft)	25-Year Energy Head (ft)	25-Year Flow Area (sq. ft.)	25-Year Top Width (ft)
P2	23.0	1.03	0.29	0.34	0.02	0.31	22.31	76.76

Flow Structure Spillway Sideslope	25-Year Flow Rate (cfs)	25-Year Velocity (ft/s)	25-Year Flow Depth (ft)	25-Year Foude Number	25-Year Velocity Head (ft)	25-Year Energy Head (ft)	25-Year Flow Area (sq. ft.)	25-Year Top Width (ft)
P2	23.0	3.38	0.09	1.98	0.18	0.27	6.81	75.54

The riprap will be provided over the entire width of the spillway of Pond 2

APPENDIX H-5

FINAL COVER SOIL LOSS CALCULATIONS

Includes pages H-5-ii through H-5-7

LICENSED PROFESSIONAL ENGINEER
Charles R.
Marsh
24599
OKLAHOMA

6.5.15

CONTENTS

FINAL COVER SOIL LOSS CALCULATIONS

This appendix presents the supporting documentation for evaluation of the thickness of the vegetation and vegetation support layer for the final cover system at the East Oak RDF. The evaluation is based on the premise of adding excess soil to increase the time required before maintenance is needed as recommended in the EPA Solid Waste Disposal Facility Criteria Technical Manual (EPA 530-R-93-017, November 1993).

The design procedure is as follows:

1. Minimum thickness of the vegetation and vegetation support layer at the end of the 30-year postclosure period is evaluated based on the depth of frost penetration or 6 inches, whichever is greater. For Oklahoma County, the approximate depth of frost penetration is approximately 9 inches. The minimum vegetation layer (i.e., the vegetation layer and vegetation support layer) thickness is 36 inches for the final cover system.
2. Soil loss is calculated using the Universal Soil Loss Equation (USLE) by following SCS procedures. The soil loss is adjusted by a safety factor of 2 and is then converted to a thickness. The thickness of the soil loss over a 30-year postclosure period is added to the minimum thickness of the vegetation layer (from Step 1) to yield a required thickness to be placed at closure of the site. According to the USLE, the typical topslope and sideslope require 9.1 inches and 9.9 inches, respectively, for the vegetation layer. These USLE requirements include the 9-inch minimum required by regulations. Conservatively, an 36-inch vegetation layer is proposed over areas with final cover. These calculations begin on page H-5-2.
3. Vegetation for the site will consist of native and introduced grasses with root depths of up to 48 inches. Native and introduced grasses will be hydroseeded with fertilizer on the disked (parallel to contours) vegetation layer upon final grading (or an equipment method). Temporary cold weather vegetation will be established if needed. Irrigation will be employed for 6 to 8 weeks or until vegetation is well established. Vegetation support control measures such as silt fences and straw bales will be used to minimize vegetation layer soil loss until the vegetation is established. Areas that do not support vegetation or do not readily vegetate after hydroseeding will be reseeded until vegetation is established or the soil will be replaced with soil that will support the grasses.
4. Slope stability information is included in Appendix N.

Required: Determine expected soil loss and minimum thickness for the vegetative layer.

Method: Expected soil loss is calculated using the Universal Soil Loss Equation. Minimum vegetation layer thickness is determined by adding the minimum thickness allowed by the regulations to the expected soil loss.

References:

1. *Control of Water Pollution from Corplands*. B.A. Stewart, D.A. Woolhiser, W.H. Wischmeier, J.H. Caro and M.H. Frere, EPA-600/2-75-026, Environmental Protection Agency.
2. *Use of the Universal Soil Loss Equation in Final Cover/Configuration Design*, Procedural Handbook, Texas Natural Resources Conservation Commission, 1993.
3. United States Department of Agriculture, Agricultural Research Service, *Predicting Soil Erosion by Water: A Guide to Conservation Planning with the Revised Universal Soil Loss Equation (RUSLE),* 1997.
4. United States Environmental Protection Agency, *Solid Waste Disposal Facility Criteria Technical Manual*, 1993.

Solution:

1. Soil Loss Equation: $A=RKL_SCP$

Where:

A= Soil loss (tons/ac/yr)
R= Rainfall factor
K= Soil erodibility factor
L_S= Slope length/slope gradient factor
C= Plant cover or cropping management factor
P= Erosion practice factor

The rainfall factor, R, represents the average intensity for the maximum intensity, 30 minute storms over a 22 year period of record compiled by the SCS. Using Ref. 2, Average Annual Values of the R Factor, the R factor for Oklahoma County is:

R = 250

The soil erodibility factor, K, factor represents the resistance of a soil surface to erosion as a function of the soil's physical and chemical properties. Assume a sandy loam with organic matter content of 2% to determine the K factor from Ref. 2.

K = 0.24

The slope length/slope gradient factor, L_s, represents the erosion of the soil due to both slope length and degree of slope. The slopes of interest are shown on Sheet H-5-7. Location 1 on the sheet includes a 477.3 foot long segment at 4 percent slope. Location 2 on the sheet includes a 143.1 foot long segment at 25 percent slope.

Location 1. Typical topslope

slope =	4	%
length =	477.3	ft

Location 2. Typical sideslope

slope =	25	%
length =	143.1	ft

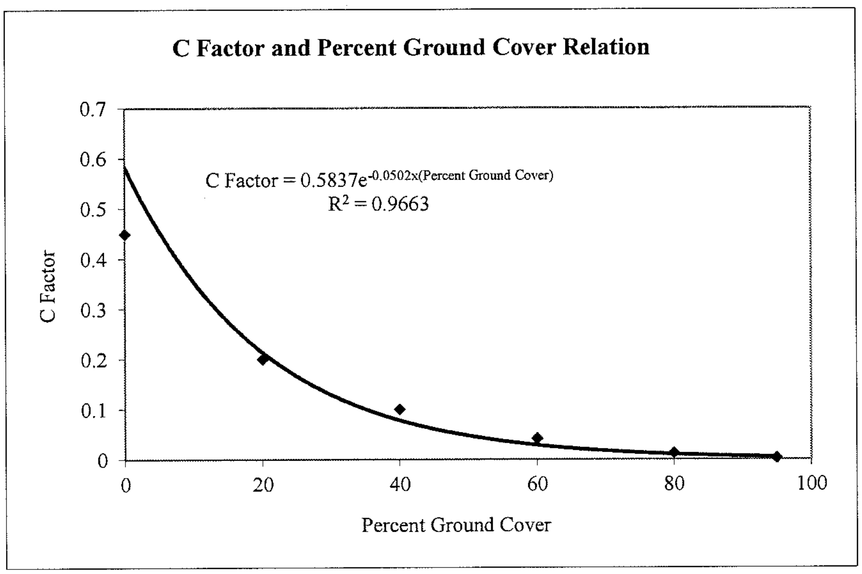
Using the above information, the L_s factors were determined.

Case	Slope (%)	Slope Length (ft)	L_s
1. Typical topslope	4	477.3	0.75
2. Typical sideslope	25	143.1	7.00

The plant cover or cropping management factor, C, represents the percentage of soil loss that would occur if the surface were partially protected by some combination of cover and management practices.

Permanent Pasture, Range, and Idle Land (Ref. 2) suggests the following C values.

% GC	C Factor
0	0.45
20	0.2
40	0.1
60	0.042
80	0.013
95	0.003



Note: Vegetation layer will be maintained to provide 85% ground cover.

C Factor= $0.5837e^{(-0.0502x85)}$

C Factor= 0.0082

The erosion control practice factor, P, measures the effect of control practices that reduce the erosion potential of the runoff by influencing drainage patterns, runoff concentration, and runoff velocity. Contouring for this site will be done only to establish vegetation.

P = 1.00

2. Soil loss calculations

Slope Condition	R	K	L_s	C	P	A (tons/ac/yr)
1. Typical Topslope 4 % slope 477.3 ft length	250	0.24	0.75	0.0082	1.0	0.4
2. Typical Sideslope 25 % slope 143.1 ft length	250	0.24	7.00	0.0082	1.0	3.4

Note: Vegetation layer will be maintained to provide 85% ground cover.

3. Vegetation layer thickness calculations:

$$T_{el} = 9\text{ in} + \frac{AYF(2000\text{lb/ton})(12\text{in/ft})}{w(43{,}560\text{sf/ac})}$$

Where:
- T_{el} = Vegetative support layer thickness
- A = Soil loss (ton/ac/yr)
- Y = Postclosure period (yr)
- F = Factor of safety
- w = Unit weight of soil (pcf)

Y =	30	yr
F =	2	
w =	120	pcf

1. Typical Topslope Thickness:

Required thickness[1] =	9.1"
Specified thickness =	36"

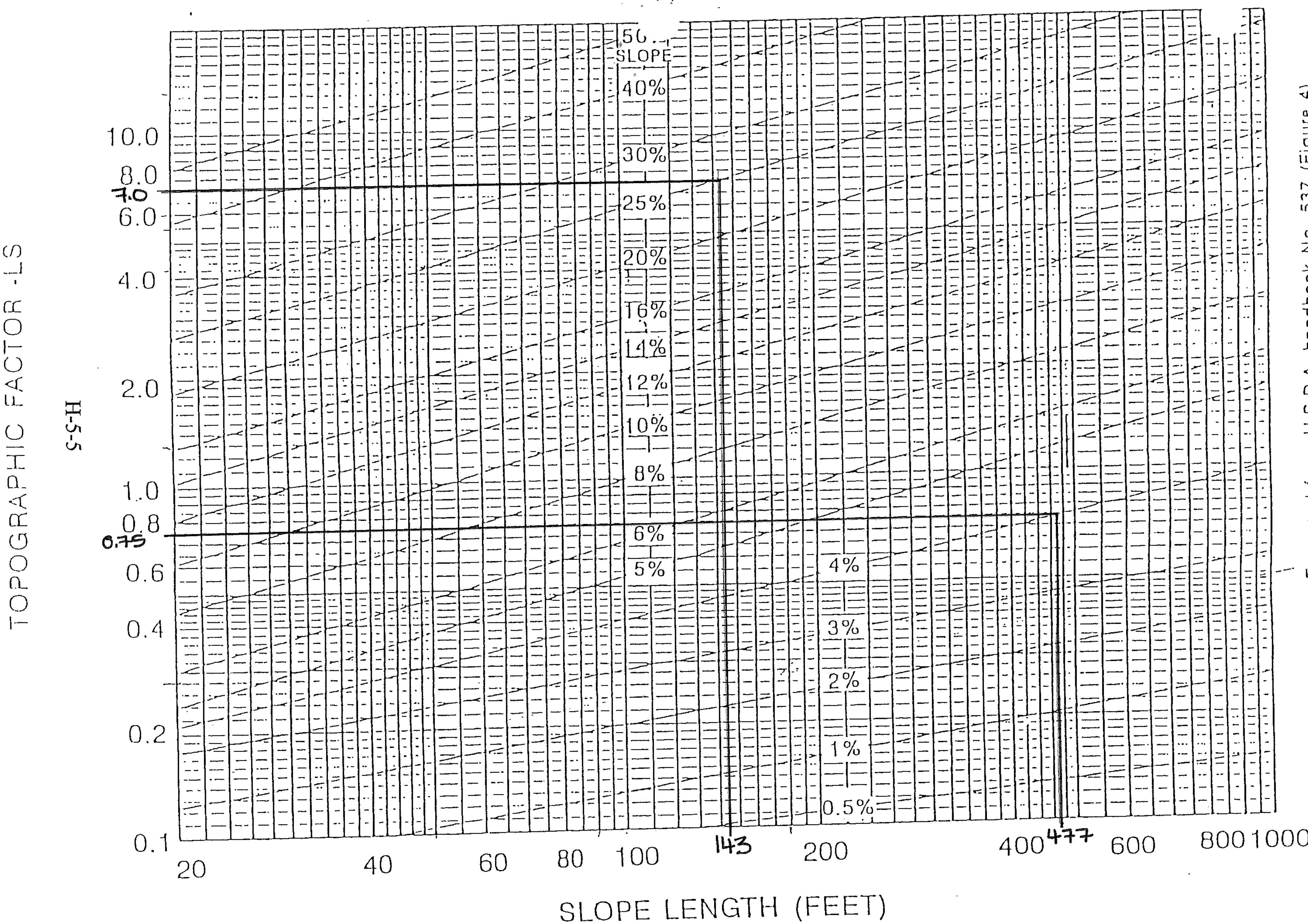
2. Typical Sideslope Thickness:

Required thickness[1] =	9.9"
Specified thickness =	36"

Note: [1]Required thicknesses include 9 inch minimum required (Ref. 3, Figure 6-4).

4. Summary:

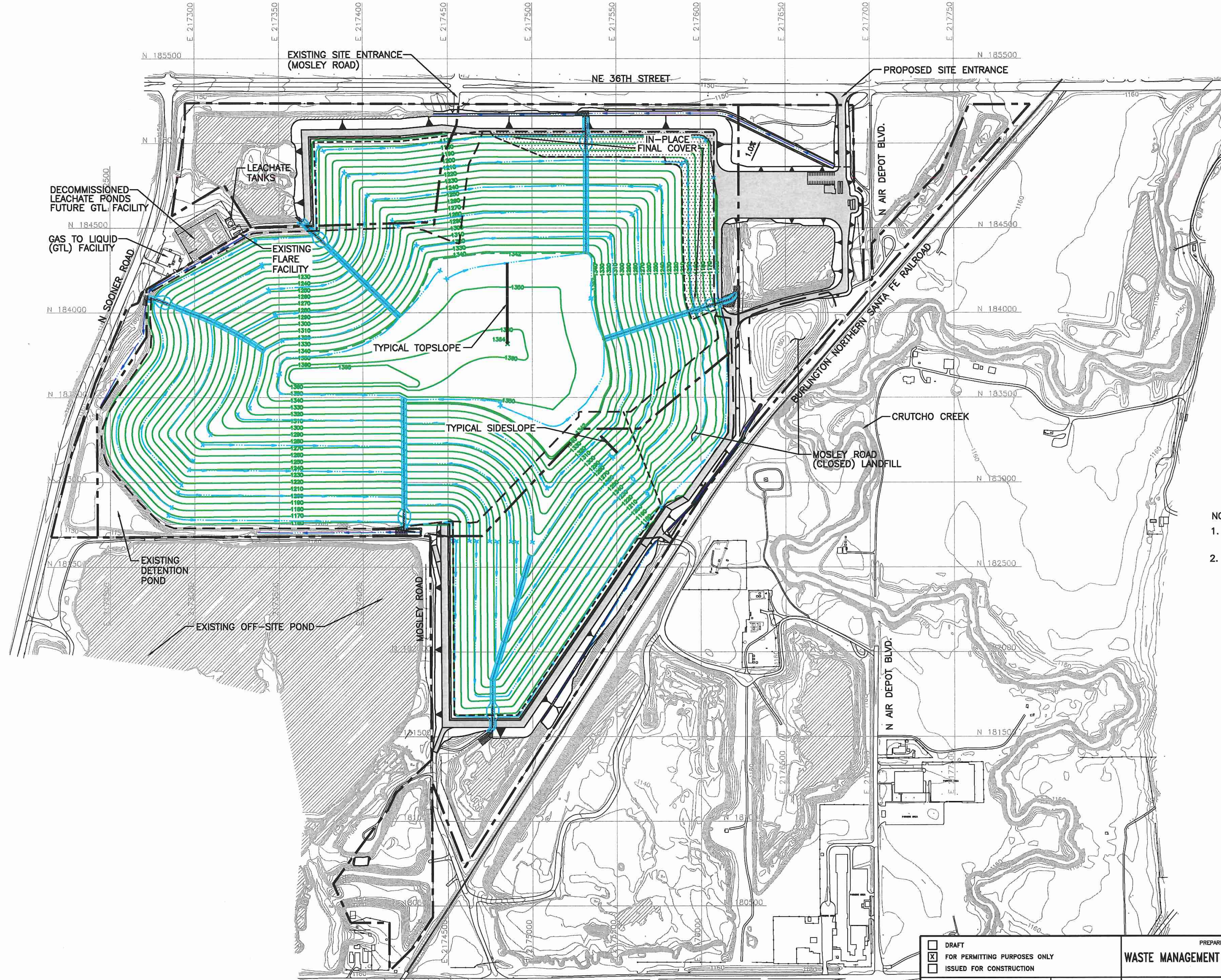
As noted in the drawings, the vegetation (erosion) layer will be a minimum of 36 inches thick. As shown above, this is a conservative design considering the maximum expected soil loss for a 30 year period is 9.9 inches



Extracted from U.S.D.A. handbook No. 537 (Figure 4).

FIGURE 2.- Slope effect chart (topographic factor, LS). LS = (λ/72.6)''' 65.41 sin² ()=4.56 sin ()+ 0.065) whereλ= slope lenght in feet ;()=angle of slope; and m = 0.2 for gradients <1 percent, 0.3 for 1 to 3 slopes: 0.4 for 3.5 to 4.5 percent slopes, and 0.5 for slopes of 5 percent or steeper.

SLOPE LENGTHS FOR SOIL LOSS DEMONSTRATION



N

0 300 600

SCALE IN FEET

LEGEND

- EXISTING PERMIT BOUNDARY
- PROPOSED PERMIT BOUNDARY
- PERMITTED LIMITS OF WASTE
- PROPOSED LIMITS OF WASTE
- MOSLEY ROAD LANDFILL LIMITS OF WASTE
- N 183000 STATE PLANE GRID COORDINATE
- 1180 EXISTING CONTOUR
- 1280 PROPOSED FINAL COVER CONTOUR
- PROPOSED DRAINAGE SWALE
- PROPOSED DRAINAGE CHUTE
- PERIMETER DRAINAGE CHANNEL
- IN-PLACE FINAL COVER
- SLOPE LENGTH

NOTE:

1. EXISTING CONTOURS AND ELEVATIONS PROVIDED BY DALLAS AERIAL SURVEYS, INC. FROM AERIAL PHOTOGRAPHY FLOWN JANUARY 19, 2014.
2. TYPICAL LANDFILL SIDE SLOPES ARE 4(H):1(V) AND TYPICAL TOP SLOPE IS 4 PERCENT.

SLOPE LENGTHS

SLOPE LENGTH	LENGTH (FEET)
TOPSLOPE	477.3
SIDESLOPE	143.1

LICENSED PROFESSIONAL ENGINEER
Charles R. Marsh
24599
OKLAHOMA

6.5.15

☐ DRAFT
☒ FOR PERMITTING PURPOSES ONLY
☐ ISSUED FOR CONSTRUCTION

DATE: 06/2015
FILE: 0086-356-11
CAD: H-5-7-SOIL LOSS.DWG

DRAWN BY: SRF
DESIGN BY: CRM
REVIEWED BY: JVQ

Weaver Consultants Group
CA 3804 PE-06/30/2015

PREPARED FOR
WASTE MANAGEMENT OF OKLAHOMA, INC.

REVISIONS

NO.	DATE	DESCRIPTION

TIER III PERMIT MODIFICATION SLOPE LENGTHS FOR SOIL LOSS DEMONSTRATIONS

EAST OAK RDF
OKLAHOMA COUNTY, OKLAHOMA

WWW.WCGRP.COM

SHEET H-5-7

O:\0086\356\EXPANSION 2013\APPENDIX H\SHEET H-5-7-SLOPE LENGTHS.dwg, uacholonu, 1:2

APPENDIX H-6

OPDES PERMIT

Oklahoma Department of Environmental Quality
Authorization to Discharge Under the OPDES Storm Water Industrial General Permit OKR05

AUTHORIZATION NO. **OKR052322**

In compliance with the Oklahoma Pollution Discharge Elimination System (OPDES) Act 27A O.S. §2-6-201, the Rules of the Department of Environmental Quality (DEQ), and in reliance on the certified statements and representations heretofore made in its application,

Waste Management of Oklahoma

5600 NW 4th St

Oklahoma City, OK 73127

Is authorized to discharge storm water from an industrial site located in **Oklahoma** County at
EAST OAK RECYCLING & DISPOSAL FACILITY

3201 MOSLEY RD

Oklahoma City, OK 73141

The receiving body of water is an unnamed tributary of the North Canadian River

This facility is required to submit annual numeric effluent limitation monitoring.

The OPDES requires permittees to have a Storm Water Pollution Plan (SWP3) which includes a description of appropriate control measures. These are applicable to your industrial site, which is subject to inspection. Proof of this authorization must be available at the facility.
The Authorization shall become effective **July 12, 2012** and will expire at midnight September 4, 2016.

All terms and conditions of the modified OPDES Storm Water Industrial General Permit OKR05, as published on September 5, 2011, shall apply to the recipient of this authorization.

Richard McDaniel

Richard McDaniel, Environmental Programs Manager
Environmental Complaints and Local Services Division

APPENDIX H-7

OKC POND 1 SURFACE WATER DISCHARGE APPROVAL LETTER

The City of
OKLAHOMA CITY
Department of Public Works

December 22, 2010

Weaver Boos Consultants
Attn: Jonathan Queen
6420 Southwest Boulevard, Suite 206
Fort Worth, TX 76109

RE: Waste Management of Oklahoma – East Oak Landfill

Mr. Queen,

The Public Work Department's Technical Review and Regulation Section has reviewed the surface water discharge options submitted on December 2, 2010. Since the existing box culvert located in the natural low of your property does not permit the proper flow of water off your site, it is acceptable to discharge the surface water via the existing CMP located to the west of your property. Because of the nature of the surface water discharge, the City of Oklahoma must receive a copy of all Oklahoma Department of Environmental Quality (ODEQ) permits before final approval of this option is permitted.

If you have any questions or concerns please contact Jessica Yeager, E.I. at (405) 297-2037.

Sincerely,

Dennis E. Clowers, P.E., Director
Public Works Department

Pc: Public Works
Jessica Yeager, E.I.

420 West Main, Suite 700, Oklahoma City, OK – 405/297-2581 – FAX 405/297-2117

Queen, Jonathan

From: jessica.yeager@okc.gov
Sent: Wednesday, March 16, 2011 11:21 AM
To: Queen, Jonathan
Subject: RE: Waste Management of Oklahoma - East Oak Landfill

Jonathan,

We did receive the copy of the ODEQ permit. This email is being sent to officially acknowledge the receipt of the additional information requested in the December 22, 2010 letter. You may proceed with the surface water discharge option submitted on December 2, 2010 to the Public Works Department.

-Jessica

Jessica Yeager, P.E.
City of Oklahoma City
Public Works/Engineering
Technical Review & Regulation
Phone: (405)297-2037
Fax: (405)297-2117

From: Queen, Jonathan [mailto:jqueen@weaverboos.com]
Sent: Wednesday, March 16, 2011 11:05 AM
To: Yeager, Jessica R
Cc: Campbell, Guy
Subject: FW: Waste Management of Oklahoma - East Oak Landfill

Jessica,

Per our phone call this morning, I wanted to follow up on the status of the surface water discharge approval for the Waste Management of Oklahoma (WMO) East Oak Landfill. Weaver Boos Consultants (WBC) provided the information requested in the City of Oklahoma City letter dated December 22, 2010 (attached) in a submittal dated February 23, 2011, which included a copy of the ODEQ permit indicating approval to discharge surface water form the northwest (PUD "Area 1") soil borrow area. As discussed, the City of Oklahoma City has received the provided information and therefore with receipt of the requested information is providing final approval to discharge surface water though the existing culvert on the west side of the property.

Please let me know if I have summarized our conversation correctly and please feel free to contact us with any questions.
Thanks

Jonathan V. Queen, PE | Project Engineer
Weaver Boos Consultants
6420 Southwest Blvd. | Suite 206 | Fort Worth, TX 76109
t. 817-735-9770 | f. 817-735-9775 | m. 817-851-9464
www.weaverboos.com | jqueen@weaverboos.com

EAST OAK RECYCLING AND DISPOSAL FACILITY
OKLAHOMA COUNTY, OKLAHOMA
ODEQ PERMIT NO. 3555036

APPENDIX I

FLOODPLAIN INFORMATION

LICENSED PROFESSIONAL ENGINEER
Charles R.
Marsh
24599
OKLAHOMA

5/31/16

Prepared for

Waste Management of Oklahoma, Inc.

June 2015
Revised January 2016

Revised May 2016

Prepared by

Weaver Consultants Group, LLC
CA 3804 PE 06/30/2017
6420 Southwest Boulevard, Suite 206
Fort Worth, Texas 76109
817-735-9770

WCG Project No. 0086-356-11-40-06

CONTENTS

100-YEAR FLOODPLAIN SUMMARY

For the 2008 Tier III Permit Modification, Waste Management of Oklahoma, Inc. (WMO) submitted a Conditional Letter of Map Revision (CLOMR) to revise the Flood Insurance Rate Map (FIRM) if the expansion project was constructed as proposed. Page I-2 shows the floodplain for the different conditions analyzed in the 2008 CLOMR. The CLOMR was approved by the City of Oklahoma City (City) in October 2007 and by the Federal Emergency Management Agency (FEMA) in March 2008. The approval letters are attached to this appendix.

Although the site had not completed all construction activities included in the post-project condition of the 2008 CLOMR, the approved construction activities impacting the floodplain of the North Canadian River had been completed in 2014. WMO submitted a Letter of Map Revision (LOMR) request demonstrating that the portions of the 2008 proposed expansion project impacting the floodplain of the North Canadian River had been constructed consistent with the CLOMR. The LOMR was approved by the City in 2014 and by FEMA in 2015. The FEMA approval letter (December 18, 2015) is attached to this appendix.

For the proposed Tier III Permit Modification, a CLOMR was submitted and approved by the City in February 2016. ~~a~~A CLOMR ~~will be~~ was submitted to FEMA and will be approved prior to the start of construction in the expansion areas. The CLOMR ~~will~~ proposes to revise the FIRM to remove the expansion areas from the floodplain. Page I-3 shows the floodplain for the conditions that ~~will be~~ were analyzed in the CLOMR for the proposed expansion. As shown on Page I-3, no portion of the waste disposal area will be located within the 100-year floodplain. In addition, the CLOMR ~~will~~ demonstrates that the perimeter berm will provide over 3 feet of freeboard between the 100-year floodplain elevation and the top of the perimeter berm. ~~The CLOMR Request approval will be maintained in the Site Operating Record.~~ The CLOMR was approved by the City in February 2016. A signed Overview and Concurrence Form (February 18, 2016) acknowledging that the City received, reviewed, and found that the CLOMR meets all of the community floodplain management requirements is attached to this appendix. FEMA has received the CLOMR, assigned it case number 16-06-1732R, and is reviewing the CLOMR as indicated in the attached email dated March 2, 2016. Approval from FEMA will be provided to ODEQ upon receipt. The site is and will remain in compliance with OAC 252:515-5-32(a).

Federal Emergency Management Agency

Washington, D.C. 20472

December 18, 2015

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

The Honorable Mick Cornett
Mayor, City of Oklahoma City
200 North Walker, 3rd Floor
Oklahoma City, OK 73102

IN REPLY REFER TO:
Case No.: 15-06-0551P
Follows Conditional Case No.: 08-06-0163R
Community Name: City of Oklahoma City, OK
Community No.: 405378
Effective Date of
This Revision: **May 4, 2016**

Dear Mayor Cornett:

The Flood Insurance Study Report and Flood Insurance Rate Map for your community have been revised by this Letter of Map Revision (LOMR). Please use the enclosed annotated map panel(s) revised by this LOMR for floodplain management purposes and for all flood insurance policies and renewals issued in your community.

Additional documents are enclosed which provide information regarding this LOMR. Please see the List of Enclosures below to determine which documents are included. Other attachments specific to this request may be included as referenced in the Determination Document. If you have any questions regarding floodplain management regulations for your community or the National Flood Insurance Program (NFIP) in general, please contact the Consultation Coordination Officer for your community. If you have any technical questions regarding this LOMR, please contact the Director, Mitigation Division of the Department of Homeland Security's Federal Emergency Management Agency (FEMA) in Denton, Texas, at (940) 898-5127, or the FEMA Map Information eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP). Additional information about the NFIP is available on our website at http://www.fema.gov/business/nfip.

Sincerely,

Luis Rodriguez, P.E., Chief
Engineering Management Branch
Federal Insurance and Mitigation Administration

List of Enclosures:

Letter of Map Revision Determination Document
Annotated Flood Insurance Study Report
Annotated Flood Insurance Rate Map

cc: Mr. Eric J. Wenger, P.E
City Engineer
City of Oklahoma City

Mr. Charles R. Marsh, P.E
Weaver Boos Consultants, LLC-Southwest

Mr. Guy Campbell
Waste Management of Oklahoma, Inc.

 | Issue Date: December 18, 2015 | Effective Date: May 4, 2016 | Case No.: 15-06-0551P | LOMR-APP

Follows Conditional Case No.: 08-06-0163R

Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION
DETERMINATION DOCUMENT

COMMUNITY AND REVISION INFORMATION		PROJECT DESCRIPTION	BASIS OF REQUEST
COMMUNITY	City of Oklahoma City Oklahoma County Oklahoma	FILL	FLOODWAY HYDRAULIC ANALYSIS UPDATED TOPOGRAPHIC DATA
	COMMUNITY NO.: 405378		
IDENTIFIER	East Oak Recycling and Disposal Facility	APPROXIMATE LATITUDE AND LONGITUDE: 35.505,-97.413 SOURCE: Precision Mapping Streets DATUM: NAD 83	

ANNOTATED MAPPING ENCLOSURES	ANNOTATED STUDY ENCLOSURES
TYPE: FIRM* NO.: 40109C0195H DATE: December 18, 2009 TYPE: FIRM* NO: 40109C0310H DATE: December 18, 2009	DATE OF EFFECTIVE FLOOD INSURANCE STUDY: December 18, 2009 FLOOD PROFILE: 294P FLOODWAY DATA TABLE: 6

Enclosures reflect changes to flooding sources affected by this revision.
* FIRM – Flood Insurance Rate Map

FLOODING SOURCES AND REVISED REACHES

North Canadian River – Just downstream of NE 36TH Street to just upstream of NE 23rd Street

SUMMARY OF REVISIONS

Flooding Source	Effective Flooding	Revised Flooding	Increases	Decreases
North Canadian River	Zone AE	Zone AE	YES	YES
	Zone X (Shaded)	Zone X (Shaded)	YES	YES
	Floodway	Floodway	YES	NO
	BFEs*	BFEs	YES	YES

* BFEs – Base Flood Elevations

DETERMINATION

This document provides the determination from the Department of Homeland Security's Federal Emergency Management Agency (FEMA) regarding a request for a Letter of Map Revision (LOMR) for the area described above. Using the information submitted, we have determined that a revision to the flood hazards depicted in the Flood Insurance Study (FIS) report and/or National Flood Insurance Program (NFIP) map is warranted. This document revises the effective NFIP map, as indicated in the attached documentation. Please use the enclosed annotated map panels revised by this LOMR for floodplain management purposes and for all flood insurance policies and renewals in your community.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 847 South Pickett Street, Alexandria, VA 22304-4605. Additional Information about the NFIP is available on our Web site at http://www.fema.gov/business/nfip.

Luis Rodriguez, P.E., Chief
Engineering Management Branch
Federal Insurance and Mitigation Administration

Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION DETERMINATION DOCUMENT (CONTINUED)

COMMUNITY INFORMATION

APPLICABLE NFIP REGULATIONS/COMMUNITY OBLIGATION

We have made this determination pursuant to Section 206 of the Flood Disaster Protection Act of 1973 (P.L. 93-234) and in accordance with the National Flood Insurance Act of 1968, as amended (Title XIII of the Housing and Urban Development Act of 1968, P.L. 90-448), 42 U.S.C. 4001-4128, and 44 CFR Part 65. Pursuant to Section 1361 of the National Flood Insurance Act of 1968, as amended, communities participating in the NFIP are required to adopt and enforce floodplain management regulations that meet or exceed NFIP criteria. These criteria, including adoption of the FIS report and FIRM, and the modifications made by this LOMR, are the minimum requirements for continued NFIP participation and do not supersede more stringent State/Commonwealth or local requirements to which the regulations apply.

We provide the floodway designation to your community as a tool to regulate floodplain development. Therefore, the floodway revision we have described in this letter, while acceptable to us, must also be acceptable to your community and adopted by appropriate community action, as specified in Paragraph 60.3(d) of the NFIP regulations.

COMMUNITY REMINDERS

We based this determination on the 1-percent-annual-chance flood discharges computed in the FIS for your community without considering subsequent changes in watershed characteristics that could increase flood discharges. Future development of projects upstream could cause increased flood discharges, which could cause increased flood hazards. A comprehensive restudy of your community's flood hazards would consider the cumulative effects of development on flood discharges subsequent to the publication of the FIS report for your community and could, therefore, establish greater flood hazards in this area.

Your community must regulate all proposed floodplain development and ensure that permits required by Federal and/or State/Commonwealth law have been obtained. State/Commonwealth or community officials, based on knowledge of local conditions and in the interest of safety, may set higher standards for construction or may limit development in floodplain areas. If your State/Commonwealth or community has adopted more restrictive or comprehensive floodplain management criteria, those criteria take precedence over the minimum NFIP requirements.

We will not print and distribute this LOMR to primary users, such as local insurance agents or mortgage lenders; instead, the community will serve as a repository for the new data. We encourage you to disseminate the information in this LOMR by preparing a news release for publication in your community's newspaper that describes the revision and explains how your community will provide the data and help interpret the NFIP maps. In that way, interested persons, such as property owners, insurance agents, and mortgage lenders, can benefit from the information.

This revision has met our criteria for removing an area from the 1-percent-annual-chance floodplain to reflect the placement of fill. However, we encourage you to require that the lowest adjacent grade and lowest floor (including basement) of any structure placed within the subject area be elevated to or above the Base (1-percent-annual-chance) Flood Elevation.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 847 South Pickett Street, Alexandria, VA 22304-4605. Additional Information about the NFIP is available on our Web site at http://www.fema.gov/business/nfip.

Luis Rodriguez, P.E., Chief
Engineering Management Branch
Federal Insurance and Mitigation Administration

Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION DETERMINATION DOCUMENT (CONTINUED)

We have designated a Consultation Coordination Officer (CCO) to assist your community. The CCO will be the primary liaison between your community and FEMA. For information regarding your CCO, please contact:

Ms. Sandy Keefe
Director, Mitigation Division
Federal Emergency Management Agency, Region VI
Federal Regional Center, Room 206
800 North Loop 288
Denton, TX 76209
(940) 898-5127

STATUS OF THE COMMUNITY NFIP MAPS

We will not physically revise and republish the FIRM and FIS report for your community to reflect the modifications made by this LOMR at this time. When changes to the previously cited FIRM panel and FIS report warrant physical revision and republication in the future, we will incorporate the modifications made by this LOMR at that time.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 847 South Pickett Street, Alexandria, VA 22304-4605. Additional Information about the NFIP is available on our Web site at http://www.fema.gov/business/nfip.

Luis Rodriguez, P.E., Chief
Engineering Management Branch
Federal Insurance and Mitigation Administration

Federal Emergency Management Agency
Washington, D.C. 20472

LETTER OF MAP REVISION
DETERMINATION DOCUMENT (CONTINUED)

PUBLIC NOTIFICATION OF REVISION

A notice of changes will be published in the *Federal Register*. This information also will be published in your local newspaper on or about the dates listed below and through FEMA's Flood Hazard Mapping Web site at https://www.floodmaps.fema.gov/fhm/Scripts/bfe_main.asp.

LOCAL NEWSPAPER Name: *The Journal Record*
Dates: December 28, 2015 and January 4, 2016

Within 90 days of the second publication in the local newspaper, a citizen may request that we reconsider this determination. Any request for reconsideration must be based on scientific or technical data. Therefore, this letter will be effective only after the 90-day appeal period has elapsed and we have resolved any appeals that we receive during this appeal period. Until this LOMR is effective, the revised flood hazard information presented in this LOMR may be changed.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Map Information eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 847 South Pickett Street, Alexandria, VA 22304-4605. Additional Information about the NFIP is available on our Web site at http://www.fema.gov/business/nfip.

Luis Rodriguez, P.E., Chief
Engineering Management Branch
Federal Insurance and Mitigation Administration

U.S. DEPARTMENT OF HOMELAND SECURITY
FEDERAL EMERGENCY MANAGEMENT AGENCY

OVERVIEW & CONCURRENCE FORM

O.M.B No. 1660-0016
Expires February 28, 2014

PAPERWORK BURDEN DISCLOSURE NOTICE

PRIVACY ACT STATEMENT

AUTHORITY: The National Flood Insurance Act of 1968, Public Law 90-448, as amended by the Flood Disaster Protection Act of 1973, Public Law 93-234.

PRINCIPAL PURPOSE(S): This information is being collected for the purpose of determining an applicant's eligibility to request changes to National Flood Insurance Program (NFIP) Flood Insurance Rate Maps (FIRM).

ROUTINE USE(S): The information on this form may be disclosed as generally permitted under 5 U.S.C § 552a(b) of the Privacy Act of 1974, as amended. This includes using this information as necessary and authorized by the routine uses published in DHS/FEMA/NFIP/LOMA-1 National Flood Insurance Program (NFIP); Letter of Map Amendment (LOMA) February 15, 2006, 71 FR 7990.

DISCLOSURE: The disclosure of information on this form is voluntary; however, failure to provide the information requested may delay or prevent FEMA from processing a determination regarding a requested change to a (NFIP) Flood Insurance Rate Maps (FIRM).

A. REQUESTED RESPONSE FROM DHS-FEMA

This request is for a (check one):

☒ CLOMR: A letter from DHS-FEMA commenting on whether a proposed project, if built as proposed, would justify a map revision, or proposed hydrology changes (See 44 CFR Ch. 1, Parts 60, 65 & 72).

☐ LOMR: A letter from DHS-FEMA officially revising the current NFIP map to show the changes to floodplains, regulatory floodway or flood elevations. (See 44 CFR Ch. 1, Parts 60, 65 & 72)

B. OVERVIEW

1. The NFIP map panel(s) affected for all impacted communities is (are):

Community No.	Community Name	State	Map No.	Panel No.	Effective Date
Example: 480301 480287	City of Katy Harris County	TX TX	48473C 48201C	0005D 0220G	02/08/83 09/28/90
405378	City of Oklahoma City	OK	40109C	0195H	12/18/09
405378	City of Oklahoma City	OK	40109C	0310H	12/18/09

2. a. Flooding Source:

   b. Types of Flooding: ☒ Riverine ☐ Coastal ☐ Shallow Flooding (e.g., Zones AO and AH)
   ☐ Alluvial fan ☐ Lakes ☐ Other (Attach Description)

3. Project Name/Identifier: East Oak Landfill

4. FEMA zone designations affected: AE, X (choices: A, AH, AO, A1-A30, A99, AE, AR, V, V1-V30, VE, B, C, D, X)

5. Basis for Request and Type of Revision:

   a. The basis for this revision request is (check all that apply)

   ☒ Physical Change ☒ Improved Methodology/Data ☐ Regulatory Floodway Revision ☐ Base Map Changes
   ☐ Coastal Analysis ☒ Hydraulic Analysis ☐ Hydrologic Analysis ☐ Corrections
   ☐ Weir-Dam Changes ☐ Levee Certification ☐ Alluvial Fan Analysis ☐ Natural Changes
   ☐ New Topographic Data ☐ Other (Attach Description)

   Note: A photograph and narrative description of the area of concern is not required, but is very helpful during review.

b. The area of revision encompasses the following structures (check all that apply)

Structures: ☐ Channelization ☐ Levee/Floodwall ☐ Bridge/Culvert

☐ Dam ☒ Fill ☐ Other (Attach Description)

6. ☒ Documentation of ESA compliance is submitted (required to initiate CLOMR review). Please refer to the Instructions for more information.

C. REVIEW FEE

Has the review fee for the appropriate request category been included? ☒ Yes Fee amount: $6,050

☐ No, Attach Explanation

Please see the DHS-FEMA Web site at http://www.fema.gov/plan/prevent/fhm/frm_fees.shtm for Fee Amounts and Exemptions.

D. SIGNATURE

All documents submitted in support of this request are correct to the best of my knowledge. I understand that any false statement may be punishable by fine or imprisonment under Title 18 of the United States Code, Section 1001.

Name: Guy Campbell	Company: Waste Management of Oklahoma, Inc.	
Mailing Address: 3201 Mosley Road Oklahoma City, OK 73141	Daytime Telephone No.: 405-417-8124	Fax No.: 817-348-2638
	E-Mail Address: gcampbe1@wm.com	
Signature of Requester (required): Guy Campbell	Date: 11-19-15	

As the community official responsible for floodplain management, I hereby acknowledge that we have received and reviewed this Letter of Map Revision (LOMR) or conditional LOMR request. Based upon the community's review, we find the completed or proposed project meets or is designed to meet all of the community floodplain management requirements, including the requirements for when fill is placed in the regulatory floodway, and that all necessary Federal, State, and local permits have been, or in the case of a conditional LOMR, will be obtained. For Conditional LOMR requests, the applicant has documented Endangered Species Act (ESA) compliance to FEMA prior to FEMA's review of the Conditional LOMR application. For LOMR requests, I acknowledge that compliance with Sections 9 and 10 of the ESA has been achieved independently of FEMA's process. For actions authorized, funded, or being carried out by Federal or State agencies, documentation from the agency showing its compliance with Section 7(a)(2) of the ESA will be submitted. In addition, we have determined that the land and any existing or proposed structures to be removed from the SFHA are or will be reasonably safe from flooding as defined in 44CFR 65.2(c), and that we have available upon request by FEMA, all analyses and documentation used to make this determination.

Community Official's Name and Title: Eric J. Wenger, P.E., City Engineer	Community Name: Oklahoma City, OK	
Mailing Address: 420 West Main, 7th Floor Oklahoma City, OK 73102	Daytime Telephone No.: 405-297-2581	Fax No.: 405-287-2117
	E-Mail Address: eric.wenger@okc.gov	
Community Official's Signature (required): Eric J. Wenger	Date: 2/18/16	

CERTIFICATION BY REGISTERED PROFESSIONAL ENGINEER AND/OR LAND SURVEYOR

This certification is to be signed and sealed by a licensed land surveyor, registered professional engineer, or architect authorized by law to certify elevation information data, hydrologic and hydraulic analysis, and any other supporting information as per NFIP regulations paragraph 65.2(b) and as described in the MT-2 Forms Instructions. All documents submitted in support of this request are correct to the best of my knowledge. I understand that any false statement may be punishable by fine or imprisonment under Title 18 of the United States Code, Section 1001.

Certifier's Name: Charles R. Marsh	License No.: 24599	Expiration Date: 08/31/16
Company Name: Weaver Consultants Group, LLC	Telephone No.: 817-735-9770	Fax No.: 817-735-9775
Signature: Charles R. Marsh	Date: 11-19-15	E-Mail Address: cmarsh@wcgrp.com

Ensure the forms that are appropriate to your revision request are included in your submittal.

Form Name and (Number)	Required if ...
☒ Riverine Hydrology and Hydraulics Form (Form 2)	New or revised discharges or water-surface elevations
☐ Riverine Structures Form (Form 3)	Channel is modified, addition/revision of bridge/culverts, addition/revision of levee/floodwall, addition/revision of dam
☐ Coastal Analysis Form (Form 4)	New or revised coastal elevations
☐ Coastal Structures Form (Form 5)	Addition/revision of coastal structure
☐ Alluvial Fan Flooding Form (Form 6)	Flood control measures on alluvial fans

LICENSED PROFESSIONAL ENGINEER
Charles R.
Marsh
24599
OKLAHOMA
Seal (Optional)

Queen, Jonathan

Subject: FW: REVISION Project is Created with Project Number=16-06-1732R

From: <mip@riskmapcds.com>
Date: March 2, 2016 at 9:16:23 AM CST
To: <gcampbe1@wm.com>
Subject: REVISION Project is Created with Project Number=16-06-1732R

We have received your request that the Department of Homeland Security's Federal Emergency Management Agency issue a revision to the flood hazard information on the applicable National Flood Insurance Program map for CITY OF OKLAHOMA CITY, OK.

Your case number is 16-06-1732R and the project identifier is EAST OAK LANDFILL.

We are reviewing your submitted data and will contact you if additional information is required to process your request.

If additional information is not required, we will issue a final letter of determination within 90 days of receiving your request.

Inquiries concerning the status of your request should be made by calling the FEMA Map Information eXchange (FMIX) toll free at (877) 336-2627 (877-FEMA-MAP) or by letter addressed to the Federal Emergency Management Agency, LOMC Clearinghouse, 847 South Pickett Street, Alexandria, VA 22304-4605, Attn: LOMC Manager.

Please be assured we will do our best to respond to all inquiries in a timely manner.

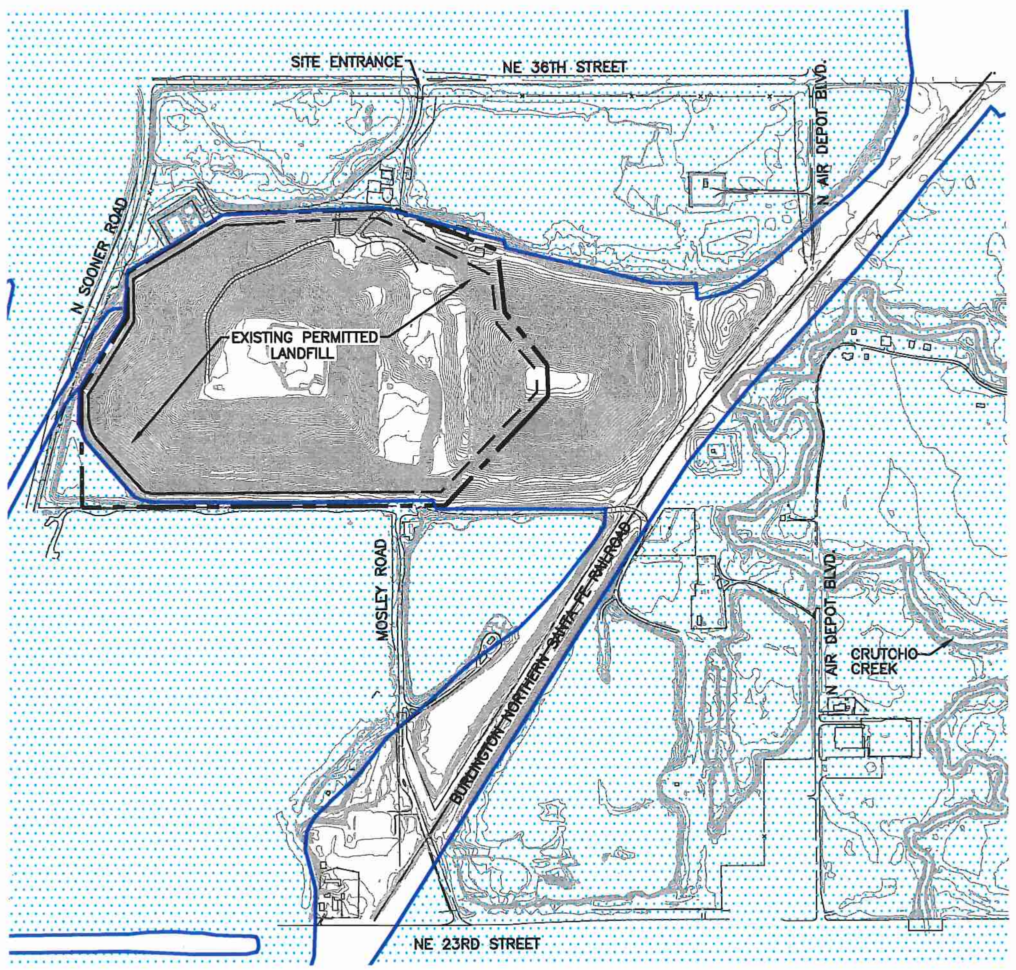


EXHIBIT A
2008 DUPLICATE EFFECTIVE CONDITION

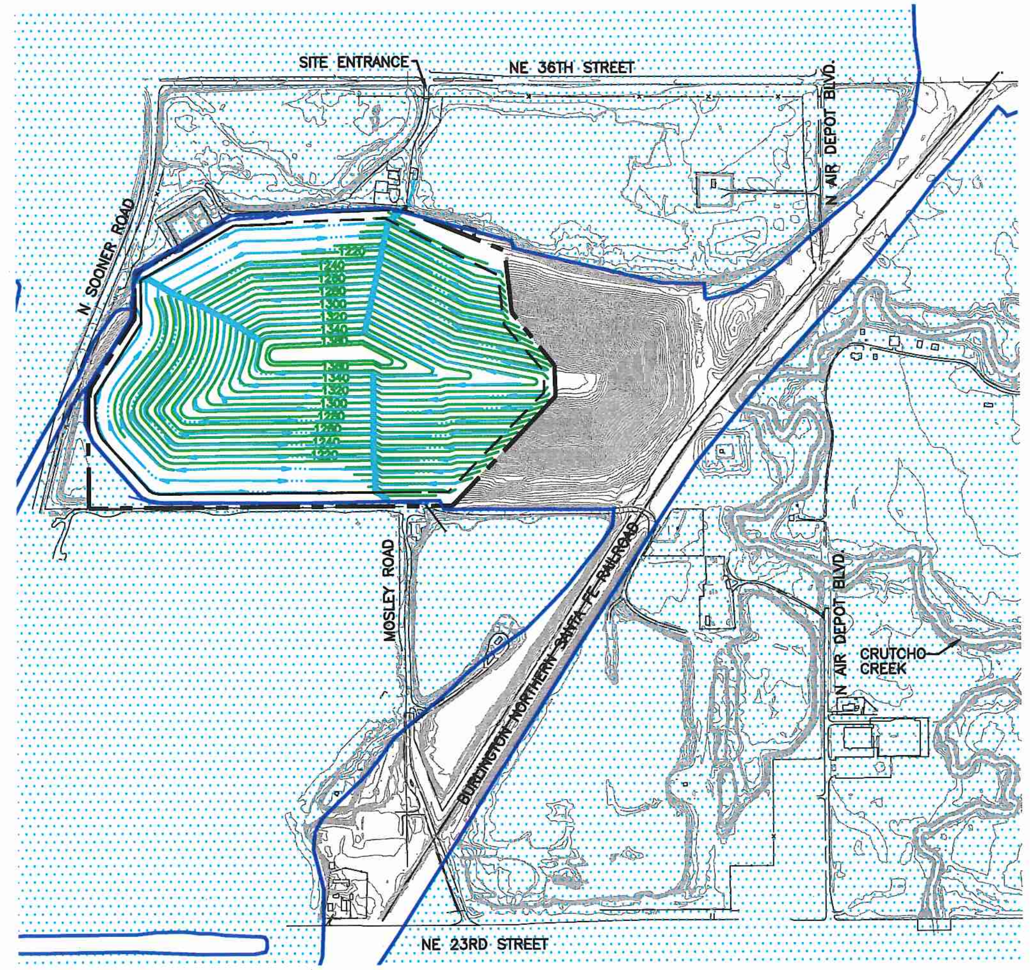


EXHIBIT B
2008 CORRECTED EFFECTIVE CONDITION

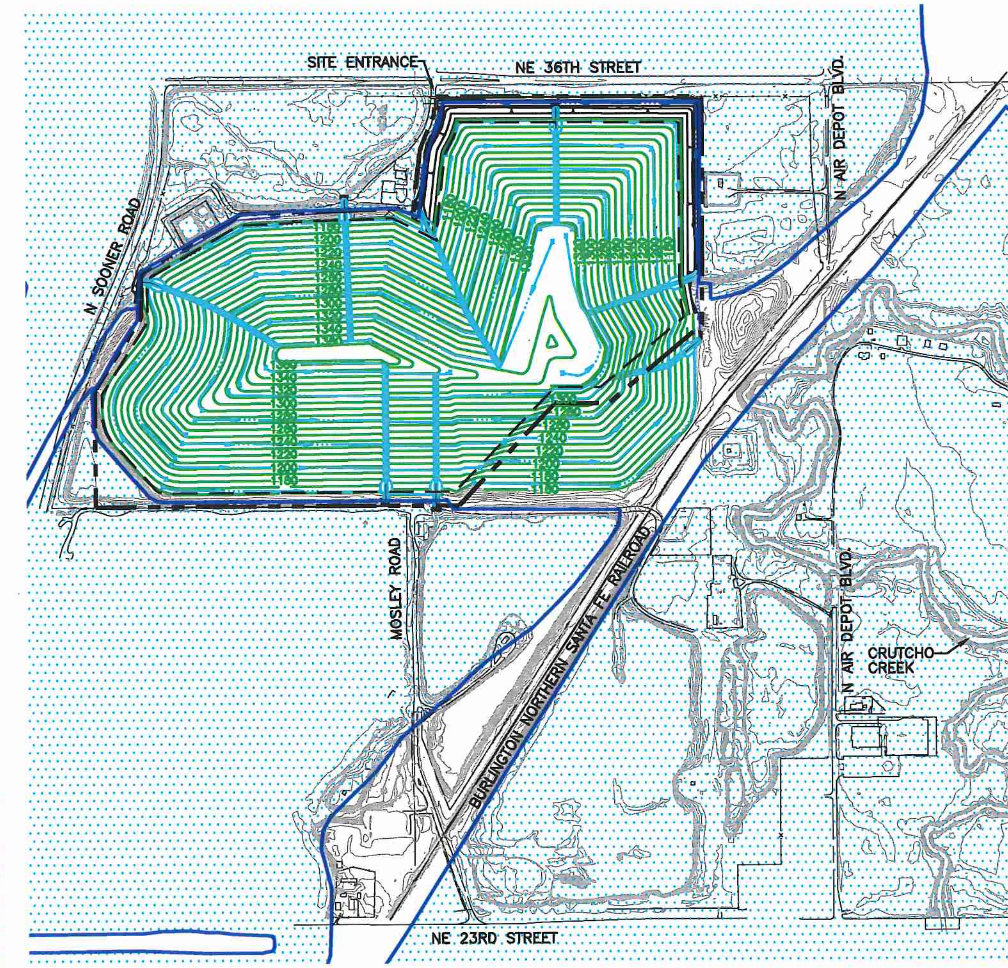


EXHIBIT C
2008 APPROVED POST-PROJECT CONDITION

LICENSED PROFESSIONAL ENGINEER
Charles R. Marsh
24599
OKLAHOMA
1·15·16

0 300 600
SCALE IN FEET

LEGEND:

- LANDFILL PERMIT BOUNDARY
- LIMITS OF WASTE
- 1180 EXISTING CONTOUR
- 1320 FINAL CONTOUR
- DRAINAGE SWALE
- DRAINAGE CHUTE
- 100-YEAR FLOODPLAIN

NOTES:

1. EXHIBIT A, B, AND C CONTOURS AND ELEVATIONS PROVIDED BY AMI ENGINEERING, INC. FROM AERIAL PHOTOGRAPHY FLOWN JANUARY 30, 2008.
2. FLOODPLAIN DELINEATIONS WERE REPRODUCED FROM THE DUPLICATE EFFECTIVE, CORRECTED EFFECTIVE, AND POST-PROJECT CONDITIONS INCLUDED IN THE APPROVED MARCH 2008 CLOMR.
3. THE 2008 CORRECTED EFFECTIVE AND POST-PROJECT CONDITIONS WERE USED AS BASE POINT COMPARISON IN THE 2014 LOMR.

- [ ] DRAFT
- [x] FOR INFORMATIONAL PURPOSES ONLY
- [ ] ISSUED FOR CONSTRUCTION

DATE: 06/2015
FILE: 0086-356-11
CAD: PAGE I-2 2008 CLOMR.DWG

DRAWN BY: SRF
DESIGN BY: RJS
REVIEWED BY: JVQ

PREPARED FOR
WASTE MANAGEMENT OF OKLAHOMA, INC.

REVISIONS

NO.	DATE	DESCRIPTION

Weaver Consultants Group
CA 3804 PE-06/30/2017

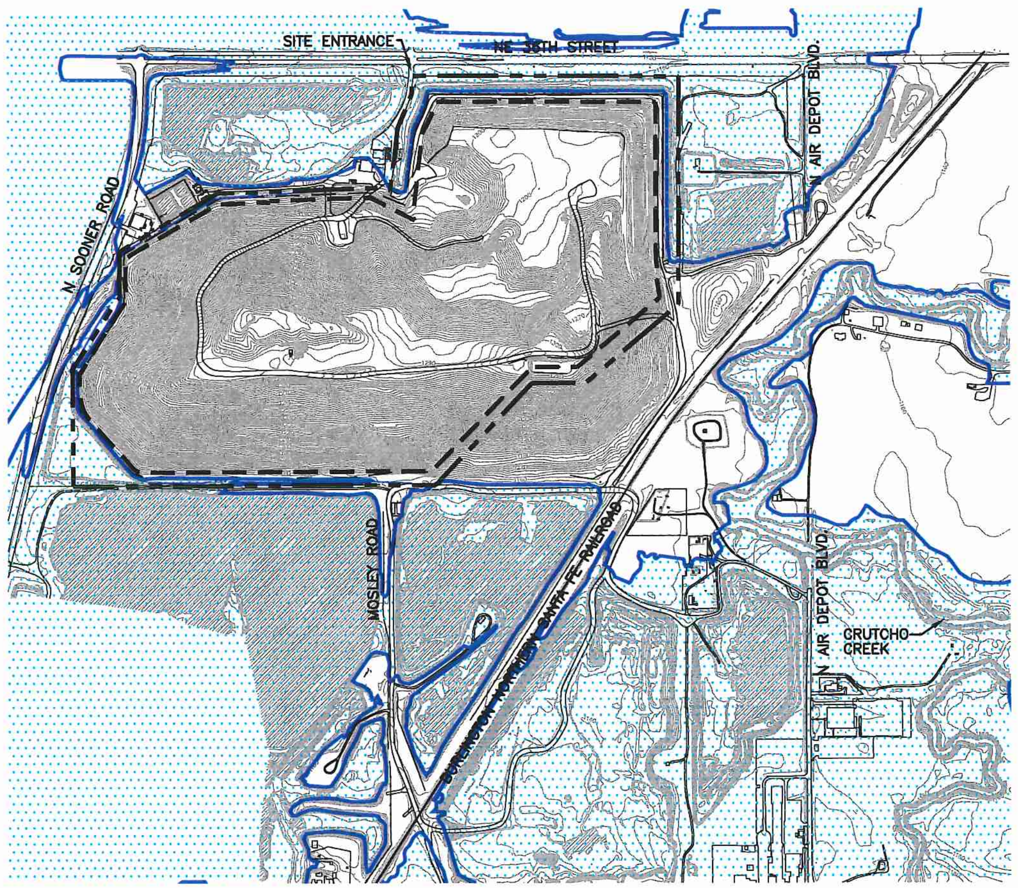
TIER III PERMIT MODIFICATION
2008 CLOMR CONDITION

EAST OAK RDF
OKLAHOMA COUNTY, OKLAHOMA

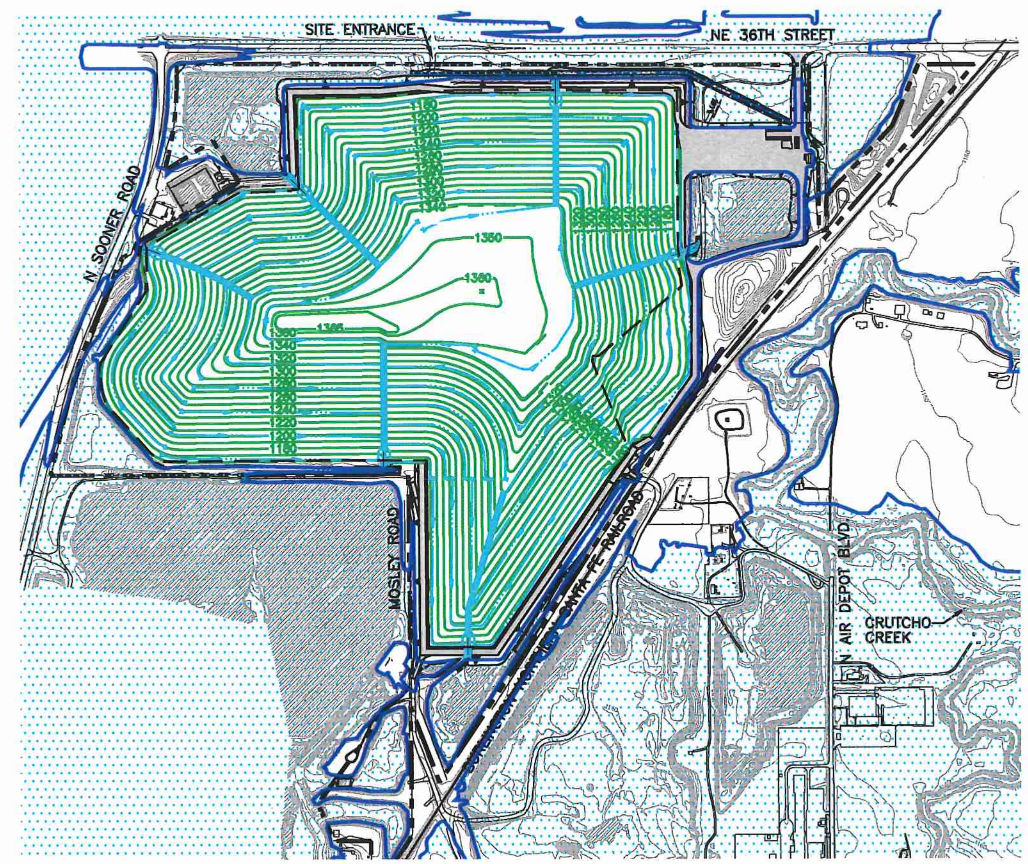
WWW.WCGRP.COM

PAGE I-2

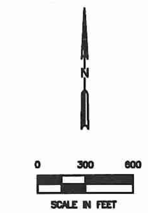
O:\0086\356\EXPANSION 2013\APPENDIX I\FIG 1-2-FLOODPLAIN HISTORY.dwg, sford, 1:2



2014 DUPLICATE EFFECTIVE CONDITION



2014 POST-PROJECT CONDITION



LEGEND:

- LANDFILL PERMIT BOUNDARY
- LIMITS OF WASTE
- 1180 EXISTING CONTOUR
- 1320 FINAL CONTOUR
- DRAINAGE SWALE
- DRAINAGE CHUTE
- 100-YEAR FLOODPLAIN

NOTES:

1. THE DUPLICATE EFFECTIVE AND POST-PROJECT CONDITIONS EXISTING CONTOURS AND ELEVATIONS PROVIDED BY DALLAS AERIAL SURVEYS, INC. FROM AERIAL PHOTOGRAPHY FLOWN ON JANUARY 19, 2014.
2. FLOODPLAIN DELINEATIONS WERE REPRODUCED FROM THE DUPLICATE EFFECTIVE AND POST-PROJECT CONDITIONS INCLUDED IN THE 2014 CLOMR.

LICENSED PROFESSIONAL ENGINEER
Charles R. Marsh
24599
OKLAHOMA
1·15·16

☐ DRAFT ☒ FOR INFORMATIONAL PURPOSES ONLY ☐ ISSUED FOR CONSTRUCTION	PREPARED FOR WASTE MANAGEMENT OF OKLAHOMA, INC.	TIER III PERMIT MODIFICATION CLOMR CONDITION COMPARISON
DATE: 06/2015 FILE: 0086-356-11 CAD: PAGE I-3 2014 CLOMR.DWG	DRAWN BY: SRF DESIGN BY: RJS REVIEWED BY: JVQ	EAST OAK RDF OKLAHOMA COUNTY, OKLAHOMA

REVISIONS		
NO.	DATE	DESCRIPTION

Weaver Consultants Group
CA 3804 PE-06/30/2017

WWW.WCGRP.COM

APPROVAL LETTERS

The City of
OKLAHOMA CITY
Department of Public Works

October 12, 2007

FEMA LOMR Depot
3601 Eisenhower Ave.
Alexandria, VA 22304

RE: Request for Conditional Letter of Map Revision (CLOMR)
East Oak Recycling and Disposal Facility – North Canadian River

Gentlemen:

Attached is the completed CLOMR request for a portion of North Canadian River. The subject area is in the Section 21, T12N, R2W, I.M., in the general vicinity of N.W. 36th Street and Sooner Road in Oklahoma City, Oklahoma. The information included supports a request for a Conditional Letter of Map Revision for the affected FIRM panels.

If you have any questions or need additional information, please contact Jeff Young, P.E. at (817) 735-9770 or Jessica Yeager, E.I. at (405) 297-2037.

Sincerely,

Dennis Clowers, P.E., Director
Public Works Department

Attachment: Conditional Letter of Map Revision request for East Oak Recycling and Disposal Facility

Pc: Weaver Boos Consultants, LLC-Southwest
Jeffrey Young, P.E.
Public Works Department
Engineering Division
Hillary Rippee
Jessica Yeager

U:\J_Yeager\Projects\FEMA\CLOMR\East Oak Recycling and Disposal Facility\FS-0041 North Canadian River CLOMR Transmittal to FEMA.doc

Federal Emergency Management Agency
Washington, D.C. 20472

MAR 2 6 2008

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

IN REPLY REFER TO:
Case No.: 08-06-0163R

The Honorable Mick Cornett
Mayor, City of Oklahoma City
200 North Walker, Third Floor
Oklahoma City, OK 73102

Community: City of Oklahoma City, OK
Community No.: 405378

104

Dear Mayor Cornett:

This responds to a request that the Department of Homeland Security's Federal Emergency Management Agency (FEMA) comment on the effects that a proposed project would have on the effective Flood Insurance Rate Map (FIRM) and Flood Insurance Study (FIS) report for Oklahoma County, Oklahoma and Incorporated Areas (the effective FIRM and FIS for your community), in accordance with Part 65 of the National Flood Insurance Program (NFIP) regulations. In a letter dated October 12, 2007, Mr. Dennis Clowers, P.E., Director, Department of Public Works, City of Oklahoma City, requested that FEMA evaluate the effects that the revised hydraulic analysis, updated topographic information, and a proposed project along the North Canadian River would have on the flood hazard information shown on the effective FIRM and FIS report. The proposed project will consist of the placement of fill along the North Canadian River from just downstream of 36th Street to approximately 2,600 feet upstream. The proposed area of revision will extend from just downstream of 36th Street to just upstream of Northeast 23rd Street.

All data required to complete our review of this request for a Conditional Letter of Map Revision (CLOMR) were submitted with letters from Mr. Jeffery P. Young, P.E., Weaver Boos Consultants, LLC-Southwest, and Mr. Clowers.

We reviewed the submitted data and the data used to prepare the effective FIRM for your community and determined that the proposed project meets the minimum floodplain management criteria of the NFIP. The submitted existing conditions HEC-RAS hydraulic computer model, dated January 2008, based on updated topographic information, was used as the base conditions model in our review of the proposed conditions model for this CLOMR request. We believe that, if the proposed project is constructed as shown on the topographic work map entitled "CLOMR Request Post-Project-USGS Map," prepared by Waste Management of Oklahoma, Inc, dated January 2008, and the data listed below are received, a revision to the FIRM would be warranted.

Our review of existing conditions revealed that as a result of the updated topographic information, the Base (1-percent-annual-chance) Flood Elevations (BFEs) decreased from approximately 2,600 feet upstream of 36th Street to just upstream of Northeast 23rd Street compared to the effective BFEs for the North Canadian River. The maximum decrease in BFE, 0.3 foot, occurred approximately 2,600 feet upstream of 36th Street.

Our review of proposed conditions revealed that as a result of the proposed project, the BFEs will neither increase nor decrease throughout the proposed area of revision compared to the existing BFEs for North Canadian River.

As a result of the proposed project and the updated topographic information, the BFEs will decrease from approximately 2,600 feet upstream of 36th Street to just upstream of Northeast 23rd Street compared to the effective BFEs for North Canadian River. The maximum decrease in BFE, 0.3 foot, will occur approximately 2,600 feet upstream of 36th Street.

As a result of the proposed project and updated topographic information, the width of the special Flood Hazard Area (SFHA), the area that would be inundated by the base flood, will decrease throughout the proposed area of revision compared to the effective SFHA width along North Canadian River. The maximum decrease in SFHA width, approximately 3,600 feet, will occur approximately 2,500 feet upstream of 36th Street.

As a result of the proposed project and updated topographic information, the width of the regulatory floodway will neither increase nor decrease throughout the proposed area of revision compared to the effective floodway width along the North Canadian River.

Upon completion of the project, your community may submit the data listed below and request that we make a final determination on revising the effective FIRM, and FIS report.

- Detailed application and certification forms, which were used in processing this request, must be used for requesting final revisions to the maps. Therefore, when the map revision request for the area covered by this letter is submitted, Form 1, entitled "Overview & Concurrence Form," must be included. (A copy of this form is enclosed.)

- The detailed application and certification form listed below may be required if as-built conditions differ from the preliminary plans. If required, please submit a new form (a copy of which is enclosed) or an annotated copy of the previously submitted form showing the revised information.

  Form 2, entitled "Riverine Hydrology & Hydraulics Form"

  Hydraulic analyses, for as-built conditions, of the base flood; the 10-percent-, 2-percent-, and 0.2-percent-annual-chance floods; and the regulatory floodway, together with a topographic work map showing the revised floodplain and floodway boundaries, must be submitted with Form 2.

- Effective October 1, 2007, FEMA revised the fee schedule for reviewing and processing requests for conditional and final modifications to published flood information and maps. In accordance with this schedule, the current fee for this map revision request is $4,800 and must be received before we can begin processing the request. Please note, however, that the fee schedule is subject to change, and requesters are required to submit the fee in effect at the time of the submittal. Payment of this fee shall be made in the form of a check or money order, made payable in U.S. funds to the National Flood Insurance Program, or by credit card (Visa or MasterCard only). The payment, along with the revision application, must be forwarded to the following address:

  FEMA National Service Provider
  3601 Eisenhower Avenue
  Alexandria, VA 22304-6425

- As-built plans, certified by a registered professional engineer, of all proposed project elements

- Community acknowledgment of the map revision request

After receiving appropriate documentation to show that the project has been completed, FEMA will initiate a revision to the FIRM, and FIS report. Because the BFEs would change as a result of the project, a 90-day appeal period would be initiated, during which community officials and interested persons may appeal the revised BFEs based on scientific or technical data.

This CLOMR is based on minimum floodplain management criteria established under the NFIP. Your community is responsible for approving all floodplain development and for ensuring all necessary permits required by Federal or State law have been received. State, county, and community officials, based on knowledge of local conditions and in the interest of safety, may set higher standards for construction in the SFHA. If the State, county, or community has adopted more restrictive or comprehensive floodplain management criteria, these criteria take precedence over the minimum NFIP criteria.

If you have any questions regarding floodplain management regulations for your community or the NFIP in general, please contact the Consultation Coordination Officer (CCO) for your community. Information on the CCO for your community may be obtained by calling the Director, Mitigation Division of FEMA in Denton, Texas, at (940) 898-5127. If you have any questions regarding this CLOMR, please call our Map Assistance Center, toll free, at 1-877-FEMA MAP (1-877-336-2627).

Sincerely,

Joshua A. Smith

Joshua A. Smith, CFM, Program Specialist
Engineering Management Branch
Mitigation Directorate

For: William R. Blanton Jr., CFM, Chief
Engineering Management Branch
Mitigation Directorate

Enclosures

cc: Mr. Dennis Clowers, P.E.
Director
Department of Public Works
City of Oklahoma City

Mr. Jeffrey P. Young, P.E.
Weaver Boos Consultants, LLC-Southwest

Mr. Pete Schultze
Waste Management of Oklahoma, Inc

EAST OAK RECYCLING AND DISPOSAL FACILITY
OKLAHOMA COUNTY, OKLAHOMA
ODEQ PERMIT NO. 3555036

APPENDIX J

ALTERNATIVE FINAL COVER SYSTEM DESIGN

Prepared for

Waste Management of Oklahoma, Inc.

June 2015
Revised January 2016

Revised May 2016

Prepared by

Weaver Consultants Group, LLC
CA 3804 PE- 06/30/2017
6420 Southwest Boulevard, Suite 206
Fort Worth, Texas 76109
817-735-9770

WCG Project No. 0086-356-11-40-08

INTRODUCTION

This appendix includes a copy of the approved Alternative Final Cover (AFC) System Design submitted by Weaver Boos Consultants, LLC-Southwest in August 2007 as part of a Tier III Permit Modification that was approved in May 2008. Also included is ODEQ's approval letter dated May 15, 2008 (see following two pages). 9 acres of the alternative final cover ~~have been~~ was constructed in 2013. The ODEQ approved AFC Design has been modified based on current conditions. These modifications include revisions to page I-1, page I-5-2, Figure I-1-1, Figure I-1-2, and Figure I-5-7.

Since this alternative final cover design is not a function of a particular area and can be used for both top slopes and sideslopes, it is also applicable for the expansion area. The current vegetation plan required to meet OAC 252-515-19-54 is also included (see Appendix I-5 of the Alternative Final Cover System Design).

O K L A H O M A
DEPARTMENT OF ENVIRONMENTAL QUALITY

STEVEN A. THOMPSON
Executive Director

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

BRAD HENRY
Governor

May 15, 2008

Mr. Peter Schultze
Waste Management of Oklahoma
3201 Mosley Road
Oklahoma City, OK 73141

Subject: Permit Modification
Tier III Modification for Lateral Expansion of the Permitted Boundary
East Oak Landfill
Permit # 3555036

Dear Mr. Schultze:

The Department has completed the technical review of the above referenced Tier III Application and found it to be technically complete; enclosed is the signed permit. Pursuant to Oklahoma Administrative Code (OAC) 252:4-7-60(2)(B) the submittal was processed as a Tier III Application. The Department approves the permit modification, which is effective on the date that it was signed. Also enclosed is a *DEQ Permit Satisfaction Survey*. The Department would appreciate you taking a few minutes to complete the survey and return it to our Customer Services Division. It is important to the Department for you to let us know how we are doing and/or how we can improve our process.

Please contact Wesley Squyres at (405) 702-5197, if there are any questions concerning the permit modification.

Sincerely,

Saba Tahmassebi, Ph. D., P. E.
Chief Engineer
Land Protection Division

cc: Jeff Young, Weaver Boos Consultants

OKLAHOMA
DEPARTMENT OF ENVIRONMENTAL QUALITY

STEVEN A. THOMPSON
Executive Director

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

BRAD HENRY
Governor

SOLID WASTE PERMIT MODIFICATION

The Department of Environmental Quality hereby approves the following modification:

Permit Number: 3555036
Permittee: Waste Management of Oklahoma, Inc.
Facility: East Oak Recycling and Disposal Facility
Facility Type: Municipal Solid Waste Landfill
County: Oklahoma County

Modification: Expansion of the permitted boundary to incorporate 44.6 additional acres, increasing the landfill's total acreage to 158.8 acres. The permit will grant three (3) variances to the OAC 252:515 regulations as follows OAC 252:515-15-4(b), OAC 252:515-5-32(a) and OAC 252:515-5-51(a).

MODIFICATION CONDITIONS:

1. The original application submitted on August 15, 2007 is considered approved and is incorporated as part of this modification.
2. Financial assurance will be required before waste is accepted.
3. The permittee is authorized to operate in conformity with the application described above. Commencing operations under this permit modification constitutes acceptance of, and consent to, the conditions contained herein.

Scott Thompson for

Date: 5-15-08

Saba Tahmassebi, Ph. D., P. E.
Chief Engineer
Land Protection Division

Scott A. Thompson

Date:

Scott A. Thompson
Division Director
Land Protection Division

Steven A. Thompson

Date: 5-16-08

Steven A. Thompson
Executive Director

EAST OAK RECYCLING AND DISPOSAL FACILITY
OKLAHOMA COUNTY, OKLAHOMA
ODEQ PERMIT NO. 3555036

APPENDIX I

ALTERNATIVE FINAL COVER DESIGN

Prepared for

Waste Management of Oklahoma, Inc.

Approved May 15,2008

Revised May 2016

LICENSED PROFESSIONAL ENGINEER
JONATHAN V. QUEEN
24456
OKLAHOMA

J. V. Q.
5/31/16

Prepared by

~~Weaver Boos Consultants, LLC–Southwest~~
Weaver Consultants Group, LLC
CA 3804 PE 06/30/2017
6420 Southwest Boulevard, Suite 206
Fort Worth, Texas 76109
817-735-9770

~~WBC~~ WCG Project No. 0086-356-11-02-11

CONTENTS

LIST OF TABLES

LIST OF APPENDICES

1 INTRODUCTION

1.1 Purpose

The purpose of this appendix is to provide the design information for the Evapotranspiration (ET) monolithic soil final cover at the East Oak Recycling and Disposal Facility. The monolithic final cover system will consist of the following layers.

- 12-inch-thick Vegetative Topsoil Layer. Soil for this layer will be selected to support the rapid establishment of a vegetative cover that will consist of native and introduced grasses that will thrive in the Oklahoma City area climate.
- 24-inch-thick Vegetative Support Layer. The soils in this layer will be capable of storing moisture in the final cover system so that the moisture can be removed by evaporation and transpiration from vegetation growing on the cover.
- Existing 12-inch-thick Intermediate Cover Layer. This layer functions as a foundation layer for the vegetative support layer. However, this material will also function as a vegetative support layer.

The above alternative final cover system is designed to minimize infiltration of stormwater into the underlying wastes. The ET cover is basically a monolithic soil cover that employs a thick layer of soil with adequate soil-water storage capacity to retain any infiltrated water until it can be removed through ET. The ET cover concept relies on the soil to act like a sponge. A key to the design is that the "soil sponge" or "soil rooting medium" be designed thick enough to hold infiltration of precipitation until the water can be consumed by ET.

Consistent with OAC 252:515-19-53(c), the proposed alternative cover is designed to be equivalent with the Subtitle D prescriptive composite final cover system and also by extension the pre-Subtitle D area final cover system. ~~As shown on Sheet I-1-1 (Appendix I-1), no final cover has previously been constructed at the East Oak Recycling and Disposal Facility.~~ Consistent with OAC 252:515-25-33, the site will initiate final cover activities 90 days after the final receipt of waste. ~~As shown on Sheet I-1-2 (Appendix I-1), the entire East Oak Recycling and Disposal Facility will need final cover.~~

The following sections of this appendix discuss the requirements of the equivalency demonstration, a description of the numeric model used to make the equivalency demonstration, a summary of the model input parameters, a summary of the equivalency demonstration, and specifications for the ET monolithic soil final cover system. In addition, the following information is presented in appendices that are attached to this appendix.

- Appendix I-1 – Figures. This appendix includes site plans that depict the proposed alternative final cover area and various details of the proposed alternative final cover system.
- Appendix I-2 – Equivalency Design Demonstration. This appendix includes the UNSAT-H model input and output files for both the prescriptive Subtitle D final cover system and the proposed ET monolithic soil final cover system.
- Appendix I-3 – Daily Climatological Data Summary. This appendix includes climatological data that was used as input into the UNSAT-H model.
- Appendix I-4 – Alternative Final Cover Quality Assurance/Quality Control Plan. This plan sets forth the QA/QC plan for each component of the ET monolithic soil alternative final cover system.
- Appendix I-5 – Vegetation Plan. This appendix includes a vegetation plan for the East Oak Recycling and Disposal Facility.

1.2 Equivalency Demonstration Requirements

Consistent with OAC 252:515-19-53(c), the proposed alternative final cover system is designed to be equivalent with the Subtitle D prescriptive composite final cover design and also by extension the pre-Subtitle D area final cover design. Both designs are summarized in Table 1-1.

Table 1-1
Existing Permitted Final Cover Design

Pre-Subtitle D Cover	Prescriptive Subtitle D Cover
12-inch-thick erosion layer	12-inch-thick erosion layer
24-inch-thick compacted clay layer ($k \leq 1x10^{-7}$ cm/s)	• Drainage geocomposite or geotextile • 40-mil-thick LLDPE geomembrane • 24-inch-thick compacted clay layer ($k \leq 1x10^{-7}$ cm/s)

As stated previously, the purpose of this appendix is to demonstrate that the proposed ET monolithic soil layer is equivalent to the final cover systems listed in Table 1-1. The following three criteria will be used to demonstrate equivalency.

1) Through the use of UNSAT-H, it will be demonstrated that the estimated percolation through the alternative final cover system will be less than the prescriptive Subtitle D final cover system and by extension the pre-Subtitle D area final cover system.
2) Also through the use of UNSAT-H, it will be demonstrated that the moisture content in the bottom layer of the ET monolithic soil final cover system will remain at a consistent level over the analysis period. This demonstrates that the alternative final cover system will function as designed. For example, the moisture content in the upper levels of the alternative final cover system will vary due to evapotranspiration and infiltration. However, if the moisture content in the bottom layer of the alternative final cover system remains consistent, then this is an indication that no significant amount of water will infiltrate past the bottom final cover layer.

As documented in numerous references regarding alternative final cover demonstrations, the estimate of infiltration through the prescriptive Subtitle D composite final cover system (Criteria 1 listed above) has been studied extensively over the past few years. Until recently, relatively unsophisticated models (e.g., HELP) and limited information from constructed composite final covers has been available. However, more sophisticated models (e.g., UNSAT-H) and information from the EPA's Alternate Cover Assessment Program (ACAP) are now available to more accurately predict percolation through a composite final cover system. A summary of various percolation rates through composite final covers, including the estimated percolation rate using UNSAT-H for the East Oak Recycling and Disposal Facility alternative final cover system is summarized in Table 1-2.

Given the above (Criteria 1 and 2) and the information listed in Table 1-2, a percolation rate of 5 mm (0.20 inches) has been used as the benchmark for Criterion 1. This value is the lowest percolation rate listed in Table 1-2 and ensures a conservative comparison.

1.3 Alternative Final Cover Model Summary

UNSAT-H (Fayer and Junes, 1990) was selected to model both the prescriptive Subtitle D composite final cover system and the ET monolithic soil alternative final cover system. UNSAT-H is a one-dimensional physically based model and is one of the most commonly used models for alternative final covers. The various UNSAT-H input parameters for climate, vegetation, and soils are discussed in the following subsections.

Climate

Oklahoma County, Oklahoma has a continental climate characterized by rapid changes in temperature. Occasionally the county may experience influence exerted by warm, moist air currents from the Gulf of Mexico. The winters are generally mild and the summers are hot. Actual daily rainfall data obtained from the Spencer, Oklahoma, weather station are used in the simulations. Weather data includes rainfall, temperature, wind speed, solar radion, and humidity for one year (1995). Total rainfall measured during this period was 41.56 inches. This is conservative given that the average annual rainfall is approximately 33.36 inches.

The area is occasionally subjected to large hail and violent windstorms which occur mostly during the spring and early summer, although occurrences have been noted throughout the year. Snowfall averages less than 10 inches per year and seldom remains on the ground very long. Occasional periods of brief freezing rain and sleet storms can occur during winter months.

UNSAT-H, the modeling program used for this analysis, requires daily climatological data. Climate data for the model input were compiled from year 1995 records for using the Spencer, Oklahoma, weather station by using Mesonet (an Oklahoma climate data provider). Spencer, Oklahoma, is less than 5 miles from the site. Individual data was occasionally missing because of equipment failures at the weather station. Because the UNSAT-H model requires input of daily climate data, those gaps were filled in by replacing missing records with an average value from the day before and the day after the gap. The weather data used is included in Appendix I-3.

Table 1-2
Summary of Percolation Rates through Subtitle D Prescriptive Final Cover Systems

Case	Average Annual Precipitation	Estimated Yearly Percolation Rate	Comments
East Oak Recycling and Disposal Facility UNSAT-H Estimate	41.56 inches[1]	14.86 mm or 0.59 inches	The input/output files for this modeling effort are included in Appendix I-2. A discussion of the various modeling parameters is included in the section entitled, "Alternative Final Cover Model Summary."
Omaha, NE EPA ACAP Site	28 inches	5.5 mm or 0.22 inches	This information was reproduced from the EPA's Alternate Cover Assessment Program 2002 Annual Report (Albright and Benson).
Cedar Rapids, ID EPA ACAP Site	36.4 inches	6.1 mm or 0.24 inches	This information was reproduced from the EPA's Alternate Cover Assessment Program 2002 Annual Report (Albright and Benson).
EPA ACAP Program Current Recommended Percolation Rate for AFC	N/A	5 mm or 0.20 inches	This information was obtained from Craig H. Benson, PhD, P.E. who is a key advisor for the EPA ACAP Program.

1 This value is from 1995 and was used for this demonstration. The actual average annual precipitation value is 33.36 inches.

Vegetation

With UNSAT-H, plant cover over the course of the year is represented by the leaf area index (LAI). The LAI is the ratio of the total leaf surface area to the size of the area vegetation is growing (USEPA, 1994). For this analysis, it was assumed that the vegetative growing season started in spring on the average date of the last frost (early April) and the transpiration ended on the average date of the first severe frost (early November).

Soils

The major soil input parameters for both cover systems are discussed below.

- Saturated Water Content of Soils. Saturated water content of 40 percent has been used for the top one-foot layer of soil for the prescriptive final cover and for the entire thickness of the ET monolithic soil final cover. The saturated water content for soils below the top one-foot layer is assumed to be 32 percent for the prescriptive final cover.
- Residual Water Content of Soils. The residual water content for the top one-foot thick layer is assumed to be 8 percent for both the prescriptive Subtitle D and the proposed ET monolithic soil final cover systems. The layers below the top one-foot layer are assumed to have a 15 percent residual water content for the ET monolithic final cover system. Residual water content values of 10 and 15 percent are used for the bottom layers of the prescriptive final cover system.
- Saturated Hydraulic Conductivity. A saturated conductivity of $5x10^{-5}$ cm/s has been used for the top 12 inches of both the prescriptive Subtitle D and the proposed ET monolithic soil final cover systems. A hydraulic conductivity of $1x10^{-7}$ cm/s has been used at lower portion of the prescriptive Subtitle D final cover. Additionally, a thin layer (below the top one-foot layer) is modeled with $3.2x10^{-12}$ cm/s hydraulic conductivity to represent the geomembrane cover. A hydraulic conductivity of $1.5x10^{-5}$ cm/s has been used for the lower portion of the proposed ET monolithic soil final cover. This value is typical for the hydraulic conductivity of silty or sandy clay material placed with low levels of compactive effort, which is the suggested soil placement technique for monolithic covers.
- Suction Head. UNSAT-H utilizes the initial suction head of the soil layers for initial hydraulic conditions. Initial suction head for the ET monolithic cover is 15,000 cm, which corresponds to wilting point, and suggested to be used for ET monolithic soil covers. However, considering that the soils will not be at the wilting point when placed, a value of 10,000 cm was used for the erosion layer of both the prescriptive and the proposed ET monolithic soil final covers. Considering that the prescriptive infiltration layer will be constructed with a relatively high moisture content and the geomembrane does not have a suction head, a value of 100 cm was used for these layers.

1.4 Equivalency Demonstration Summary

A summary of the equivalency demonstration is provided in Table 1-3. As shown, the ET monolithic soil final cover system performs better than the prescriptive Subtitle D composite final cover system for each of the following equivalency criteria.

- Percolation Rate. As shown on Table 1-3 and Figure I-10, the ET monolithic final cover system estimated percolation rate is less than (1) the site specific modeling estimate, (2) similar ACAP sites, and (3) ACAP's current alternative final cover recommended percolation rate.
- Moisture Content Variance. Figure I-11 provides a summary of the moisture content fluctuation of the various layers of the ET monolithic soil alternative final cover system. As shown, the moisture content fluctuates substantially in the upper layers of the system; however, the moisture content in the bottom layer is relatively constant. This analysis provides another demonstration that very little surface water infiltrates through the proposed alternative final cover system.

1.5 Alternative Final Cover Material Requirements

As discussed in previous sections of this appendix, the proposed ET monolithic soil alternative final cover system includes three layers (from top to bottom): a vegetation layer; a vegetation support layer; and a foundation (intermediate cover) layer. A description of the material requirements for each layer is listed below.

- Vegetation Layer. Soil for this layer will consist of material that is capable of supporting the rapid establishment of vegetation. If on-site "topsoil" is not available, this material will be imported from an off-site source. East Oak Recycling and Disposal Facility will notify the ODEQ of the vegetation layer source two weeks prior to construction.
- Vegetation Support Layer. This 24-inch-thick layer will be capable of storing moisture to be used by the vegetation layer. This layer will consist of cohesive soils that classify as either CL, CH, ML, SM, or SC according to the Unified Soil Classification System (USCS). As recommended in information developed for the EPA's ACAP, to promote adequate root development, the soil in a vegetation support layer should be compacted to between 75 and 85 percent of Standard Proctor density at a moisture content less than optimum. This layer will be placed in one 24-inch lift.

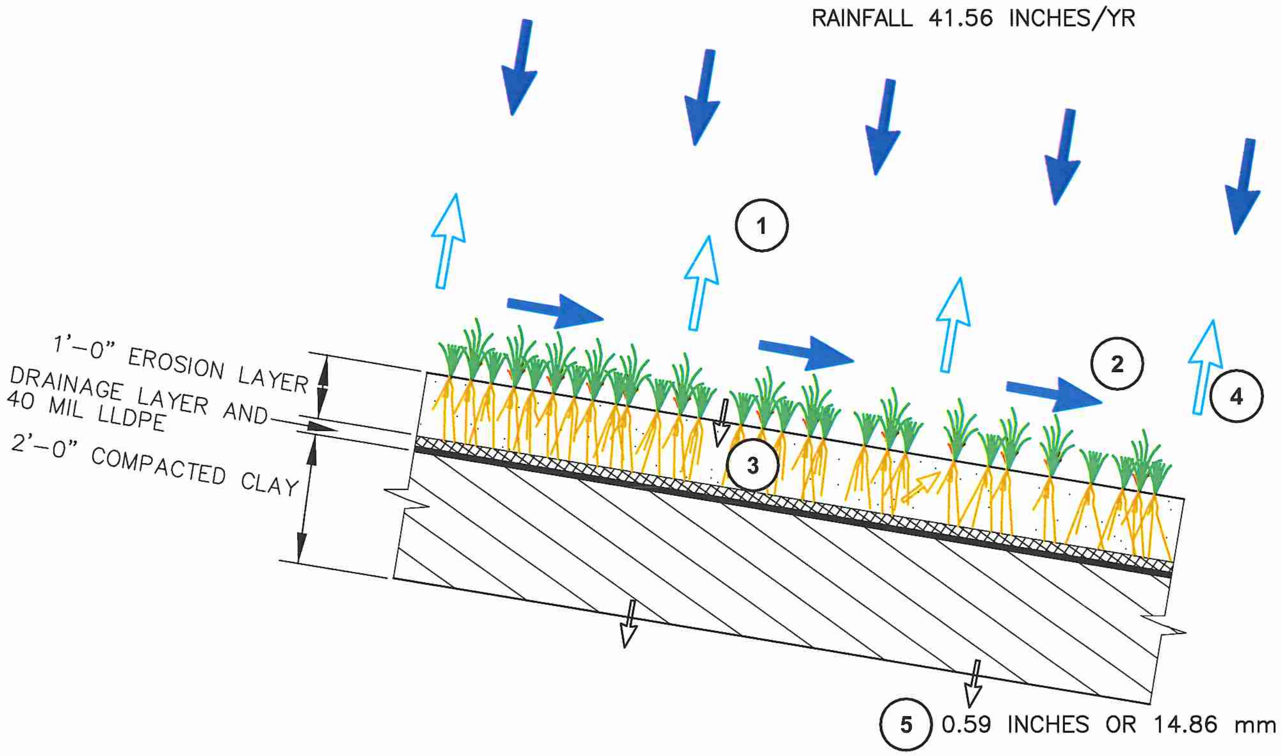
Table 1-3
Equivalency Demonstration Summary

Equivalency Criteria	Subtitle D Prescriptive Composite Final Cover System	ET Monolithic Soil Final Cover System
1. Estimated percolation rate through cover system	• 14.86 mm using UNSAT-H • 5.5 – 6.1 mm – similar ACAP sites • 5 mm ACAP current recommendation	4.58 mm using UNSAT-H
2. Moisture content variance in the 10-foot-thick waste column below the final cover system	Moisture content decreases from 25% to 18.8% over the 5-year analysis period.	Moisture content decreases from 25% to 8.7% over the 5-year analysis period.

- Existing 12-inch-thick Foundation Layer. This layer functions as a foundation layer for the vegetation support layer. However, this material will also function as a vegetation support layer. Although this layer has no specific material requirements, it is composed of soils that are classified as CL, CH, ML, SM, or SL, according to the USCS. Therefore, this layer meets the specifications of the vegetation support layer.

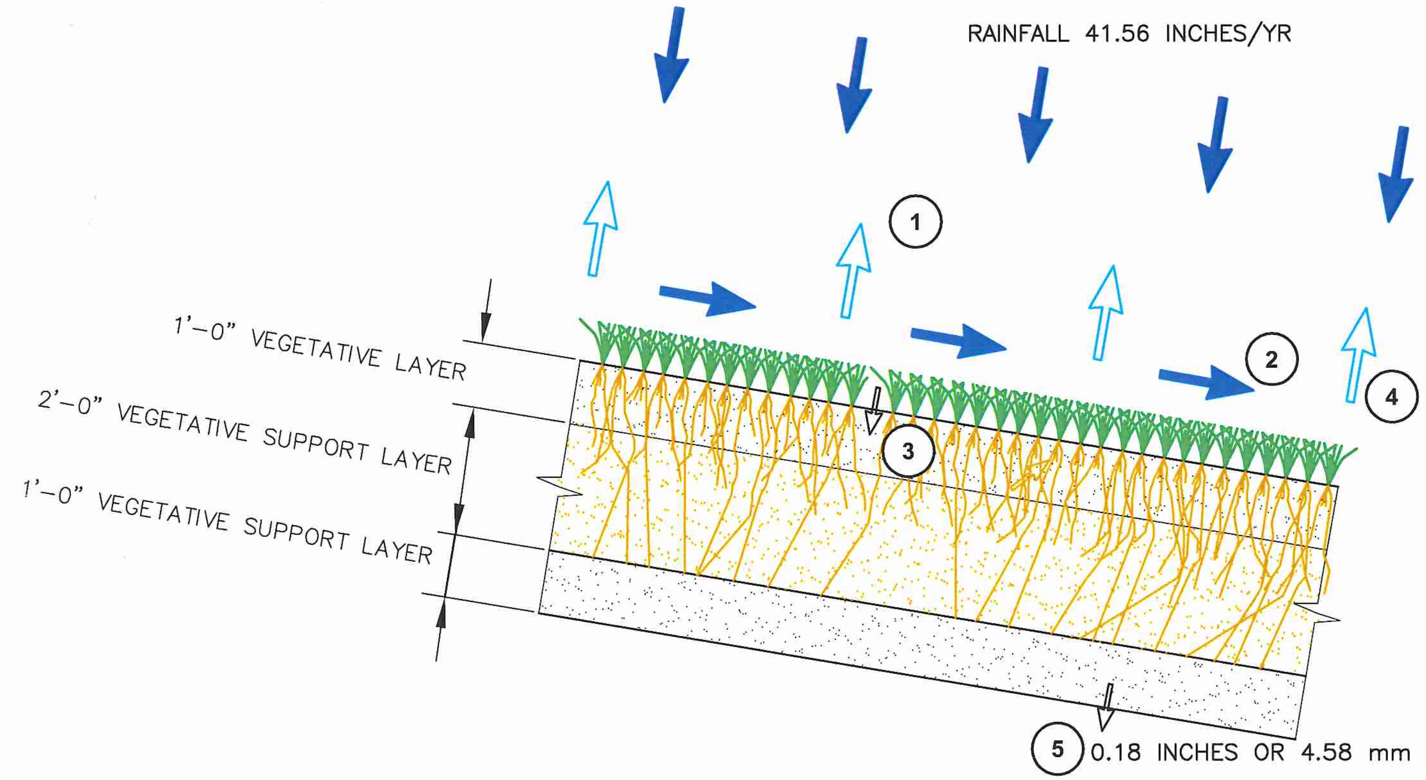
The existing 12-inch-thick foundation layer thickness will be verified prior to placement of the 24-inch-thick vegetation support layer. As an option to the foundation layer thickness verification, the vegetation support layer may be installed as a 36-inch-thick single layer.

Construction Quality Assurance and Quality Control (QA/QC) procedures for each of these layers, including surveying requirements, are addressed in the Alternative Final Cover QA/QC Plan included in Appendix I-4.



PRESCRIPTIVE SUBTITLE D COMPOSITE FINAL COVER SYSTEM

0 1.5 3
SCALE IN FEET



ET MONOLITHIC SOIL ALTERNATIVE FINAL COVER SYSTEM

0 1.5 3
SCALE IN FEET

LEGEND

1. PRECIPITATION
2. RUNOFF
3. INFILTRATION
4. EVAPOTRANSPIRATION
5. PERCOLATION

RAINFALL

RUNOFF

INFILTRATION AND PERCOLATION

NOTES:

1. REFER TO APPENDIX I–2 FOR ADDITIONAL UNSAT–H MODELING INFORMATION.

REGISTERED PROFESSIONAL ENGINEER
JEFFREY P. YOUNG
17831
OKLAHOMA

8-13-07

☐ DRAFT
☒ FOR PERMITTING PURPOSES ONLY
☐ ISSUED FOR CONSTRUCTION
☐ CLIENT APPROVAL BY: ____________

DATE: 07/2007
FILE: 0086–356–11
CAD: FIGURE I–10.DWG

DRAWN BY: VRS
DESIGN BY: MDM
REVIEWED BY: JPY

REUSE OF DOCUMENTS

PREPARED FOR

WASTE MANAGEMENT OF OKLAHOMA, INC.

REVISIONS

NO.	DATE	DESCRIPTION

TIER III PERMIT MODIFICATION
ALTERNATIVE FINAL COVER
FINAL COVER COMPARISON

EAST OAK RDF
OKLAHOMA COUNTY, OKLAHOMA

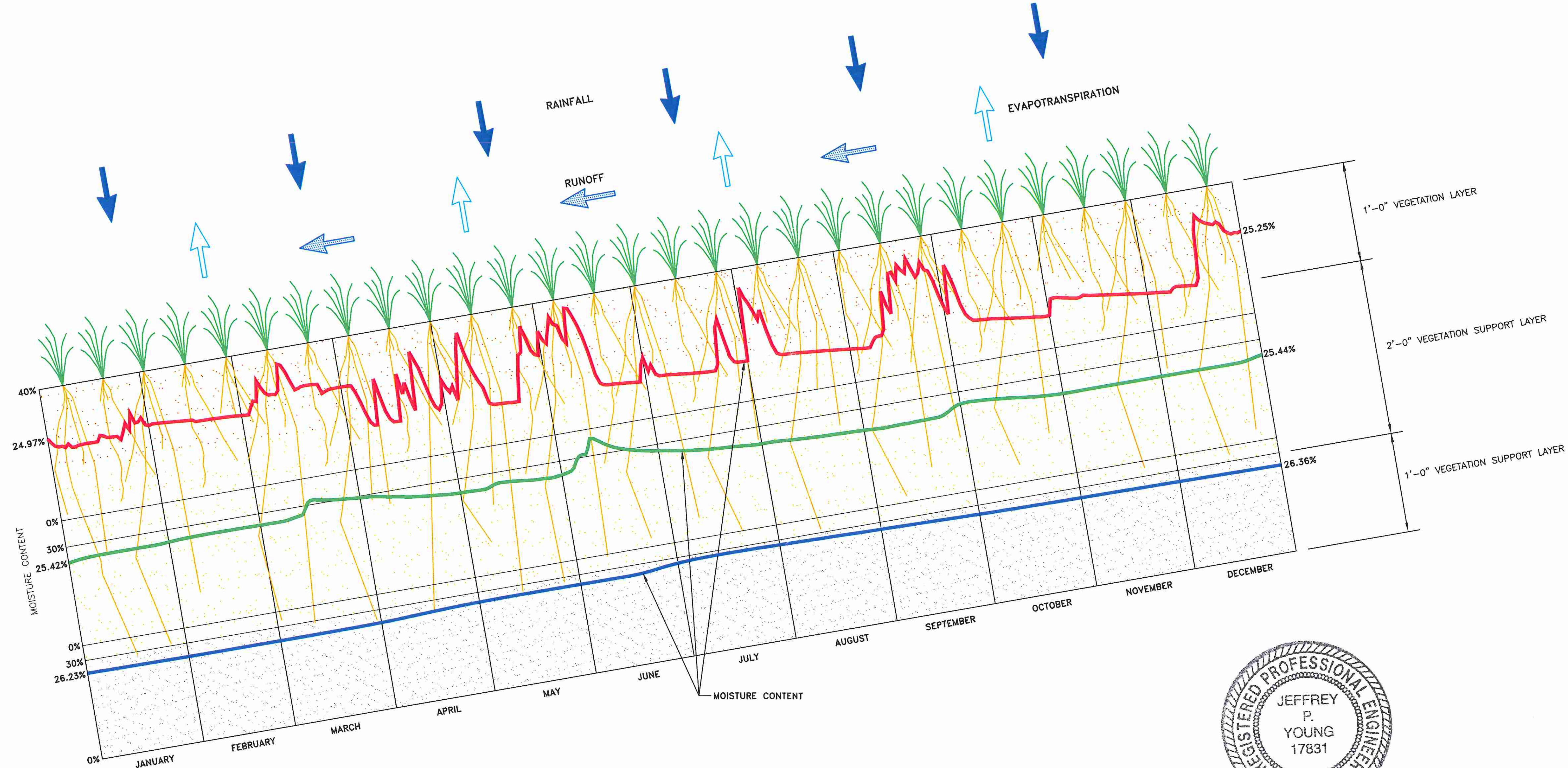
Weaver Boos Consultants

CHICAGO, IL
NAPERVILLE, IL
COLUMBUS, OH
DENVER, CO

FORT WORTH, TX
(817) 735–9770

GRIFFITH, IN
SOUTH BEND, IN
SPRINGFIELD, IL
ST. LOUIS, MO

FIGURE I–10



REGISTERED PROFESSIONAL ENGINEER
JEFFREY P. YOUNG
17831
OKLAHOMA

8-13-07

O:\0086\356\EXPANSION-2007\APPENDIX I\AFC\FIGURE I-11.dwg, 7/21/2007 4:57:07 PM, jqueen, 1:2

☐	DRAFT
☒	FOR PERMITTING PURPOSES ONLY
☐	ISSUED FOR CONSTRUCTION
☐	CLIENT APPROVAL BY: ____________

DATE: 07/2007
FILE: 0086-356-11
CAD: FIGURE I-11.DWG

DRAWN BY: VRS
DESIGN BY: MDM
REVIEWED BY: JPY

PREPARED FOR
WASTE MANAGEMENT OF OKLAHOMA, INC.

REVISIONS

NO.	DATE	DESCRIPTION

TIER III PERMIT MODIFICATION ALTERNATIVE FINAL COVER MOISTURE CONTENT DISTRIBUTION

EAST OAK RDF
OKLAHOMA COUNTY, OKLAHOMA

Weaver Boos Consultants

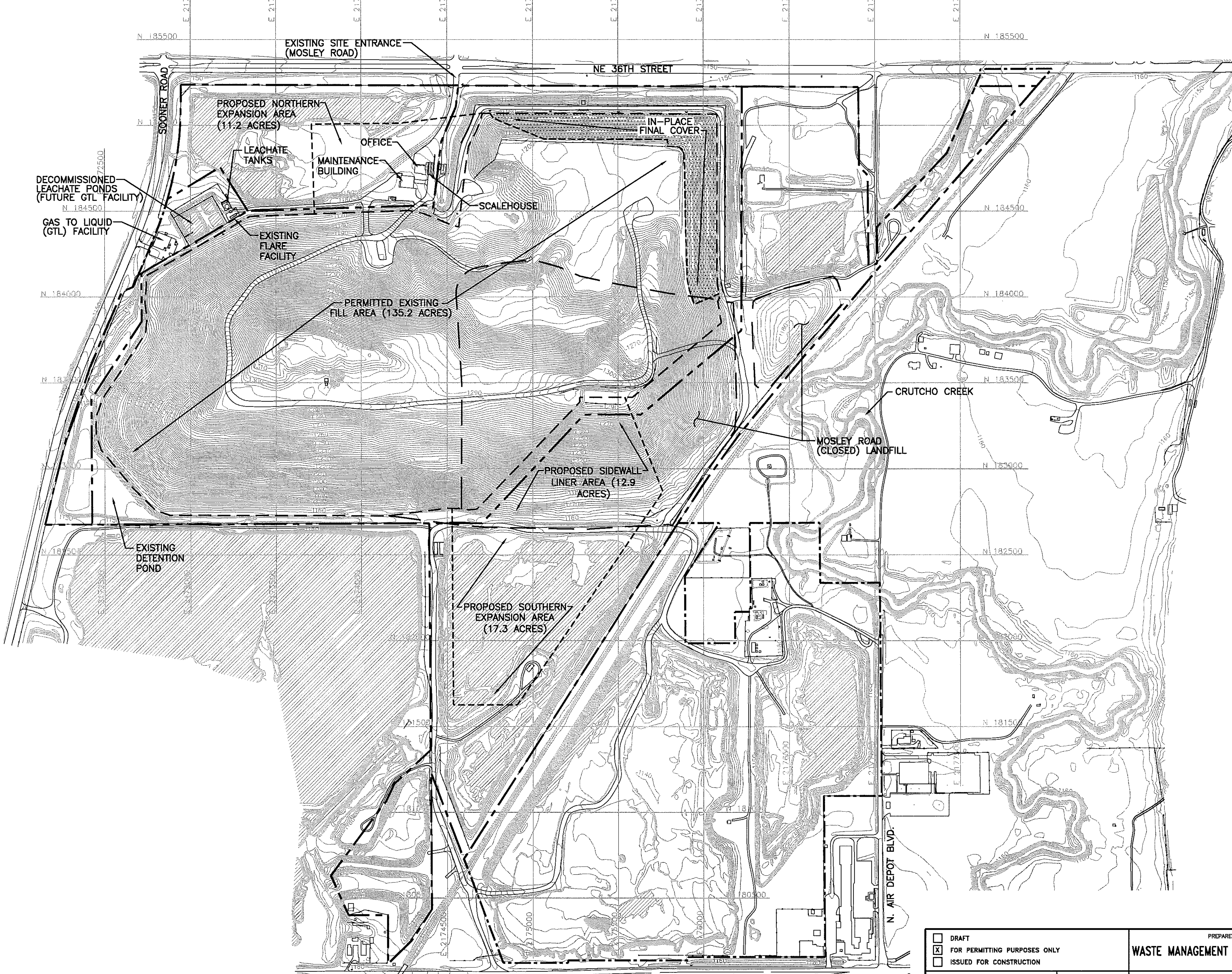
CHICAGO, IL
NAPERVILLE, IL
COLUMBUS, OH
DENVER, CO
FORT WORTH, TX
(817) 735-9770
GRIFFITH, IN
SOUTH BEND, IN
SPRINGFIELD, IL
ST. LOUIS, MO

FIGURE I-11

APPENDIX I-1

FIGURES

Includes pages I-1-1 through I-1-3



N

0 300 600

SCALE IN FEET

LEGEND

PROPERTY BOUNDARY
EXISTING PERMIT BOUNDARY
PROPOSED PERMIT BOUNDARY
PERMITTED LIMITS OF WASTE
PROPOSED LIMITS OF WASTE
MOSLEY ROAD LANDFILL LIMITS OF WASTE
N 183000 STATE PLANE GRID COORDINATE
1180 EXISTING CONTOUR
IN-PLACE FINAL COVER

LICENSED PROFESSIONAL ENGINEER
JONATHAN V. QUEEN
24456
OKLAHOMA

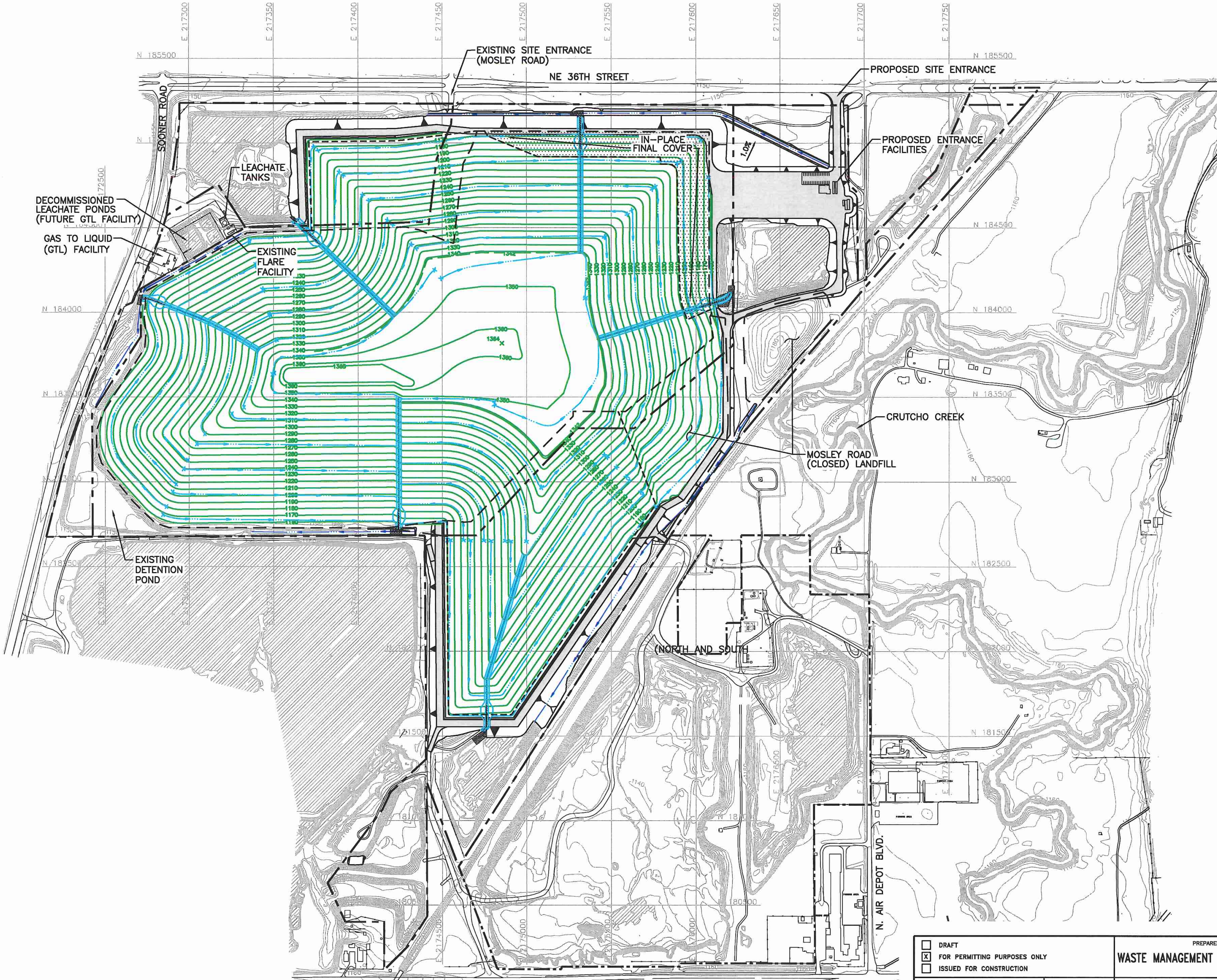
J-V2
5/31/16

NOTES:

1. EXISTING CONTOURS AND ELEVATIONS PROVIDED BY DALLAS AERIAL SURVEYS, INC. FROM AERIAL PHOTOGRAPHY FLOWN JANUARY 19, 2014.
2. PERMIT BOUNDARY WAS REPRODUCED FROM LEGAL DESCRIPTION PREPARED BY LEMKE LAND SURVEYING, INC.
3. PERMITTED LIMITS OF WASTE AND MOSLEY ROAD LANDFILL (CLOSED LANDFILL) LIMITS OF WASTE PROVIDED BY WASTE MANAGEMENT OF OKLAHOMA, INC.
4. IN-PLACE FINAL COVER AREA REPRODUCED FROM LEMKE LAND SURVEYING, INC. VERIFICATION SURVEY DATED JULY 2013 (FINAL COVER AREA 1).

☐ DRAFT ☒ FOR PERMITTING PURPOSES ONLY ☐ ISSUED FOR CONSTRUCTION	PREPARED FOR WASTE MANAGEMENT OF OKLAHOMA, INC.		TIER III PERMIT MODIFICATION SITE PLAN EAST OAK RDF OKLAHOMA COUNTY, OKLAHOMA
DATE: 04/2016 FILE: 0086-356-11 CAD: 2-SITE PLAN.DWG	DRAWN BY: RDM DESIGN BY: RJS REVIEWED BY: JVQ	REVISIONS NO. 1 — DATE 05/2016 — DESCRIPTION UPDATED SITE PLAN	
Weaver Consultants Group CA 3804 PE-06/30/2017			WWW.WCGRP.COM — FIGURE I-1-1

O:\0086\356\EXPANSION-2007\APPENDIX I\AFC\FIGURE I-1-1.dwg, rmorris, 1:2



LICENSED PROFESSIONAL ENGINEER
JONATHAN V. QUEEN
24456
OKLAHOMA

J-VQ
5/31/16

0 300 600
SCALE IN FEET

LEGEND

- PROPERTY BOUNDARY
- EXISTING PERMIT BOUNDARY
- PROPOSED PERMIT BOUNDARY
- PERMITTED LIMITS OF WASTE
- PROPOSED LIMITS OF WASTE
- MOSLEY ROAD LANDFILL LIMITS OF WASTE
- N 183000 STATE PLANE GRID COORDINATE
- 1180 EXISTING CONTOUR
- 1280 PROPOSED FINAL COVER CONTOUR
- PROPOSED DRAINAGE CHANNEL
- PROPOSED DRAINAGE SWALE
- PROPOSED DRAINAGE CHUTE
- IN-PLACE FINAL COVER

NOTES:

1. EXISTING CONTOURS AND ELEVATIONS PROVIDED BY DALLAS AERIAL SURVEYS, INC. FROM AERIAL PHOTOGRAPHY FLOWN JANUARY 19, 2014.
2. PERMIT BOUNDARY WAS REPRODUCED FROM LEGAL DESCRIPTION PREPARED BY LEMKE LAND SURVEYING, INC.
3. PERMITTED LIMITS OF WASTE AND MOSLEY ROAD LANDFILL (CLOSED LANDFILL) LIMITS OF WASTE PROVIDED BY WASTE MANAGEMENT OF OKLAHOMA, INC.
4. IN-PLACE FINAL COVER LIMITS REPRODUCED FROM SOIL VERIFICATION SURVEY PREPARED BY LEMKE LAND SURVEYING, INC. DATED JUNE 2013.

O:\0086\356\EXPANSION-2007\APPENDIX I\AFC\FIGURE I-1-2 REV.DWG, rmorris, 1:2

☐ DRAFT
☒ FOR PERMITTING PURPOSES ONLY
☐ ISSUED FOR CONSTRUCTION

PREPARED FOR
WASTE MANAGEMENT OF OKLAHOMA, INC.

DATE: 04/2016	DRAWN BY: RDM
FILE: 0086-356-11	DESIGN BY: RJS
CAD: 10-CLOSURE PLAN.DWG	REVIEWED BY: JVQ

REVISIONS

NO.	DATE	DESCRIPTION
1	05/2016	UPDATED FINAL CONTOUR PLAN

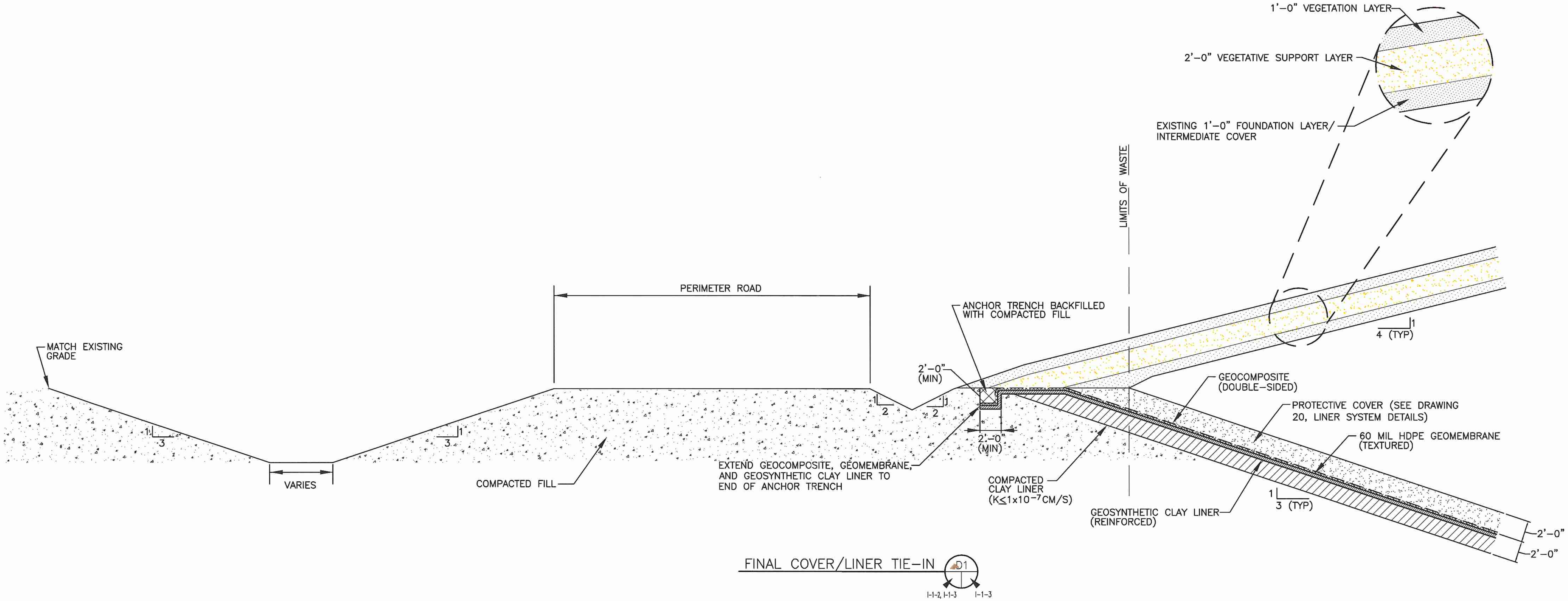
Weaver Consultants Group
CA 3804 PE-06/30/2017

TIER III PERMIT MODIFICATION FINAL CONTOUR PLAN

EAST OAK RDF
OKLAHOMA COUNTY, OKLAHOMA

WWW.WCGRP.COM

FIGURE I-1-2



FINAL COVER/LINER TIE–IN D1 I-1-2, I-1-3 I-1-3

0 5 10
SCALE IN FEET (VERTICAL)

REGISTERED PROFESSIONAL ENGINEER
JEFFREY P. YOUNG 17831
OKLAHOMA

8-13-07

☐ FOR INFORMATIONAL PURPOSES ONLY ☒ FOR PERMITTING PURPOSES ONLY ☐ ISSUED FOR CONSTRUCTION ☐ CLIENT APPROVAL BY:	PREPARED FOR WASTE MANAGEMENT OF OKLAHOMA, INC.	TIER III PERMIT MODIFICATION ALTERNATIVE FINAL COVER FINAL COVER DETAILS EAST OAK RDF OKLAHOMA COUNTY, OKLAHOMA
DATE: 07/2007 DRAWN BY: VRS FILE: 0086-356-11 DESIGN BY: MDM CAD: FIGURE I-1-3.DWG REVIEWED BY: JPY	REVISIONS NO. / DATE / DESCRIPTION	Weaver Boos Consultants
REUSE OF DOCUMENTS THIS DOCUMENT, AND THE DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF WEAVER BOOS CONSULTANTS – LLC SOUTHWEST AND IS NOT TO BE USED IN WHOLE OR IN PART, WITHOUT THE WRITTEN AUTHORIZATION OF WEAVER BOOS CONSULTANTS – LLC SOUTHWEST.		CHICAGO, IL NAPERVILLE, IL COLUMBUS, OH DENVER, CO / FORT WORTH, TX (817) 735–9770 / GRIFFITH, IN SOUTH BEND, IN SPRINGFIELD, IL ST. LOUIS, MO FIGURE I–1–3

O:\0086\356\EXPANSION-2007\APPENDIX 1\AFC\FIGURE I-1-3.dwg, 7/21/2007 4:59:14 PM, jqueen, 1:2

APPENDIX I-2

EQUIVALENCY DESIGN DEMONSTRATION

REGISTERED PROFESSIONAL ENGINEER
JEFFREY
P.
YOUNG
17831
OKLAHOMA

8-13-07

SUBTITLE D PRESCRIPTIVE COMPOSITE FINAL COVER UNSAT-H ANALYSIS

```
--------------------------------------------------------------------------

                         Program DATAINH
                          Version2.03

--------------------------------------------------------------------------

 Input Filename: C:\Program Files\University of Wisconsin\WinUnsatH\project.i
 Date Processed:  8-MAY-**
 Time Processed:  9:15:18

--------------------------------------------------------------------------
 Title:
 East Oak RDF Prescriptive Subtitle D Final Cover
--------------------------------------------------------------------------

 Options chosen include:

 IPLANT =   1        LOWER  =   1       NGRAV  =   1        ISWDIF =   1
 IHEAT  =   0        UPPERH =   0       LOWERH =   1
 NPRINT =   0        DAYEND = 365       NDAYS  = 365        NYEARS =   5
 IRAIN  =   1        ICONVH =   0
 NSURPE =   1        NFHOUR =   2       ITOPBC =   0        ET_OPT =   1
 ICLOUD =   0
 KOPT   =   4        KEST   =   3       IVAPOR =   1        SH_OPT =   1
 INMAX  =   2        INHMAX =   1
 HIRRI  =   1.00     HDRY   =  1.000E-06 HTOP   =   15.0    DHMAX  =   10.0
 DMAXBA =  1.000E-03 DELMAX =  0.250     DELMIN =  1.000E-04 STOPHR =  24.0
 OUTTIM =  0.250
 TORT   =  0.660     TSOIL  =   291.     VAPDIF =  0.240     QHTOP  =  0.00

 IVAPOR = 1:  This option allows vapor flow
 Saturated vapor density (g/cm3)
  of soil when soil temperature is
  a constant equal to TSOIL         =  1.521E-05
 100*MOLAR*GRAV/GASCON (K/cm)       =  2.123E-04
 VC (cm5/g/h)                       =  5.702E+02
 TGRAD  =   0.00     TSMEAN =   0.00     TSAMP  =   0.00     QHLEAK =   0.00
 WTF    =  0.500     RFACT  =   1.00     RAINIF =  1.000E-03 DHFACT =  0.100
 MATN   =   3        NPT    =   25

--------------------------------------------------------------------------
 KOPT = 4:  van Genuchten functions for soil hydraulic properties

 THETA vs H, MAT 1,
      AIRINT =   0.0000                        THET =   0.40000
        THTR =  8.00000E-02                    ALPHA =  5.00000E-03
           N =   1.4800                            M =  0.32432
     K vs H, MAT 1,
      AIRINK =   0.0000                           SK =  0.18000
           A =  5.00000E-03                        N =   1.4800
           M =  0.32432                       KMODEL =   2.0000
        EPIT =  0.50000

 THETA vs H, MAT 2,
      AIRINT =   0.0000                        THET =  1.00000E-02
        THTR =  1.00000E-02                    ALPHA =  5.00000E-03
           N =   1.4800                            M =  0.32432
     K vs H, MAT 2,
      AIRINK =   0.0000                           SK =  1.15000E-08
           A =  5.00000E-03                        N =   1.4800
```

EOAK SUBD INPUT

```
         M =  0.32432                                        KMODEL =    2.0000
      EPIT =  0.50000

THETA vs H, MAT 3,
    AIRINT =    0.0000                                         THET =  0.32000
      THTR =  0.15000                                         ALPHA =  5.00000E-03
         N =    1.4800                                            M =  0.32432
  K vs H, MAT 3,
    AIRINK =    0.0000                                           SK =  3.60000E-02
         A =  5.00000E-03                                         N =   1.4800
         M =  0.32432                                        KMODEL =   2.0000
      EPIT =  0.50000
```

Surface node hydraulic properties

```
HIRRI =      1.0     , THETA = 0.4000, K =   1.5281E-01, C =  -6.0345E-05
HDRY  =    1.00E-06, THETA = 0.4000, K =   1.8000E-01, C =  -7.9592E-08
NDAY =   0
```

NODE	Z	MAT	HEAD	CONDUCTIVITY	CAPACITY	THETA	TEMP
1	0.00	1	1.0000E+04	6.8953E-08	-2.3395E-06	0.1289	291.0
2	5.00	1	1.0000E+04	6.8953E-08	-2.3395E-06	0.1289	291.0
3	9.00	1	1.0000E+04	6.8953E-08	-2.3395E-06	0.1289	291.0
4	12.00	1	1.0000E+04	6.8953E-08	-2.3395E-06	0.1289	291.0
5	15.00	1	1.0000E+02	2.1082E-02	-3.6699E-04	0.3697	291.0
6	18.00	1	1.0000E+02	2.1082E-02	-3.6699E-04	0.3697	291.0
7	21.00	1	1.0000E+02	2.1082E-02	-3.6699E-04	0.3697	291.0
8	25.00	1	1.0000E+02	2.1082E-02	-3.6699E-04	0.3697	291.0
9	30.00	1	1.0000E+02	2.1082E-02	-3.6699E-04	0.3697	291.0
10	30.50	1	1.0000E+02	2.1082E-02	-3.6699E-04	0.3697	291.0
11	30.60	2	1.0000E+02	1.3469E-09	0.0000E+00	0.0100	291.0
12	30.70	3	1.0000E+02	4.2164E-03	-1.9496E-04	0.3039	291.0
13	35.00	3	1.0000E+02	4.2164E-03	-1.9496E-04	0.3039	291.0
14	40.00	3	1.0000E+02	4.2164E-03	-1.9496E-04	0.3039	291.0
15	45.00	3	1.0000E+02	4.2164E-03	-1.9496E-04	0.3039	291.0
16	50.00	3	1.0000E+02	4.2164E-03	-1.9496E-04	0.3039	291.0
17	55.00	3	1.0000E+02	4.2164E-03	-1.9496E-04	0.3039	291.0
18	60.00	3	1.0000E+02	4.2164E-03	-1.9496E-04	0.3039	291.0
19	65.00	3	1.0000E+02	4.2164E-03	-1.9496E-04	0.3039	291.0
20	70.00	3	1.0000E+02	4.2164E-03	-1.9496E-04	0.3039	291.0
21	75.00	3	1.0000E+02	4.2164E-03	-1.9496E-04	0.3039	291.0
22	80.00	3	1.0000E+02	4.2164E-03	-1.9496E-04	0.3039	291.0
23	85.00	3	1.0000E+02	4.2164E-03	-1.9496E-04	0.3039	291.0
24	90.00	3	1.0000E+02	4.2164E-03	-1.9496E-04	0.3039	291.0
25	91.50	3	1.0000E+02	4.2164E-03	-1.9496E-04	0.3039	291.0

Total Initial Storage = 26.5385 cm

IPLANT = 1

LEAF= 1, NFROOT= 1, NUPTAK= 1, NFPET= 1, NSOW= 92, NHRVST=306

Total number of Growth Day - Leaf Area Index (LAI) data pairs =   5

Growth Day	LAI
0	0.100
91	2.000
182	2.000
273	2.000

EOAK SUBD INPUT

365 0.100

BARE = 0.050

DAY	LAI	DAY	LAI	DAY	LAI	DAY	LAI	DAY	LAI	DAY	LAI
1	0.121	2	0.142	3	0.163	4	0.184	5	0.204	6	0.225
7	0.246	8	0.267	9	0.288	10	0.309	11	0.330	12	0.351
13	0.371	14	0.392	15	0.413	16	0.434	17	0.455	18	0.476
19	0.497	20	0.518	21	0.538	22	0.559	23	0.580	24	0.601
25	0.622	26	0.643	27	0.664	28	0.685	29	0.705	30	0.726
31	0.747	32	0.768	33	0.789	34	0.810	35	0.831	36	0.852
37	0.873	38	0.893	39	0.914	40	0.935	41	0.956	42	0.977
43	0.998	44	1.019	45	1.040	46	1.060	47	1.081	48	1.102
49	1.123	50	1.144	51	1.165	52	1.186	53	1.207	54	1.227
55	1.248	56	1.269	57	1.290	58	1.311	59	1.332	60	1.353
61	1.374	62	1.395	63	1.415	64	1.436	65	1.457	66	1.478
67	1.499	68	1.520	69	1.541	70	1.562	71	1.582	72	1.603
73	1.624	74	1.645	75	1.666	76	1.687	77	1.708	78	1.729
79	1.749	80	1.770	81	1.791	82	1.812	83	1.833	84	1.854
85	1.875	86	1.896	87	1.916	88	1.937	89	1.958	90	1.979
91	2.000	92	2.000	93	2.000	94	2.000	95	2.000	96	2.000
97	2.000	98	2.000	99	2.000	100	2.000	101	2.000	102	2.000
103	2.000	104	2.000	105	2.000	106	2.000	107	2.000	108	2.000
109	2.000	110	2.000	111	2.000	112	2.000	113	2.000	114	2.000
115	2.000	116	2.000	117	2.000	118	2.000	119	2.000	120	2.000
121	2.000	122	2.000	123	2.000	124	2.000	125	2.000	126	2.000
127	2.000	128	2.000	129	2.000	130	2.000	131	2.000	132	2.000
133	2.000	134	2.000	135	2.000	136	2.000	137	2.000	138	2.000
139	2.000	140	2.000	141	2.000	142	2.000	143	2.000	144	2.000
145	2.000	146	2.000	147	2.000	148	2.000	149	2.000	150	2.000
151	2.000	152	2.000	153	2.000	154	2.000	155	2.000	156	2.000
157	2.000	158	2.000	159	2.000	160	2.000	161	2.000	162	2.000
163	2.000	164	2.000	165	2.000	166	2.000	167	2.000	168	2.000
169	2.000	170	2.000	171	2.000	172	2.000	173	2.000	174	2.000
175	2.000	176	2.000	177	2.000	178	2.000	179	2.000	180	2.000
181	2.000	182	2.000	183	2.000	184	2.000	185	2.000	186	2.000
187	2.000	188	2.000	189	2.000	190	2.000	191	2.000	192	2.000
193	2.000	194	2.000	195	2.000	196	2.000	197	2.000	198	2.000
199	2.000	200	2.000	201	2.000	202	2.000	203	2.000	204	2.000
205	2.000	206	2.000	207	2.000	208	2.000	209	2.000	210	2.000
211	2.000	212	2.000	213	2.000	214	2.000	215	2.000	216	2.000
217	2.000	218	2.000	219	2.000	220	2.000	221	2.000	222	2.000
223	2.000	224	2.000	225	2.000	226	2.000	227	2.000	228	2.000
229	2.000	230	2.000	231	2.000	232	2.000	233	2.000	234	2.000
235	2.000	236	2.000	237	2.000	238	2.000	239	2.000	240	2.000
241	2.000	242	2.000	243	2.000	244	2.000	245	2.000	246	2.000
247	2.000	248	2.000	249	2.000	250	2.000	251	2.000	252	2.000
253	2.000	254	2.000	255	2.000	256	2.000	257	2.000	258	2.000
259	2.000	260	2.000	261	2.000	262	2.000	263	2.000	264	2.000
265	2.000	266	2.000	267	2.000	268	2.000	269	2.000	270	2.000
271	2.000	272	2.000	273	2.000	274	1.979	275	1.959	276	1.938
277	1.917	278	1.897	279	1.876	280	1.855	281	1.835	282	1.814
283	1.793	284	1.773	285	1.752	286	1.732	287	1.711	288	1.690
289	1.670	290	1.649	291	1.628	292	1.608	293	1.587	294	1.566
295	1.546	296	1.525	297	1.504	298	1.484	299	1.463	300	1.442
301	1.422	302	1.401	303	1.380	304	1.360	305	1.339	306	1.318
307	1.298	308	1.277	309	1.257	310	1.236	311	1.215	312	1.195
313	1.174	314	1.153	315	1.133	316	1.112	317	1.091	318	1.071
319	1.050	320	1.029	321	1.009	322	0.988	323	0.967	324	0.947
325	0.926	326	0.905	327	0.885	328	0.864	329	0.843	330	0.823
331	0.802	332	0.782	333	0.761	334	0.740	335	0.720	336	0.699
337	0.678	338	0.658	339	0.637	340	0.616	341	0.596	342	0.575

343	0.554	344	0.534	345	0.513	346	0.492	347	0.472	348	0.451
349	0.430	350	0.410	351	0.389	352	0.368	353	0.348	354	0.327
355	0.307	356	0.286	357	0.265	358	0.245	359	0.224	360	0.203
361	0.183	362	0.162	363	0.141	364	0.121	365	0.100		

NFROOT = 1: Negative exponential representation of root growth

AA (intersection of the curve at z=0 with abscissa) = 1.200
B1 (coefficient defining degree of curvature) = 0.13000
B2 (coefficient that determines the value of asymptote = 0.020

Root depth, density, and weight/node versus depth

DAY	MAX ROOT DEPTH	ROOT DENSITY (cm/cm)	NORMALIZED DENSITY (1/cm)
1	0.00	0.000	0.0000
1	5.00	0.646	0.1715
1	9.00	0.392	0.1041
1	12.00	0.272	0.0722
1	15.00	0.191	0.0506

MXROOT (deepest node to which roots penetrate) = 5
NUPTAK = 1: Feddes et al. 1975 moisture dependent sink term

For Material No. 1

THETAW (wilting point moisture content) = 0.1203
THETAD (lower limit of optimum moisture content) = 0.1667
THETAN (upper limit of optimum moisture content) = 0.3988

For Material No. 2

THETAW (wilting point moisture content) = 0.0100
THETAD (lower limit of optimum moisture content) = 0.0100
THETAN (upper limit of optimum moisture content) = 0.0100

For Material No. 3

THETAW (wilting point moisture content) = 0.1714
THETAD (lower limit of optimum moisture content) = 0.1961
THETAN (upper limit of optimum moisture content) = 0.3194

NFHOUR = 2: User subroutine for hourly PET distribution

0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0150	0.0440
0.0699	0.0911	0.1061	0.1139	0.1139	0.1061	0.0911	0.0699
0.0440	0.0150	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100

ET_OPT = 1 and IHEAT = 0:
PET calculated from meteorological data
using subroutine CALPEN

ALBEDO = 2.000E-01
ALT = 3.730E+02 (m)
ZU = 5.000E-01 (m)
PMB = 1.000E+03 (mb)

ET_OPT = 1: Meteorological Data

IDAY	Temperature Max F	Min F	Dew F	Solar Rad ly/d	Wind Speed mph	Cloud Cover tenth	Prec. in
1.	35.	21.	17.6	279.	8.3	0.0	0.00
2.	47.	24.	19.7	187.	5.2	0.0	0.00
3.	37.	17.	19.6	124.	7.0	0.0	0.00
4.	30.	12.	10.6	266.	4.2	0.0	0.03
5.	36.	17.	17.3	135.	9.9	0.0	0.01
6.	42.	19.	28.5	69.	13.2	0.0	0.04
7.	42.	15.	14.9	284.	6.6	0.0	0.00
8.	46.	31.	26.4	261.	9.4	0.0	0.00
9.	65.	27.	31.1	282.	6.2	0.0	0.00
10.	60.	42.	41.6	279.	7.2	0.0	0.00
11.	74.	40.	34.3	285.	9.4	0.0	0.00
12.	63.	46.	35.5	189.	6.8	0.0	0.00
13.	55.	41.	36.7	211.	11.4	0.0	0.00
14.	55.	31.	30.0	289.	6.6	0.0	0.00
15.	64.	31.	27.1	297.	10.0	0.0	0.00
16.	62.	50.	40.7	155.	16.2	0.0	0.30
17.	60.	35.	28.2	293.	6.2	0.0	0.00
18.	39.	26.	26.9	53.	6.4	0.0	0.01
19.	51.	25.	24.1	315.	7.9	0.0	0.00
20.	57.	27.	25.8	302.	5.2	0.0	0.00
21.	43.	29.	24.1	245.	5.8	0.0	0.00
22.	33.	22.	27.1	179.	6.2	0.0	0.07
23.	40.	21.	22.0	327.	6.0	0.0	0.19
24.	55.	32.	26.2	300.	8.7	0.0	0.41
25.	60.	40.	31.8	312.	6.9	0.0	0.00
26.	54.	44.	47.2	33.	8.2	0.0	0.39
27.	63.	43.	44.3	307.	13.2	0.0	0.04
28.	43.	33.	34.0	53.	13.2	0.0	0.01
29.	36.	31.	29.5	46.	9.3	0.0	0.07
30.	53.	23.	26.1	344.	6.7	0.0	0.00
31.	62.	34.	26.9	289.	7.6	0.0	0.00
32.	73.	37.	34.3	343.	7.4	0.0	0.00
33.	79.	46.	37.5	348.	6.9	0.0	0.00
34.	56.	38.	34.1	282.	12.6	0.0	0.00
35.	65.	26.	28.2	353.	7.2	0.0	0.00
36.	53.	33.	26.0	361.	7.6	0.0	0.00
37.	58.	39.	27.5	271.	7.5	0.0	0.00
38.	47.	24.	18.1	332.	9.0	0.0	0.00
39.	49.	20.	13.6	378.	4.8	0.0	0.00
40.	60.	39.	23.7	373.	10.5	0.0	0.00
41.	57.	36.	27.7	360.	8.2	0.0	0.00
42.	36.	23.	9.9	210.	10.5	0.0	0.00
43.	26.	19.	6.7	76.	7.3	0.0	0.00
44.	33.	26.	14.7	92.	5.5	0.0	0.00
45.	46.	31.	32.4	55.	9.4	0.0	0.02
46.	56.	28.	33.6	177.	12.2	0.0	0.00
47.	43.	26.	18.7	118.	6.1	0.0	0.01
48.	58.	22.	18.2	423.	4.2	0.0	0.00
49.	62.	37.	25.8	320.	10.3	0.0	0.00
50.	65.	35.	29.9	413.	7.2	0.0	0.00
51.	75.	38.	28.9	420.	7.8	0.0	0.00
52.	72.	40.	24.4	422.	6.3	0.0	0.00
53.	78.	51.	34.1	317.	13.9	0.0	0.00
54.	73.	47.	34.6	430.	9.5	0.0	0.00
55.	66.	37.	20.4	437.	7.4	0.0	0.00
56.	72.	47.	40.8	396.	13.0	0.0	0.00
57.	76.	56.	55.0	261.	12.1	0.0	0.00
58.	63.	40.	49.8	127.	7.8	0.0	0.00

					EOAK	SUBD	INPUT
59.	40.	29.	28.9	73.	12.2	0.0	0.00
60.	29.	21.	18.1	79.	10.1	0.0	0.00
61.	24.	21.	19.5	117.	6.7	0.0	0.00
62.	33.	21.	24.1	240.	3.5	0.0	0.25
63.	41.	31.	35.4	67.	6.8	0.0	0.14
64.	43.	39.	38.0	80.	4.3	0.0	0.01
65.	60.	28.	43.6	109.	10.0	0.0	0.61
66.	28.	15.	16.3	469.	14.5	0.0	0.01
67.	44.	14.	12.4	502.	6.0	0.0	0.05
68.	61.	28.	18.3	509.	11.8	0.0	0.00
69.	66.	40.	26.5	501.	14.2	0.0	0.00
70.	67.	49.	44.1	320.	16.6	0.0	0.00
71.	65.	59.	55.9	131.	15.6	0.0	0.41
72.	60.	55.	55.0	72.	4.9	0.0	1.56
73.	64.	54.	54.0	212.	8.1	0.0	0.27
74.	72.	55.	50.6	291.	7.1	0.0	0.06
75.	77.	46.	43.0	493.	4.4	0.0	0.00
76.	79.	47.	42.4	479.	3.6	0.0	0.00
77.	80.	50.	44.2	498.	8.4	0.0	0.00
78.	86.	60.	46.7	484.	14.6	0.0	0.00
79.	72.	52.	40.4	503.	7.1	0.0	0.00
80.	85.	53.	45.6	524.	14.1	0.0	0.00
81.	91.	63.	43.6	503.	12.6	0.0	0.00
82.	76.	50.	36.1	542.	6.6	0.0	0.00
83.	79.	52.	45.2	492.	10.6	0.0	0.00
84.	71.	60.	54.3	148.	10.8	0.0	0.15
85.	69.	43.	42.5	435.	10.8	0.0	0.02
86.	61.	36.	30.3	559.	7.6	0.0	0.00
87.	49.	38.	32.1	185.	7.5	0.0	0.00
88.	52.	41.	35.5	287.	6.2	0.0	0.00
89.	53.	34.	27.5	295.	6.1	0.0	0.00
90.	60.	40.	36.0	512.	5.0	0.0	0.00
91.	72.	45.	34.3	585.	8.0	0.0	0.00
92.	77.	51.	33.4	590.	11.5	0.0	0.00
93.	61.	49.	50.7	109.	6.5	0.0	0.16
94.	69.	46.	44.5	452.	5.5	0.0	0.01
95.	72.	46.	45.0	461.	8.1	0.0	0.00
96.	74.	53.	51.2	499.	7.3	0.0	0.00
97.	81.	56.	56.0	481.	12.3	0.0	0.00
98.	89.	63.	56.7	605.	14.7	0.0	0.00
99.	72.	52.	53.5	508.	9.8	0.0	0.00
100.	63.	39.	43.3	27.	9.8	0.0	1.14
101.	57.	30.	25.8	602.	11.1	0.0	0.00
102.	70.	35.	29.4	631.	6.9	0.0	0.00
103.	78.	39.	34.6	616.	6.7	0.0	0.00
104.	84.	58.	45.8	558.	16.6	0.0	0.00
105.	77.	60.	56.1	450.	8.1	0.0	0.00
106.	81.	59.	65.2	335.	10.6	0.0	0.00
107.	69.	54.	58.9	37.	6.8	0.0	1.12
108.	67.	48.	39.9	656.	9.3	0.0	0.00
109.	65.	42.	45.0	358.	7.2	0.0	0.28
110.	71.	50.	47.7	646.	7.9	0.0	0.00
111.	69.	46.	44.1	635.	8.8	0.0	0.01
112.	48.	42.	41.8	40.	10.4	0.0	1.91
113.	60.	41.	40.4	349.	8.6	0.0	0.05
114.	67.	40.	40.4	428.	6.9	0.0	0.01
115.	72.	46.	43.0	616.	11.6	0.0	0.00
116.	72.	44.	46.8	402.	17.2	0.0	0.00
117.	64.	38.	34.5	620.	6.0	0.0	0.00
118.	72.	45.	47.1	334.	8.3	0.0	0.00
119.	74.	56.	56.3	428.	7.5	0.0	0.13
120.	63.	54.	54.6	187.	6.0	0.0	0.32
121.	63.	53.	53.8	290.	9.3	0.0	0.00

					EOAK	SUBD	INPUT
122.	63.	53.	53.8	364.	5.3	0.0	0.01
123.	62.	52.	53.0	91.	7.1	0.0	0.07
124.	70.	50.	48.6	656.	7.0	0.0	0.01
125.	67.	46.	49.8	374.	6.5	0.0	0.52
126.	72.	56.	58.6	244.	8.4	0.0	1.20
127.	69.	59.	60.5	65.	9.2	0.0	1.89
128.	74.	58.	48.6	592.	14.0	0.0	0.00
129.	77.	53.	48.2	650.	9.0	0.0	0.00
130.	66.	49.	44.2	574.	8.3	0.0	0.00
131.	73.	47.	48.9	580.	3.9	0.0	0.00
132.	74.	56.	58.7	316.	12.1	0.0	0.00
133.	90.	72.	57.0	691.	8.8	0.0	0.00
134.	75.	63.	58.3	646.	7.5	0.0	0.00
135.	85.	60.	63.5	526.	6.5	0.0	0.00
136.	79.	73.	67.8	227.	11.3	0.0	0.00
137.	87.	60.	57.5	412.	11.9	0.0	0.00
138.	68.	48.	45.8	387.	9.9	0.0	0.00
139.	76.	41.	43.9	700.	3.1	0.0	0.00
140.	79.	55.	50.2	661.	6.1	0.0	0.00
141.	82.	61.	56.0	555.	4.5	0.0	0.02
142.	84.	62.	57.6	633.	9.6	0.0	0.00
143.	75.	61.	63.6	149.	12.4	0.0	0.32
144.	60.	54.	54.8	83.	6.3	0.0	0.50
145.	58.	54.	54.4	116.	5.8	0.0	0.21
146.	75.	58.	62.9	356.	7.0	0.0	2.23
147.	80.	62.	60.0	558.	10.6	0.0	0.14
148.	76.	58.	50.9	671.	6.8	0.0	0.00
149.	68.	54.	52.3	389.	5.5	0.0	0.00
150.	70.	61.	60.0	183.	4.3	0.0	0.00
151.	80.	60.	60.1	600.	4.3	0.0	1.05
152.	81.	58.	61.1	619.	4.0	0.0	0.03
153.	87.	63.	61.7	450.	7.1	0.0	0.15
154.	78.	64.	65.3	403.	7.2	0.0	0.57
155.	79.	61.	62.4	355.	7.4	0.0	1.72
156.	80.	58.	62.2	528.	6.8	0.0	0.07
157.	85.	65.	68.3	557.	8.6	0.0	0.29
158.	90.	74.	72.6	636.	11.2	0.0	0.00
159.	86.	70.	71.1	322.	8.2	0.0	0.00
160.	81.	63.	66.5	123.	9.2	0.0	3.93
161.	72.	60.	62.1	129.	6.3	0.0	0.48
162.	72.	54.	52.3	679.	6.9	0.0	0.13
163.	79.	51.	50.8	683.	4.8	0.0	0.00
164.	82.	60.	54.6	701.	7.3	0.0	0.00
165.	87.	65.	60.5	701.	10.6	0.0	0.00
166.	86.	68.	60.1	704.	10.9	0.0	0.00
167.	84.	68.	62.0	697.	9.0	0.0	0.00
168.	84.	66.	61.3	657.	6.3	0.0	0.00
169.	84.	64.	59.0	671.	5.8	0.0	0.00
170.	86.	65.	60.8	630.	5.8	0.0	0.00
171.	87.	67.	60.9	614.	5.8	0.0	0.00
172.	88.	68.	61.5	662.	5.2	0.0	0.00
173.	89.	68.	62.9	607.	5.1	0.0	0.00
174.	90.	62.	63.1	533.	5.7	0.0	0.00
175.	84.	62.	61.5	567.	7.6	0.0	0.00
176.	83.	61.	56.2	695.	8.6	0.0	0.00
177.	86.	57.	54.0	714.	5.4	0.0	0.00
178.	87.	63.	59.9	572.	4.8	0.0	0.00
179.	91.	67.	64.1	678.	6.0	0.0	0.00
180.	80.	65.	65.4	332.	6.8	0.0	0.26
181.	75.	62.	59.6	342.	6.0	0.0	0.12
182.	78.	57.	53.4	701.	5.0	0.0	0.00
183.	81.	61.	62.5	385.	6.6	0.0	0.13
184.	91.	68.	66.0	638.	11.8	0.0	0.00

					EOAK	SUBD	INPUT
185.	92.	70.	61.8	689.	12.6	0.0	0.00
186.	92.	62.	57.2	708.	4.8	0.0	0.00
187.	96.	68.	64.4	703.	6.1	0.0	0.00
188.	96.	72.	63.5	717.	9.4	0.0	0.00
189.	97.	73.	63.0	703.	9.3	0.0	0.00
190.	96.	75.	65.5	692.	5.6	0.0	0.00
191.	98.	68.	67.2	696.	4.7	0.0	0.00
192.	102.	76.	64.7	697.	7.1	0.0	0.00
193.	100.	76.	65.5	688.	7.1	0.0	0.00
194.	96.	76.	68.8	656.	6.4	0.0	0.00
195.	93.	73.	69.3	651.	6.8	0.0	0.00
196.	94.	72.	66.3	620.	6.0	0.0	0.00
197.	94.	70.	66.6	622.	4.9	0.0	0.00
198.	88.	70.	68.0	402.	4.3	0.0	0.00
199.	93.	69.	65.8	660.	5.0	0.0	0.00
200.	90.	70.	67.8	546.	7.0	0.0	0.00
201.	88.	71.	70.0	386.	5.0	0.0	0.01
202.	95.	70.	70.2	632.	6.2	0.0	0.00
203.	95.	69.	68.9	561.	7.2	0.0	0.16
204.	91.	67.	65.0	536.	8.1	0.0	1.06
205.	89.	64.	66.4	637.	5.5	0.0	0.59
206.	93.	70.	69.0	664.	7.3	0.0	0.00
207.	93.	69.	68.1	666.	9.7	0.0	0.00
208.	98.	76.	69.3	683.	9.3	0.0	0.00
209.	95.	76.	69.0	678.	6.3	0.0	0.00
210.	91.	74.	70.7	631.	6.8	0.0	0.00
211.	90.	71.	68.7	549.	5.5	0.0	0.00
212.	83.	71.	69.4	352.	5.5	0.0	0.04
213.	81.	72.	71.0	269.	5.6	0.0	3.49
214.	84.	72.	71.6	363.	5.8	0.0	0.07
215.	85.	72.	71.4	321.	4.4	0.0	0.03
216.	87.	72.	71.3	419.	3.6	0.0	0.00
217.	89.	70.	70.3	534.	2.8	0.0	0.00
218.	93.	70.	70.7	609.	7.7	0.0	0.51
219.	92.	76.	70.1	647.	9.8	0.0	0.00
220.	91.	75.	72.2	568.	8.0	0.0	0.00
221.	91.	73.	64.8	611.	8.8	0.0	0.00
222.	91.	68.	64.1	652.	7.3	0.0	0.00
223.	92.	74.	67.8	623.	7.1	0.0	0.00
224.	91.	76.	68.8	609.	8.0	0.0	0.00
225.	91.	76.	69.2	630.	9.0	0.0	0.00
226.	93.	76.	70.7	586.	8.0	0.0	0.00
227.	88.	73.	70.5	484.	7.7	0.0	0.01
228.	93.	76.	68.8	471.	8.5	0.0	0.00
229.	94.	75.	66.6	618.	8.2	0.0	0.00
230.	94.	74.	67.3	623.	7.3	0.0	0.00
231.	96.	70.	67.6	596.	3.7	0.0	0.00
232.	96.	70.	70.6	593.	3.3	0.0	0.00
233.	95.	69.	65.8	625.	4.2	0.0	0.00
234.	93.	69.	67.2	555.	4.1	0.0	0.00
235.	93.	69.	65.8	567.	4.6	0.0	0.00
236.	95.	66.	55.7	626.	5.0	0.0	0.00
237.	94.	71.	60.7	522.	5.7	0.0	0.00
238.	96.	72.	66.7	524.	3.9	0.0	0.00
239.	98.	71.	66.4	531.	3.7	0.0	0.00
240.	99.	68.	64.3	556.	3.0	0.0	0.00
241.	98.	72.	64.5	529.	5.3	0.0	0.00
242.	98.	75.	64.7	549.	7.0	0.0	0.00
243.	97.	71.	62.4	561.	5.5	0.0	0.00
244.	98.	69.	63.0	562.	4.5	0.0	0.00
245.	99.	73.	62.8	557.	6.6	0.0	0.00
246.	101.	78.	60.1	418.	10.4	0.0	0.00
247.	101.	75.	61.7	545.	6.8	0.0	0.00

					EOAK	SUBD	INPUT
248.	93.	67.	64.3	562.	7.5	0.0	0.00
249.	96.	74.	65.9	496.	10.6	0.0	0.00
250.	82.	60.	63.3	309.	8.3	0.0	0.17
251.	69.	57.	53.3	285.	5.5	0.0	0.00
252.	75.	59.	54.7	396.	4.7	0.0	0.00
253.	79.	62.	56.9	344.	3.1	0.0	0.00
254.	73.	65.	61.2	196.	5.6	0.0	0.09
255.	82.	63.	65.0	439.	5.7	0.0	1.21
256.	88.	65.	63.6	535.	4.6	0.0	0.00
257.	86.	65.	65.8	382.	3.6	0.0	0.00
258.	73.	68.	68.2	78.	3.6	0.0	1.04
259.	83.	68.	71.1	261.	4.3	0.0	0.28
260.	82.	68.	68.9	364.	4.9	0.0	0.00
261.	80.	68.	68.2	208.	5.7	0.0	0.73
262.	78.	60.	64.5	285.	7.6	0.0	0.07
263.	63.	56.	54.6	150.	5.2	0.0	0.00
264.	58.	43.	45.2	42.	9.1	0.0	0.73
265.	59.	37.	34.6	538.	5.3	0.0	0.00
266.	68.	40.	37.3	537.	5.9	0.0	0.00
267.	63.	47.	47.1	172.	3.8	0.0	0.12
268.	61.	50.	52.6	117.	2.4	0.0	0.37
269.	72.	48.	52.8	493.	5.2	0.0	0.01
270.	77.	54.	60.9	229.	5.7	0.0	0.04
271.	86.	66.	67.5	427.	9.8	0.0	0.00
272.	87.	72.	65.7	424.	13.0	0.0	0.00
273.	82.	57.	59.2	407.	11.6	0.0	0.00
274.	79.	46.	47.6	504.	3.9	0.0	0.00
275.	62.	54.	55.0	74.	4.9	0.0	1.12
276.	74.	51.	50.1	488.	4.8	0.0	0.01
277.	80.	53.	49.7	482.	9.3	0.0	0.00
278.	71.	49.	40.4	478.	12.5	0.0	0.00
279.	67.	46.	40.7	480.	9.2	0.0	0.00
280.	74.	44.	42.3	479.	5.8	0.0	0.00
281.	80.	52.	48.0	454.	9.7	0.0	0.00
282.	81.	50.	56.5	422.	4.0	0.0	0.00
283.	84.	54.	59.8	438.	3.9	0.0	0.00
284.	87.	64.	58.5	438.	6.8	0.0	0.00
285.	85.	65.	55.9	436.	9.2	0.0	0.00
286.	75.	43.	45.7	395.	10.6	0.0	0.00
287.	70.	37.	34.4	451.	5.5	0.0	0.00
288.	86.	47.	37.6	447.	6.3	0.0	0.00
289.	86.	52.	41.4	435.	6.3	0.0	0.00
290.	82.	60.	41.7	422.	11.7	0.0	0.00
291.	83.	61.	49.5	409.	11.9	0.0	0.00
292.	75.	47.	43.7	308.	13.2	0.0	0.00
293.	67.	38.	25.4	434.	8.0	0.0	0.00
294.	78.	42.	29.0	416.	7.6	0.0	0.00
295.	82.	59.	46.9	401.	17.4	0.0	0.00
296.	71.	38.	33.1	408.	13.4	0.0	0.00
297.	68.	30.	24.4	415.	5.0	0.0	0.00
298.	73.	50.	39.1	384.	8.9	0.0	0.00
299.	84.	49.	46.8	379.	8.8	0.0	0.00
300.	72.	47.	33.8	341.	6.1	0.0	0.00
301.	68.	34.	23.7	392.	4.3	0.0	0.00
302.	73.	46.	30.2	330.	10.8	0.0	0.00
303.	60.	54.	48.4	88.	9.3	0.0	0.02
304.	62.	55.	56.6	74.	7.5	0.0	0.03
305.	79.	45.	52.7	332.	10.2	0.0	0.20
306.	45.	32.	29.6	198.	10.6	0.0	0.00
307.	49.	30.	14.5	377.	5.3	0.0	0.00
308.	57.	26.	18.4	313.	6.7	0.0	0.00
309.	60.	40.	34.3	355.	11.6	0.0	0.00
310.	66.	47.	51.6	204.	13.5	0.0	0.03

					EOAK	SUBD	INPUT
311.	64.	39.	35.0	351.	8.6	0.0	0.00
312.	60.	29.	25.4	348.	5.9	0.0	0.00
313.	70.	47.	44.7	337.	18.8	0.0	0.00
314.	82.	26.	46.1	301.	17.6	0.0	0.10
315.	43.	21.	19.7	348.	8.2	0.0	0.12
316.	69.	38.	25.9	333.	11.7	0.0	0.00
317.	64.	42.	33.8	242.	6.5	0.0	0.00
318.	63.	29.	32.3	311.	6.5	0.0	0.00
319.	58.	35.	36.5	312.	8.2	0.0	0.00
320.	64.	31.	35.1	317.	8.5	0.0	0.00
321.	69.	44.	36.9	309.	7.2	0.0	0.00
322.	69.	33.	31.8	326.	4.5	0.0	0.00
323.	74.	48.	43.0	313.	8.7	0.0	0.00
324.	67.	43.	33.9	301.	5.8	0.0	0.00
325.	63.	31.	21.5	291.	4.1	0.0	0.00
326.	71.	46.	37.7	246.	11.5	0.0	0.00
327.	50.	31.	24.9	212.	5.9	0.0	0.00
328.	65.	27.	25.7	300.	8.6	0.0	0.00
329.	77.	45.	32.5	294.	8.9	0.0	0.00
330.	76.	52.	40.1	257.	15.2	0.0	0.00
331.	67.	29.	26.7	256.	13.8	0.0	0.00
332.	39.	21.	6.6	289.	5.8	0.0	0.00
333.	61.	27.	22.4	287.	9.3	0.0	0.00
334.	72.	42.	31.5	299.	13.0	0.0	0.00
335.	72.	45.	41.6	287.	8.2	0.0	0.00
336.	74.	49.	47.2	277.	10.1	0.0	0.00
337.	66.	42.	35.1	288.	7.9	0.0	0.00
338.	65.	34.	32.5	209.	8.4	0.0	0.00
339.	56.	36.	22.6	273.	10.1	0.0	0.00
340.	59.	31.	12.6	238.	6.1	0.0	0.00
341.	46.	21.	16.4	244.	4.8	0.0	0.00
342.	44.	14.	26.1	60.	9.1	0.0	0.13
343.	26.	10.	-6.1	281.	6.9	0.0	0.00
344.	41.	10.	0.5	292.	9.5	0.0	0.00
345.	55.	29.	22.6	279.	9.9	0.0	0.00
346.	54.	41.	44.9	68.	6.2	0.0	0.00
347.	75.	47.	36.1	170.	9.0	0.0	0.00
348.	61.	35.	35.4	193.	3.3	0.0	0.00
349.	57.	38.	38.7	126.	5.9	0.0	0.00
350.	49.	39.	43.0	41.	5.0	0.0	0.15
351.	49.	42.	45.5	35.	6.5	0.0	1.28
352.	42.	29.	34.4	14.	11.9	0.0	0.74
353.	33.	29.	29.0	112.	11.9	0.0	0.03
354.	31.	28.	26.2	66.	4.1	0.0	0.02
355.	33.	28.	27.8	48.	2.9	0.0	0.01
356.	33.	28.	27.0	59.	6.3	0.0	0.02
357.	37.	18.	21.1	276.	3.6	0.0	0.06
358.	48.	25.	25.6	278.	5.8	0.0	0.19
359.	39.	21.	24.2	191.	5.1	0.0	0.00
360.	60.	28.	28.4	270.	5.8	0.0	0.00
361.	44.	24.	25.3	251.	6.0	0.0	0.00
362.	42.	19.	22.3	259.	3.5	0.0	0.00
363.	44.	26.	23.6	206.	8.7	0.0	0.11
364.	50.	34.	36.8	164.	7.8	0.0	0.02
365.	46.	39.	39.6	86.	3.9	0.0	0.01

NFPET = 1:

PET is partitioned into PT and PE according to the relationship developed by Ritchie (1972)

DAY	PET	PTRANS	PEVAPO	DAY	PET	PTRANS	PEVAPO
1	0.2095	0.0000	0.2095	2	0.1809	0.0000	0.1809

3	0.0741	0.0000	0.0741	4	0.1148	0.0000	0.1148
5	0.1410	0.0000	0.1410	6	0.0000	0.0000	0.0000
7	0.2175	0.0000	0.2175	8	0.3026	0.0000	0.3026
9	0.3119	0.0000	0.3119	10	0.2829	0.0000	0.2829
11	0.6299	0.0000	0.6299	12	0.3601	0.0000	0.3601
13	0.3600	0.0000	0.3600	14	0.2888	0.0000	0.2888
15	0.5449	0.0000	0.5449	16	0.6443	0.0000	0.6443
17	0.3762	0.0000	0.3762	18	0.0128	0.0000	0.0128
19	0.3222	0.0000	0.3222	20	0.2861	0.0000	0.2861
21	0.1961	0.0000	0.1961	22	0.0044	0.0000	0.0044
23	0.1873	0.0000	0.1873	24	0.4203	0.0000	0.4203
25	0.4225	0.0000	0.4225	26	0.0000	0.0000	0.0000
27	0.4384	0.0000	0.4384	28	0.0502	0.0000	0.0502
29	0.0099	0.0000	0.0099	30	0.2859	0.0000	0.2859
31	0.4530	0.0000	0.4530	32	0.5357	0.0000	0.5357
33	0.6259	0.0000	0.6259	34	0.4758	0.0000	0.4758
35	0.4207	0.0000	0.4207	36	0.4173	0.0000	0.4173
37	0.4382	0.0000	0.4382	38	0.3891	0.0000	0.3891
39	0.3112	0.0000	0.3112	40	0.7196	0.0000	0.7196
41	0.4886	0.0000	0.4886	42	0.3417	0.0000	0.3417
43	0.1280	0.0000	0.1280	44	0.1094	0.0000	0.1094
45	0.0635	0.0000	0.0635	46	0.2498	0.0000	0.2498
47	0.1616	0.0000	0.1616	48	0.3594	0.0000	0.3594
49	0.6423	0.0000	0.6423	50	0.5337	0.0000	0.5337
51	0.7117	0.0000	0.7117	52	0.6551	0.0000	0.6551
53	1.1371	0.0000	1.1371	54	0.8273	0.0000	0.8273
55	0.6822	0.0000	0.6822	56	0.8457	0.0000	0.8457
57	0.5349	0.0000	0.5349	58	0.0141	0.0000	0.0141
59	0.0899	0.0000	0.0899	60	0.0774	0.0000	0.0774
61	0.0108	0.0000	0.0108	62	0.0541	0.0000	0.0541
63	0.0000	0.0000	0.0000	64	0.0000	0.0000	0.0000
65	0.0000	0.0000	0.0000	66	0.2462	0.0000	0.2462
67	0.3437	0.0000	0.3437	68	0.8194	0.0000	0.8194
69	1.0659	0.0000	1.0659	70	0.7689	0.0000	0.7689
71	0.2947	0.0000	0.2947	72	0.0000	0.0000	0.0000
73	0.1867	0.0000	0.1867	74	0.4208	0.0000	0.4208
75	0.5476	0.0000	0.5476	76	0.5242	0.0000	0.5242
77	0.8101	0.0000	0.8101	78	1.3783	0.0000	1.3783
79	0.7291	0.0000	0.7291	80	1.2565	0.0000	1.2565
81	1.4506	0.0000	1.4506	82	0.8043	0.0000	0.8043
83	0.9164	0.0000	0.9164	84	0.3925	0.0000	0.3925
85	0.6296	0.0000	0.6296	86	0.6211	0.0000	0.6211
87	0.2216	0.0000	0.2216	88	0.2684	0.0000	0.2684
89	0.3157	0.0000	0.3157	90	0.4573	0.0000	0.4573
91	0.8435	0.0000	0.8435	92	1.2187	0.9030	0.3157
93	0.0528	0.0391	0.0137	94	0.4669	0.3459	0.1209
95	0.5929	0.4393	0.1536	96	0.6026	0.4465	0.1561
97	0.8153	0.6041	0.2112	98	1.3517	1.0016	0.3502
99	0.5859	0.4341	0.1518	100	0.1104	0.0818	0.0286
101	0.7143	0.5292	0.1850	102	0.7449	0.5520	0.1930
103	0.7966	0.5902	0.2064	104	1.5218	1.1275	0.3942
105	0.6279	0.4652	0.1626	106	0.3836	0.2842	0.0994
107	0.0000	0.0000	0.0000	108	0.8554	0.6338	0.2216
109	0.3408	0.2526	0.0883	110	0.7350	0.5446	0.1904
111	0.7392	0.5477	0.1915	112	0.0012	0.0009	0.0003
113	0.3806	0.2820	0.0986	114	0.4669	0.3460	0.1210
115	0.9017	0.6681	0.2336	116	0.7553	0.5596	0.1956
117	0.6103	0.4522	0.1581	118	0.4382	0.3247	0.1135
119	0.4831	0.3580	0.1252	120	0.1109	0.0821	0.0287
121	0.2352	0.1743	0.0609	122	0.2498	0.1851	0.0647
123	0.0422	0.0313	0.0109	124	0.6838	0.5067	0.1771
125	0.3216	0.2383	0.0833	126	0.2505	0.1856	0.0649
127	0.0459	0.0340	0.0119	128	1.1109	0.8231	0.2878

129	0.9069	0.6720	0.2349	130	0.6690	0.4957	0.1733
131	0.5184	0.3841	0.1343	132	0.4177	0.3095	0.1082
133	1.2502	0.9263	0.3239	134	0.7601	0.5632	0.1969
135	0.6081	0.4506	0.1575	136	0.4528	0.3355	0.1173
137	0.8862	0.6566	0.2296	138	0.5470	0.4053	0.1417
139	0.6143	0.4551	0.1591	140	0.8053	0.5967	0.2086
141	0.6538	0.4844	0.1694	142	0.9748	0.7223	0.2525
143	0.2106	0.1560	0.0546	144	0.0000	0.0000	0.0000
145	0.0000	0.0000	0.0000	146	0.2973	0.2203	0.0770
147	0.8058	0.5970	0.2087	148	0.8354	0.6190	0.2164
149	0.3717	0.2754	0.0963	150	0.1324	0.0981	0.0343
151	0.6085	0.4509	0.1576	152	0.5939	0.4401	0.1539
153	0.6585	0.4879	0.1706	154	0.4217	0.3124	0.1092
155	0.4197	0.3110	0.1087	156	0.5446	0.4035	0.1411
157	0.6572	0.4869	0.1702	158	0.9610	0.7120	0.2489
159	0.4398	0.3259	0.1139	160	0.1893	0.1402	0.0490
161	0.0848	0.0628	0.0220	162	0.7160	0.5306	0.1855
163	0.7168	0.5311	0.1857	164	0.9326	0.6910	0.2416
165	1.1245	0.8332	0.2913	166	1.1900	0.8818	0.3083
167	1.0100	0.7483	0.2616	168	0.8377	0.6207	0.2170
169	0.8408	0.6230	0.2178	170	0.8094	0.5997	0.2097
171	0.8282	0.6136	0.2145	172	0.8612	0.6381	0.2231
173	0.7928	0.5874	0.2054	174	0.6846	0.5073	0.1773
175	0.7404	0.5486	0.1918	176	0.9867	0.7311	0.2556
177	0.8743	0.6478	0.2265	178	0.7071	0.5240	0.1832
179	0.9029	0.6690	0.2339	180	0.3873	0.2869	0.1003
181	0.3890	0.2882	0.1008	182	0.7626	0.5650	0.1975
183	0.4533	0.3359	0.1174	184	1.0973	0.8131	0.2843
185	1.3804	1.0228	0.3576	186	0.9152	0.6781	0.2371
187	1.0040	0.7439	0.2601	188	1.2858	0.9527	0.3331
189	1.3068	0.9683	0.3385	190	1.0311	0.7640	0.2671
191	0.9085	0.6732	0.2354	192	1.2320	0.9129	0.3192
193	1.1847	0.8778	0.3069	194	1.0053	0.7449	0.2604
195	0.9296	0.6888	0.2408	196	0.9082	0.6729	0.2353
197	0.8271	0.6129	0.2143	198	0.4922	0.3647	0.1275
199	0.8596	0.6369	0.2227	200	0.7723	0.5722	0.2001
201	0.4812	0.3565	0.1246	202	0.8529	0.6319	0.2209
203	0.8318	0.6163	0.2155	204	0.8372	0.6203	0.2169
205	0.7395	0.5479	0.1916	206	0.9267	0.6866	0.2401
207	1.0338	0.7660	0.2678	208	1.2176	0.9022	0.3154
209	1.0064	0.7457	0.2607	210	0.8670	0.6424	0.2246
211	0.7124	0.5279	0.1845	212	0.4123	0.3055	0.1068
213	0.2873	0.2129	0.0744	214	0.4131	0.3061	0.1070
215	0.3530	0.2616	0.0914	216	0.4535	0.3360	0.1175
217	0.5590	0.4142	0.1448	218	0.8477	0.6281	0.2196
219	1.0772	0.7981	0.2790	220	0.8290	0.6143	0.2148
221	1.0484	0.7768	0.2716	222	0.9518	0.7053	0.2466
223	0.9426	0.6984	0.2442	224	0.9668	0.7164	0.2505
225	1.0267	0.7607	0.2660	226	0.9325	0.6909	0.2416
227	0.6897	0.5111	0.1787	228	0.8769	0.6497	0.2272
229	1.0626	0.7873	0.2753	230	0.9900	0.7336	0.2565
231	0.7484	0.5546	0.1939	232	0.6970	0.5164	0.1806
233	0.8038	0.5956	0.2082	234	0.6913	0.5122	0.1791
235	0.7437	0.5510	0.1926	236	0.9274	0.6872	0.2402
237	0.8516	0.6310	0.2206	238	0.7105	0.5264	0.1840
239	0.7175	0.5316	0.1859	240	0.7040	0.5216	0.1824
241	0.8408	0.6230	0.2178	242	1.0032	0.7433	0.2599
243	0.8911	0.6603	0.2308	244	0.8127	0.6022	0.2105
245	0.9988	0.7401	0.2587	246	1.2708	0.9416	0.3292
247	1.0605	0.7858	0.2747	248	0.8798	0.6519	0.2279
249	1.1049	0.8187	0.2862	250	0.4071	0.3017	0.1055
251	0.3069	0.2274	0.0795	252	0.4413	0.3270	0.1143
253	0.3653	0.2707	0.0946	254	0.2231	0.1653	0.0578

255	0.4721	0.3498	0.1223	256	0.6456	0.4784	0.1672
257	0.4089	0.3029	0.1059	258	0.0000	0.0000	0.0000
259	0.2307	0.1710	0.0598	260	0.3703	0.2744	0.0959
261	0.2213	0.1640	0.0573	262	0.2745	0.2034	0.0711
263	0.0905	0.0670	0.0234	264	0.0495	0.0366	0.0128
265	0.4643	0.3440	0.1203	266	0.5706	0.4228	0.1478
267	0.1144	0.0848	0.0296	268	0.0000	0.0000	0.0000
269	0.4251	0.3150	0.1101	270	0.1807	0.1339	0.0468
271	0.6207	0.4599	0.1608	272	0.9407	0.6970	0.2437
273	0.6603	0.4893	0.1711	274	0.5087	0.3744	0.1342
275	0.0000	0.0000	0.0000	276	0.5003	0.3634	0.1370
277	0.7825	0.5645	0.2181	278	0.9196	0.6588	0.2609
279	0.6615	0.4706	0.1909	280	0.5590	0.3948	0.1642
281	0.7951	0.5576	0.2375	282	0.3914	0.2725	0.1189
283	0.4269	0.2950	0.1319	284	0.7020	0.4815	0.2205
285	0.8615	0.5865	0.2750	286	0.6111	0.4128	0.1983
287	0.5084	0.3408	0.1676	288	0.7511	0.4996	0.2516
289	0.7498	0.4947	0.2551	290	1.1522	0.7540	0.3982
291	1.0318	0.6697	0.3621	292	0.7598	0.4890	0.2707
293	0.6878	0.4390	0.2488	294	0.7652	0.4842	0.2810
295	1.3668	0.8573	0.5095	296	0.8743	0.5436	0.3307
297	0.4701	0.2896	0.1804	298	0.7259	0.4432	0.2827
299	0.7179	0.4342	0.2837	300	0.5570	0.3337	0.2233
301	0.4496	0.2668	0.1828	302	0.8672	0.5096	0.3576
303	0.1888	0.1098	0.0789	304	0.0000	0.0000	0.0000
305	0.4639	0.2645	0.1995	306	0.2293	0.1294	0.1000
307	0.3883	0.0000	0.3883	308	0.4039	0.0000	0.4039
309	0.5884	0.0000	0.5884	310	0.2454	0.0000	0.2454
311	0.5047	0.0000	0.5047	312	0.3824	0.0000	0.3824
313	0.8638	0.0000	0.8638	314	0.5074	0.0000	0.5074
315	0.2902	0.0000	0.2902	316	0.8246	0.0000	0.8246
317	0.3834	0.0000	0.3834	318	0.3265	0.0000	0.3265
319	0.3183	0.0000	0.3183	320	0.3782	0.0000	0.3782
321	0.4962	0.0000	0.4962	322	0.3527	0.0000	0.3527
323	0.5783	0.0000	0.5783	324	0.4318	0.0000	0.4318
325	0.3292	0.0000	0.3292	326	0.6827	0.0000	0.6827
327	0.2353	0.0000	0.2353	328	0.4768	0.0000	0.4768
329	0.7250	0.0000	0.7250	330	1.0192	0.0000	1.0192
331	0.6932	0.0000	0.6932	332	0.2800	0.0000	0.2800
333	0.4945	0.0000	0.4945	334	0.8771	0.0000	0.8771
335	0.4962	0.0000	0.4962	336	0.5346	0.0000	0.5346
337	0.4822	0.0000	0.4822	338	0.3828	0.0000	0.3828
339	0.5596	0.0000	0.5596	340	0.4160	0.0000	0.4160
341	0.2046	0.0000	0.2046	342	0.0000	0.0000	0.0000
343	0.2324	0.0000	0.2324	344	0.3681	0.0000	0.3681
345	0.4649	0.0000	0.4649	346	0.0000	0.0000	0.0000
347	0.5764	0.0000	0.5764	348	0.1448	0.0000	0.1448
349	0.1178	0.0000	0.1178	350	0.0000	0.0000	0.0000
351	0.0000	0.0000	0.0000	352	0.0000	0.0000	0.0000
353	0.0158	0.0000	0.0158	354	0.0000	0.0000	0.0000
355	0.0000	0.0000	0.0000	356	0.0000	0.0000	0.0000
357	0.1013	0.0000	0.1013	358	0.2071	0.0000	0.2071
359	0.0738	0.0000	0.0738	360	0.2880	0.0000	0.2880
361	0.1604	0.0000	0.1604	362	0.1120	0.0000	0.1120
363	0.2244	0.0000	0.2244	364	0.1022	0.0000	0.1022
365	0.0000	0.0000	0.0000				

Totals: PET = 157.0664
PTRANS = 104.5508
PEVAPO = 96.8209

IRAIN = 1

Rainfall/Irrigation Details

Day	Time (hr)	Amount (cm)	Application Type	Efficiency	Changes In Rate/Head
4	0.000	0.0762	1	1.000	2
	1.000	0.0000			
5	0.000	0.0254	1	1.000	2
	1.000	0.0000			
6	0.000	0.1016	1	1.000	2
	1.000	0.0000			
16	0.000	0.7620	1	1.000	2
	1.000	0.0000			
18	0.000	0.0254	1	1.000	2
	1.000	0.0000			
22	0.000	0.1778	1	1.000	2
	1.000	0.0000			
23	0.000	0.4826	1	1.000	2
	1.000	0.0000			
24	0.000	1.0000	1	1.000	3
	1.000	0.0414			
	2.000	0.0000			
26	0.000	0.9906	1	1.000	2
	1.000	0.0000			
27	0.000	0.1016	1	1.000	2
	1.000	0.0000			
28	0.000	0.0254	1	1.000	2
	1.000	0.0000			
29	0.000	0.1778	1	1.000	2
	1.000	0.0000			
45	0.000	0.0508	1	1.000	2
	1.000	0.0000			
47	0.000	0.0254	1	1.000	2
	1.000	0.0000			
62	0.000	0.6350	1	1.000	2
	1.000	0.0000			
63	0.000	0.3556	1	1.000	2
	1.000	0.0000			
64	0.000	0.0254	1	1.000	2
	1.000	0.0000			
65	0.000	1.0000	1	1.000	3
	1.000	0.5494			
	2.000	0.0000			
66	0.000	0.0254	1	1.000	2
	1.000	0.0000			
67	0.000	0.1270	1	1.000	2
	1.000	0.0000			
71	0.000	1.0000	1	1.000	3
	1.000	0.0414			
	2.000	0.0000			
72	0.000	3.0000	1	1.000	3
	3.000	0.9624			
	4.000	0.0000			
73	0.000	0.6858	1	1.000	2
	1.000	0.0000			
74	0.000	0.1524	1	1.000	2
	1.000	0.0000			
84	0.000	0.3810	1	1.000	2
	1.000	0.0000			
85	0.000	0.0508	1	1.000	2
	1.000	0.0000			
93	0.000	0.4064	1	1.000	2
	1.000	0.0000			

94	0.000	0.0254	1	1.000	2
	1.000	0.0000			
100	0.000	2.0000	1	1.000	3
	2.000	0.8956			
	3.000	0.0000			
107	0.000	2.0000	1	1.000	3
	2.000	0.8448			
	3.000	0.0000			
109	0.000	0.7112	1	1.000	2
	1.000	0.0000			
111	0.000	0.0254	1	1.000	2
	1.000	0.0000			
112	0.000	4.0000	1	1.000	3
	4.000	0.8514			
	5.000	0.0000			
113	0.000	0.1270	1	1.000	2
	1.000	0.0000			
114	0.000	0.0254	1	1.000	2
	1.000	0.0000			
119	0.000	0.3302	1	1.000	2
	1.000	0.0000			
120	0.000	0.8128	1	1.000	2
	1.000	0.0000			
122	0.000	0.0254	1	1.000	2
	1.000	0.0000			
123	0.000	0.1778	1	1.000	2
	1.000	0.0000			
124	0.000	0.0254	1	1.000	2
	1.000	0.0000			
125	0.000	1.0000	1	1.000	3
	1.000	0.3208			
	2.000	0.0000			
126	0.000	3.0000	1	1.000	3
	3.000	0.0480			
	4.000	0.0000			
127	0.000	4.0000	1	1.000	3
	4.000	0.8006			
	5.000	0.0000			
141	0.000	0.0508	1	1.000	2
	1.000	0.0000			
143	0.000	0.8128	1	1.000	2
	1.000	0.0000			
144	0.000	1.0000	1	1.000	3
	1.000	0.2700			
	2.000	0.0000			
145	0.000	0.5334	1	1.000	2
	1.000	0.0000			
146	0.000	5.0000	1	1.000	3
	5.000	0.6642			
	6.000	0.0000			
147	0.000	0.3556	1	1.000	2
	1.000	0.0000			
151	0.000	2.0000	1	1.000	3
	2.000	0.6670			
	3.000	0.0000			
152	0.000	0.0762	1	1.000	2
	1.000	0.0000			
153	0.000	0.3810	1	1.000	2
	1.000	0.0000			
154	0.000	1.0000	1	1.000	3
	1.000	0.4478			
	2.000	0.0000			
155	0.000	4.0000	1	1.000	3

	4.000	0.3688			
	5.000	0.0000			
156	0.000	0.1778	1	1.000	2
	1.000	0.0000			
157	0.000	0.7366	1	1.000	2
	1.000	0.0000			
160	0.000	9.0000	1	1.000	3
	9.000	0.9822			
	10.000	0.0000			
161	0.000	1.0000	1	1.000	3
	1.000	0.2192			
	2.000	0.0000			
162	0.000	0.3302	1	1.000	2
	1.000	0.0000			
180	0.000	0.6604	1	1.000	2
	1.000	0.0000			
181	0.000	0.3048	1	1.000	2
	1.000	0.0000			
183	0.000	0.3302	1	1.000	2
	1.000	0.0000			
201	0.000	0.0254	1	1.000	2
	1.000	0.0000			
203	0.000	0.4064	1	1.000	2
	1.000	0.0000			
204	0.000	2.0000	1	1.000	3
	2.000	0.6924			
	3.000	0.0000			
205	0.000	1.0000	1	1.000	3
	1.000	0.4986			
	2.000	0.0000			
212	0.000	0.1016	1	1.000	2
	1.000	0.0000			
213	0.000	8.0000	1	1.000	3
	8.000	0.8646			
	9.000	0.0000			
214	0.000	0.1778	1	1.000	2
	1.000	0.0000			
215	0.000	0.0762	1	1.000	2
	1.000	0.0000			
218	0.000	1.0000	1	1.000	3
	1.000	0.2954			
	2.000	0.0000			
227	0.000	0.0254	1	1.000	2
	1.000	0.0000			
250	0.000	0.4318	1	1.000	2
	1.000	0.0000			
254	0.000	0.2286	1	1.000	2
	1.000	0.0000			
255	0.000	3.0000	1	1.000	3
	3.000	0.0734			
	4.000	0.0000			
258	0.000	2.0000	1	1.000	3
	2.000	0.6416			
	3.000	0.0000			
259	0.000	0.7112	1	1.000	2
	1.000	0.0000			
261	0.000	1.0000	1	1.000	3
	1.000	0.8542			
	2.000	0.0000			
262	0.000	0.1778	1	1.000	2
	1.000	0.0000			
264	0.000	1.0000	1	1.000	3
	1.000	0.8542			

	2.000	0.0000			
267	0.000	0.3048	1	1.000	2
	1.000	0.0000			
268	0.000	0.9398	1	1.000	2
	1.000	0.0000			
269	0.000	0.0254	1	1.000	2
	1.000	0.0000			
270	0.000	0.1016	1	1.000	2
	1.000	0.0000			
275	0.000	2.0000	1	1.000	3
	2.000	0.8448			
	3.000	0.0000			
276	0.000	0.0254	1	1.000	2
	1.000	0.0000			
303	0.000	0.0508	1	1.000	2
	1.000	0.0000			
304	0.000	0.0762	1	1.000	2
	1.000	0.0000			
305	0.000	0.5080	1	1.000	2
	1.000	0.0000			
310	0.000	0.0762	1	1.000	2
	1.000	0.0000			
314	0.000	0.2540	1	1.000	2
	1.000	0.0000			
315	0.000	0.3048	1	1.000	2
	1.000	0.0000			
342	0.000	0.3302	1	1.000	2
	1.000	0.0000			
350	0.000	0.3810	1	1.000	2
	1.000	0.0000			
351	0.000	3.0000	1	1.000	3
	3.000	0.2512			
	4.000	0.0000			
352	0.000	1.0000	1	1.000	3
	1.000	0.8796			
	2.000	0.0000			
353	0.000	0.0762	1	1.000	2
	1.000	0.0000			
354	0.000	0.0508	1	1.000	2
	1.000	0.0000			
355	0.000	0.0254	1	1.000	2
	1.000	0.0000			
356	0.000	0.0508	1	1.000	2
	1.000	0.0000			
357	0.000	0.1524	1	1.000	2
	1.000	0.0000			
358	0.000	0.4826	1	1.000	2
	1.000	0.0000			
363	0.000	0.2794	1	1.000	2
	1.000	0.0000			
364	0.000	0.0508	1	1.000	2
	1.000	0.0000			
365	0.000	0.0254	1	1.000	2
	1.000	0.0000			

NWATER (number of days of rain/irrigation) =105

Total Water Applied = 105.5624 cm

UNSAT-H Version 2.03
INITIAL CONDITIONS

Input Filename: C:\Program Files\University of Wisconsin\WinUnsatH\project.in
Results Filename: C:\Program Files\University of Wisconsin\WinUnsatH\project.re
Date of Run: 8-MAY-**
Time of Run: 9:15:44
Title:
East Oak RDF Prescriptive Subtitle D Final Cover

NODE	DEPTH (cm)	Initial Conditions HEAD (cm)	THETA (vol.)	TEMP (K)	NODE	DEPTH (cm)	Initial Conditions HEAD (cm)	THETA (vol.)	TEMP (K)
1	0.000E+00	3.517E+02	0.2971	0.00	2	5.000E+00	3.467E+02	0.2982	0.00
3	9.000E+00	3.427E+02	0.2990	0.00	4	1.200E+01	3.397E+02	0.2997	0.00
5	1.500E+01	3.367E+02	0.3003	0.00	6	1.800E+01	3.338E+02	0.3009	0.00
7	2.100E+01	3.309E+02	0.3016	0.00	8	2.500E+01	3.270E+02	0.3024	0.00
9	3.000E+01	3.223E+02	0.3034	0.00	10	3.050E+01	3.219E+02	0.3035	0.00
11	3.060E+01	3.520E+02	0.0100	0.00	12	3.070E+01	4.652E+02	0.2545	0.00
13	3.500E+01	4.649E+02	0.2545	0.00	14	4.000E+01	4.649E+02	0.2545	0.00
15	4.500E+01	4.652E+02	0.2545	0.00	16	5.000E+01	4.655E+02	0.2544	0.00
17	5.500E+01	4.658E+02	0.2544	0.00	18	6.000E+01	4.660E+02	0.2544	0.00
19	6.500E+01	4.662E+02	0.2544	0.00	20	7.000E+01	4.663E+02	0.2544	0.00
21	7.500E+01	4.663E+02	0.2544	0.00	22	8.000E+01	4.663E+02	0.2544	0.00
23	8.500E+01	4.662E+02	0.2544	0.00	24	9.000E+01	4.662E+02	0.2544	0.00
25	9.150E+01	4.662E+02	0.2544	0.00					

Initial Water Storage = 24.6578 cm

NOTE: There are no temperature data when plants are modelled.

```
DAILY SUMMARY:  Day =    1, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12           25
Depth (cm)         =     5.00000    30.70000     91.50000
Water (cm3/cm3)    =     0.28623     0.25439      0.25438
Head (cm)          = 4.08275E+02 4.66065E+02 4.66250E+02
Water Flow (cm)    =-1.20108E-01 3.85826E-03 4.14877E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS    DRAIN    NEWSTOR           STORAGE
 24.6578+ 0.0000+ 0.0000 - 0.2095- 0.0000-  0.0041 = 24.4441  Versus  24.4441

Mass Balance = -9.5367E-06 cm;  Time step attempts =   96 and successes =   96
  Evaporation:  Potential =  0.8382 cm, Actual =  0.2095 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 66.0 %;  TMEAN = 270.9 K;  HDRY =  5.7041E+05 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day =    2, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12           25
Depth (cm)         =     5.00000    30.70000     91.50000
Water (cm3/cm3)    =     0.27968     0.25422      0.25438
```

```
Head (cm)           = 4.46357E+02 4.68109E+02 4.66241E+02
Water Flow (cm)     =-1.34498E-01 3.26631E-03 4.14853E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR          STORAGE
 24.4441+ 0.0000+ 0.0000 - 0.1809- 0.0000-  0.0041 = 24.2591  Versus  24.2591

Mass Balance = -3.8147E-06 cm;  Time step attempts =   96 and successes =   96
   Evaporation:  Potential =  0.7235 cm, Actual =  0.1809 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 53.9 %;  TMEAN = 275.1 K;  HDRY =  8.4711E+05 cm;  DAYUBC =     0

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day =   3, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.27994     0.25402     0.25438
Head (cm)           = 4.44783E+02 4.70589E+02 4.66212E+02
Water Flow (cm)     =-7.97436E-02 2.51909E-03 4.14902E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR          STORAGE
 24.2591+ 0.0000+ 0.0000 - 0.0741- 0.0000-  0.0041 = 24.1809  Versus  24.1809

Mass Balance =  0.0000E+00 cm;  Time step attempts =   96 and successes =   96
   Evaporation:  Potential =  0.2963 cm, Actual =  0.0741 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 74.4 %;  TMEAN = 270.4 K;  HDRY =  4.0487E+05 cm;  DAYUBC =     0

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day =   4, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.27878     0.25385     0.25438
Head (cm)           = 4.51828E+02 4.72644E+02 4.66179E+02
Water Flow (cm)     =-2.85300E-02 2.03146E-03 4.14977E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR          STORAGE
 24.1809+ 0.0762+ 0.0000 - 0.1137- 0.0000-  0.0041 = 24.1392  Versus  24.1393

Mass Balance = -6.6757E-05 cm;  Time step attempts = 2096 and successes = 2096
   Evaporation:  Potential =  0.4593 cm, Actual =  0.1137 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 65.0 %;  TMEAN = 267.0 K;  HDRY =  5.8999E+05 cm;  DAYUBC =     0

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day =   5, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.27338     0.25369     0.25439
Head (cm)           = 4.86350E+02 4.74542E+02 4.66153E+02
Water Flow (cm)     =-7.43738E-02 1.78322E-03 4.15050E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00
```

```
 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 24.1393+ 0.0254+ 0.0000 - 0.1396- 0.0000-  0.0042 = 24.0210  Versus  24.0211

Mass Balance = -8.7738E-05 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.5640 cm, Actual =  0.1396 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 69.1 %;  TMEAN = 270.1 K;  HDRY =  5.0676E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =   6, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.28171     0.25354     0.25439
Head (cm)          = 4.34180E+02 4.76396E+02 4.66144E+02
Water Flow (cm)    = 3.73579E-02 1.50416E-03 4.15096E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 24.0211+ 0.1016+ 0.0000 - 0.0000- 0.0000-  0.0042 = 24.1185  Versus  24.1186

Mass Balance = -7.8201E-05 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 92.5 %;  TMEAN = 272.3 K;  HDRY =  1.0623E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =   7, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.26697     0.25342     0.25438
Head (cm)          = 5.31037E+02 4.77859E+02 4.66166E+02
Water Flow (cm)    =-1.02880E-01 1.43315E-03 4.15085E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 24.1186+ 0.0000+ 0.0000 - 0.2175- 0.0000-  0.0042 = 23.8969  Versus  23.8969

Mass Balance = -1.3351E-05 cm;  Time step attempts =   96 and successes =   96
  Evaporation:  Potential =  0.8700 cm, Actual =  0.2175 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 57.9 %;  TMEAN = 271.2 K;  HDRY =  7.4994E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =   8, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.25096     0.25325     0.25438
Head (cm)          = 6.64247E+02 4.79958E+02 4.66230E+02
Water Flow (cm)    =-1.65539E-01 1.17635E-03 4.14983E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 23.8969+ 0.0000+ 0.0000 - 0.3026- 0.0000-  0.0041 = 23.5902  Versus  23.5902
```

```
Mass Balance = -5.7220E-06 cm;  Time step attempts =  402 and successes =  402
  Evaporation:  Potential =  1.2102 cm, Actual =  0.3026 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 63.0 %;  TMEAN = 276.8 K;  HDRY =  6.3392E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day =   9, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12          25
Depth (cm)        =    5.00000    30.70000    91.50000
Water (cm3/cm3)   =    0.23859     0.25303     0.25437
Head (cm)         = 7.95011E+02 4.82651E+02 4.66335E+02
Water Flow (cm)   =-1.79749E-01 6.64247E-04 4.14780E-03
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR          STORAGE
 23.5902+ 0.0000+ 0.0000 - 0.3119- 0.0000-  0.0041 = 23.2742  Versus  23.2742

Mass Balance = -9.5367E-06 cm;  Time step attempts =  873 and successes =  873
  Evaporation:  Potential =  1.2475 cm, Actual =  0.3119 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 57.5 %;  TMEAN = 280.9 K;  HDRY =  7.5866E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  10, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12          25
Depth (cm)        =    5.00000    30.70000    91.50000
Water (cm3/cm3)   =    0.23035     0.25279     0.25436
Head (cm)         = 9.00348E+02 4.85627E+02 4.66485E+02
Water Flow (cm)   =-1.71166E-01 1.13839E-04 4.14472E-03
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR          STORAGE
 23.2742+ 0.0000+ 0.0000 - 0.2829- 0.0000-  0.0041 = 22.9872  Versus  22.9872

Mass Balance = -2.2888E-05 cm;  Time step attempts = 1592 and successes = 1592
  Evaporation:  Potential =  1.1317 cm, Actual =  0.2829 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 71.4 %;  TMEAN = 283.7 K;  HDRY =  4.6164E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  11, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12          25
Depth (cm)        =    5.00000    30.70000    91.50000
Water (cm3/cm3)   =    0.23683     0.25257     0.25434
Head (cm)         = 8.16156E+02 4.88403E+02 4.66649E+02
Water Flow (cm)   =-1.23457E-01-3.65206E-04 4.14104E-03
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR          STORAGE
 22.9872+ 0.0000+ 0.0000 - 0.3195- 0.0000-  0.0041 = 22.6635  Versus  22.6641

Mass Balance = -6.1989E-04 cm;  Time step attempts =20820 and successes =20820
  Evaporation:  Potential =  2.5196 cm, Actual =  0.3195 cm
```

```
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 44.2 %;  TMEAN = 287.0 K;  HDRY =  1.1187E+06 cm;  DAYUBC =  2914

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  12, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.24235     0.25234     0.25432
Head (cm)          = 7.52204E+02 4.91343E+02 4.66908E+02
Water Flow (cm)    =-4.11679E-02-7.33855E-04 4.13595E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR          STORAGE
 22.6641+ 0.0000+ 0.0000 - 0.0152- 0.0000-  0.0041 = 22.6448  Versus  22.6448

Mass Balance = -3.8147E-06 cm;  Time step attempts =  302 and successes =  302
  Evaporation:  Potential =  1.4404 cm, Actual =  0.0152 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 50.4 %;  TMEAN = 285.7 K;  HDRY =  9.3903E+05 cm;  DAYUBC =   272

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  13, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.24360     0.25213     0.25430
Head (cm)          = 7.38558E+02 4.93983E+02 4.67222E+02
Water Flow (cm)    =-2.54668E-02-9.63817E-04 4.12910E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR          STORAGE
 22.6448+ 0.0000+ 0.0000 - 0.0160- 0.0000-  0.0041 = 22.6246  Versus  22.6246

Mass Balance =  0.0000E+00 cm;  Time step attempts =  325 and successes =  325
  Evaporation:  Potential =  1.4399 cm, Actual =  0.0160 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 66.2 %;  TMEAN = 282.0 K;  HDRY =  5.6521E+05 cm;  DAYUBC =   287

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  14, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.24382     0.25195     0.25427
Head (cm)          = 7.36183E+02 4.96243E+02 4.67565E+02
Water Flow (cm)    =-2.03133E-02-1.08797E-03 4.12157E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR          STORAGE
 22.6246+ 0.0000+ 0.0000 - 0.0205- 0.0000-  0.0041 = 22.6000  Versus  22.6008

Mass Balance = -8.6403E-04 cm;  Time step attempts =10092 and successes =10092
  Evaporation:  Potential =  1.1554 cm, Actual =  0.0205 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 61.4 %;  TMEAN = 279.3 K;  HDRY =  6.6825E+05 cm;  DAYUBC =  3499
```

```
DAILY SUMMARY:  Day =  15, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12          25
Depth (cm)        =    5.00000    30.70000    91.50000
Water (cm3/cm3)   =    0.24381     0.25179     0.25423
Head (cm)         = 7.36346E+02 4.98315E+02 4.67964E+02
Water Flow (cm)   =-1.68234E-02-1.15616E-03 4.11278E-03
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 22.6008+ 0.0000+ 0.0000 - 0.0200- 0.0000-  0.0041 = 22.5768  Versus  22.5777

Mass Balance = -9.9182E-04 cm;  Time step attempts =10092 and successes =10092
  Evaporation:  Potential =  2.1795 cm, Actual =  0.0200 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 46.7 %;  TMEAN = 281.8 K;  HDRY =  1.0450E+06 cm;  DAYUBC =  3404
```

```
DAILY SUMMARY:  Day =  16, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12          25
Depth (cm)        =    5.00000    30.70000    91.50000
Water (cm3/cm3)   =    0.24914     0.25170     0.25421
Head (cm)         = 6.81775E+02 4.99470E+02 4.68195E+02
Water Flow (cm)   = 9.87901E-02-1.19358E-03 4.10373E-03
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 22.5777+ 0.7620+ 0.0000 - 0.6354- 0.0000-  0.0041 = 22.7003  Versus  22.7009

Mass Balance = -5.9128E-04 cm;  Time step attempts =79119 and successes =79119
  Evaporation:  Potential =  2.5770 cm, Actual =  0.6354 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 58.1 %;  TMEAN = 286.5 K;  HDRY =  7.4446E+05 cm;  DAYUBC =  3066
```

```
DAILY SUMMARY:  Day =  17, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12          25
Depth (cm)        =    5.00000    30.70000    91.50000
Water (cm3/cm3)   =    0.24858     0.25159     0.25417
Head (cm)         = 6.87264E+02 5.00937E+02 4.68685E+02
Water Flow (cm)   =-1.62168E-02-1.11649E-03 4.09685E-03
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 22.7009+ 0.0000+ 0.0000 - 0.0204- 0.0000-  0.0041 = 22.6764  Versus  22.6763

Mass Balance =  2.8610E-05 cm;  Time step attempts =10092 and successes =10092
  Evaporation:  Potential =  1.5049 cm, Actual =  0.0204 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 48.7 %;  TMEAN = 281.8 K;  HDRY =  9.8610E+05 cm;  DAYUBC =  3499
```

```
DAILY SUMMARY:  Day =  18, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.23807     0.25151     0.25416
Head (cm)          = 8.01189E+02 5.01963E+02 4.68806E+02
Water Flow (cm)    =-4.84944E-02-1.08316E-03 4.08983E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 22.6763+ 0.0254+ 0.0000 - 0.0127- 0.0000-  0.0041 = 22.6850  Versus  22.6889

Mass Balance = -3.8681E-03 cm;  Time step attempts =42405 and successes =42405
  Evaporation:  Potential =  0.0512 cm, Actual =  0.0127 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 80.5 %;  TMEAN = 273.4 K;  HDRY =  2.9718E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  19, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.23688     0.25140     0.25412
Head (cm)          = 8.15521E+02 5.03337E+02 4.69296E+02
Water Flow (cm)    =-7.51074E-02-1.10452E-03 4.08220E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 22.6889+ 0.0000+ 0.0000 - 0.1867- 0.0000-  0.0041 = 22.4981  Versus  22.5001

Mass Balance = -2.0523E-03 cm;  Time step attempts =28024 and successes =28024
  Evaporation:  Potential =  1.2887 cm, Actual =  0.1867 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 58.6 %;  TMEAN = 276.5 K;  HDRY =  7.3310E+05 cm;  DAYUBC =  2683

------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  20, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.23927     0.25127     0.25407
Head (cm)          = 7.87094E+02 5.05051E+02 4.69938E+02
Water Flow (cm)    =-2.71243E-02-1.17686E-03 4.06919E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 22.5001+ 0.0000+ 0.0000 - 0.0174- 0.0000-  0.0041 = 22.4787  Versus  22.4789

Mass Balance = -2.0981E-04 cm;  Time step attempts = 7593 and successes = 7593
  Evaporation:  Potential =  1.1442 cm, Actual =  0.0174 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 54.1 %;  TMEAN = 278.7 K;  HDRY =  8.4307E+05 cm;  DAYUBC =  2961

------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  21, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
```

```
Depth (cm)          =      5.00000     30.70000     91.50000
Water (cm3/cm3)     =      0.23964      0.25114      0.25401
Head (cm)           = 7.82811E+02 5.06769E+02 4.70634E+02
Water Flow (cm)     =-1.98401E-02-1.25909E-03 4.05335E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
 22.4789+ 0.0000+ 0.0000 - 0.0159- 0.0000-  0.0041 = 22.4589  Versus  22.4592

Mass Balance = -3.1281E-04 cm;  Time step attempts = 4802 and successes = 4802
  Evaporation:  Potential =  0.7843 cm, Actual =  0.0159 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 63.1 %;  TMEAN = 275.4 K;  HDRY =  6.3055E+05 cm;  DAYUBC =  4778

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  22, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =      5.00000     30.70000     91.50000
Water (cm3/cm3)     =      0.22523      0.25105      0.25397
Head (cm)           = 9.74830E+02 5.07966E+02 4.71161E+02
Water Flow (cm)     =-8.55049E-02-1.31278E-03 4.03768E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
 22.4592+ 0.1778+ 0.0000 - 0.0043- 0.0000-  0.0040 = 22.6287  Versus  22.6332

Mass Balance = -4.5815E-03 cm;  Time step attempts =67912 and successes =67912
  Evaporation:  Potential =  0.0176 cm, Actual =  0.0043 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 98.4 %;  TMEAN = 270.7 K;  HDRY =  2.1467E+04 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  23, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =      5.00000     30.70000     91.50000
Water (cm3/cm3)     =      0.24536      0.25104      0.25397
Head (cm)           = 7.19921E+02 5.08006E+02 4.71173E+02
Water Flow (cm)     = 1.48586E-01-1.33528E-03 4.03231E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
 22.6332+ 0.4826+ 0.0000 - 0.1854- 0.0000-  0.0040 = 22.9264  Versus  22.9333

Mass Balance = -6.8913E-03 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  0.7492 cm, Actual =  0.1854 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 71.6 %;  TMEAN = 272.3 K;  HDRY =  4.5856E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  24, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =      5.00000     30.70000     91.50000
Water (cm3/cm3)     =      0.26426      0.25104      0.25391
Head (cm)           = 5.51269E+02 5.08002E+02 4.71828E+02
```

```
Water Flow (cm)     = 5.02191E-01-1.14175E-03 4.02622E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 22.9333+ 1.0414+ 0.0000 - 0.4119- 0.0000-  0.0040 = 23.5588  Versus  23.5592

Mass Balance = -4.2725E-04 cm;  Time step attempts =37982 and successes =37982
  Evaporation:  Potential =  1.6811 cm, Actual =  0.4119 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 52.0 %;  TMEAN = 279.5 K;  HDRY =  8.9634E+05 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day =  25, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =    5.00000    30.70000    91.50000
Water (cm3/cm3)     =    0.23979     0.25110     0.25385
Head (cm)           = 7.81100E+02 5.07311E+02 4.72658E+02
Water Flow (cm)     =-1.44617E-01-2.71557E-04 4.00782E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 23.5592+ 0.0000+ 0.0000 - 0.4225- 0.0000-  0.0040 = 23.1327  Versus  23.1327

Mass Balance =  5.7220E-06 cm;  Time step attempts = 1412 and successes = 1412
  Evaporation:  Potential =  1.6900 cm, Actual =  0.4225 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 51.2 %;  TMEAN = 283.2 K;  HDRY =  9.1671E+05 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day =  26, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =    5.00000    30.70000    91.50000
Water (cm3/cm3)     =    0.28985     0.25117     0.25378
Head (cm)           = 3.88590E+02 5.06302E+02 4.73484E+02
Water Flow (cm)     = 5.14270E-01 6.84186E-05 3.98928E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 23.1327+ 0.9906+ 0.0000 - 0.0000- 0.0000-  0.0040 = 24.1193  Versus  24.1194

Mass Balance = -1.1826E-04 cm;  Time step attempts = 5110 and successes = 5110
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 93.8 %;  TMEAN = 282.6 K;  HDRY =  8.7661E+04 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day =  27, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =    5.00000    30.70000    91.50000
Water (cm3/cm3)     =    0.26102     0.25137     0.25371
Head (cm)           = 5.76625E+02 5.03782E+02 4.74346E+02
Water Flow (cm)     =-9.62073E-02 1.15790E-03 3.96992E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00
```

```
 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 24.1194+ 0.1016+ 0.0000 - 0.4340- 0.0000-  0.0040 = 23.7830  Versus  23.7831

Mass Balance = -1.1063E-04 cm;  Time step attempts = 2420 and successes = 2420
  Evaporation:  Potential =  1.7536 cm, Actual =  0.4340 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 73.5 %;  TMEAN = 284.8 K;  HDRY =  4.2266E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  28, Simulated Time = 24.0000 hr
-------------
Node Number          =        2          12          25
Depth (cm)           =     5.00000    30.70000    91.50000
Water (cm3/cm3)      =     0.26791     0.25137     0.25363
Head (cm)            = 5.24192E+02 5.03734E+02 4.75223E+02
Water Flow (cm)      =-1.01873E-01 1.34257E-03 3.95025E-03
Plant Sink (cm)      = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 23.7831+ 0.0254+ 0.0000 - 0.0497- 0.0000-  0.0040 = 23.7549  Versus  23.7549

Mass Balance = -7.4387E-05 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.2010 cm, Actual =  0.0497 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 86.0 %;  TMEAN = 276.5 K;  HDRY =  2.0606E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  29, Simulated Time = 24.0000 hr
-------------
Node Number          =        2          12          25
Depth (cm)           =     5.00000    30.70000    91.50000
Water (cm3/cm3)      =     0.27895     0.25134     0.25356
Head (cm)            = 4.50769E+02 5.04105E+02 4.76108E+02
Water Flow (cm)      = 8.69372E-02 9.96739E-04 3.93045E-03
Plant Sink (cm)      = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 23.7549+ 0.1778+ 0.0000 - 0.0098- 0.0000-  0.0039 = 23.9190  Versus  23.9191

Mass Balance = -1.0109E-04 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.0397 cm, Actual =  0.0098 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 85.8 %;  TMEAN = 274.0 K;  HDRY =  2.1047E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  30, Simulated Time = 24.0000 hr
-------------
Node Number          =        2          12          25
Depth (cm)           =     5.00000    30.70000    91.50000
Water (cm3/cm3)      =     0.25836     0.25134     0.25349
Head (cm)            = 5.98377E+02 5.04119E+02 4.77015E+02
Water Flow (cm)      =-1.19780E-01 1.05417E-03 3.91011E-03
Plant Sink (cm)      = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 23.9191+ 0.0000+ 0.0000 - 0.2859- 0.0000-  0.0039 = 23.6292  Versus  23.6292
```

```
Mass Balance = -7.6294E-06 cm;  Time step attempts =  260 and successes =  260
  Evaporation:  Potential =  1.1438 cm, Actual =  0.2859 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 63.4 %;  TMEAN = 276.5 K;  HDRY =  6.2462E+05 cm;  DAYUBC =     0

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  31, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12          25
Depth (cm)        =    5.00000    30.70000    91.50000
Water (cm3/cm3)   =    0.24206     0.25126     0.25342
Head (cm)         = 7.55412E+02 5.05158E+02 4.77895E+02
Water Flow (cm)   =-1.77341E-01 8.71585E-04 3.89025E-03
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 23.6292+ 0.0000+ 0.0000 - 0.4530- 0.0000-  0.0039 = 23.1723  Versus  23.1724

Mass Balance = -8.3923E-05 cm;  Time step attempts = 2668 and successes = 2668
  Evaporation:  Potential =  1.8121 cm, Actual =  0.4530 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 45.5 %;  TMEAN = 282.0 K;  HDRY =  1.0802E+06 cm;  DAYUBC =     0

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  32, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12          25
Depth (cm)        =    5.00000    30.70000    91.50000
Water (cm3/cm3)   =    0.24646     0.25113     0.25336
Head (cm)         = 7.08558E+02 5.06837E+02 4.78613E+02
Water Flow (cm)   =-1.54757E-01 4.03335E-04 3.87265E-03
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 23.1724+ 0.0000+ 0.0000 - 0.3414- 0.0000-  0.0039 = 22.8271  Versus  22.8279

Mass Balance = -8.4114E-04 cm;  Time step attempts =23803 and successes =23803
  Evaporation:  Potential =  2.1429 cm, Actual =  0.3414 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 47.3 %;  TMEAN = 285.9 K;  HDRY =  1.0248E+06 cm;  DAYUBC =  4167

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  33, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12          25
Depth (cm)        =    5.00000    30.70000    91.50000
Water (cm3/cm3)   =    0.25198     0.25097     0.25329
Head (cm)         = 6.54737E+02 5.08927E+02 4.79416E+02
Water Flow (cm)   =-4.24832E-02-6.67134E-05 3.85636E-03
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 22.8279+ 0.0000+ 0.0000 - 0.0186- 0.0000-  0.0039 = 22.8054  Versus  22.8056

Mass Balance = -1.4496E-04 cm;  Time step attempts = 5094 and successes = 5094
  Evaporation:  Potential =  2.5037 cm, Actual =  0.0186 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
```

```
RHMEAN = 41.4 %;  TMEAN = 290.1 K;  HDRY =  1.2078E+06 cm;  DAYUBC =  3281
```

```
DAILY SUMMARY:  Day =  34, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =    5.00000    30.70000    91.50000
Water (cm3/cm3)    =    0.25274     0.25083     0.25323
Head (cm)          = 6.47676E+02 5.10770E+02 4.80197E+02
Water Flow (cm)    =-2.54064E-02-3.51457E-04 3.83894E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 22.8056+ 0.0000+ 0.0000 - 0.0177- 0.0000-  0.0038 = 22.7840  Versus  22.7842

Mass Balance = -1.5259E-04 cm;  Time step attempts = 3803 and successes = 3803
  Evaporation:  Potential =  1.9031 cm, Actual =  0.0177 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 62.2 %;  TMEAN = 281.5 K;  HDRY =  6.5069E+05 cm;  DAYUBC =  3771
```

```
DAILY SUMMARY:  Day =  35, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =    5.00000    30.70000    91.50000
Water (cm3/cm3)    =    0.25273     0.25071     0.25317
Head (cm)          = 6.47797E+02 5.12369E+02 4.80940E+02
Water Flow (cm)    =-2.01599E-02-4.84843E-04 3.82274E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 22.7842+ 0.0000+ 0.0000 - 0.0224- 0.0000-  0.0038 = 22.7579  Versus  22.7589

Mass Balance = -9.4986E-04 cm;  Time step attempts =10092 and successes =10092
  Evaporation:  Potential =  1.6827 cm, Actual =  0.0224 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 52.3 %;  TMEAN = 280.7 K;  HDRY =  8.8797E+05 cm;  DAYUBC =  3207
```

```
DAILY SUMMARY:  Day =  36, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =    5.00000    30.70000    91.50000
Water (cm3/cm3)    =    0.25227     0.25060     0.25311
Head (cm)          = 6.52024E+02 5.13860E+02 4.81684E+02
Water Flow (cm)    =-1.79676E-02-5.64987E-04 3.80660E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 22.7589+ 0.0000+ 0.0000 - 0.0200- 0.0000-  0.0038 = 22.7350  Versus  22.7355

Mass Balance = -4.9782E-04 cm;  Time step attempts = 4053 and successes = 4053
  Evaporation:  Potential =  1.6692 cm, Actual =  0.0200 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 52.5 %;  TMEAN = 279.3 K;  HDRY =  8.8224E+05 cm;  DAYUBC =  4048
```

```
DAILY SUMMARY:  Day =  37, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.25180     0.25050     0.25305
Head (cm)           = 6.56378E+02 5.15245E+02 4.82413E+02
Water Flow (cm)     =-1.65974E-02-6.16000E-04 3.79091E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR             STORAGE
 22.7355+ 0.0000+ 0.0000 - 0.0200- 0.0000-  0.0038 = 22.7117  Versus  22.7125

Mass Balance = -8.3160E-04 cm;  Time step attempts = 7593 and successes = 7593
  Evaporation:  Potential =  1.7530 cm, Actual =  0.0200 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 45.7 %;  TMEAN = 282.3 K;  HDRY =  1.0723E+06 cm;  DAYUBC =  4030

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  38, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.25114     0.25039     0.25299
Head (cm)           = 6.62536E+02 5.16618E+02 4.83158E+02
Water Flow (cm)     =-1.63960E-02-6.59053E-04 3.77502E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR             STORAGE
 22.7125+ 0.0000+ 0.0000 - 0.0185- 0.0000-  0.0038 = 22.6903  Versus  22.6905

Mass Balance = -2.5940E-04 cm;  Time step attempts = 3207 and successes = 3207
  Evaporation:  Potential =  1.5565 cm, Actual =  0.0185 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 50.5 %;  TMEAN = 275.1 K;  HDRY =  9.3651E+05 cm;  DAYUBC =  3186

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  39, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.25063     0.25030     0.25293
Head (cm)           = 6.67406E+02 5.17900E+02 4.83886E+02
Water Flow (cm)     =-1.57565E-02-6.91270E-04 3.75968E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR             STORAGE
 22.6905+ 0.0000+ 0.0000 - 0.0194- 0.0000-  0.0038 = 22.6674  Versus  22.6684

Mass Balance = -1.0662E-03 cm;  Time step attempts =10092 and successes =10092
  Evaporation:  Potential =  1.2447 cm, Actual =  0.0194 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 43.5 %;  TMEAN = 274.5 K;  HDRY =  1.1399E+06 cm;  DAYUBC =  4744

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  40, Simulated Time = 24.0000 hr
```

```
-------------
Node Number         =       2            12            25
Depth (cm)          =     5.00000     30.70000      91.50000
Water (cm3/cm3)     =     0.25013      0.25020       0.25287
Head (cm)           = 6.72204E+02 5.19173E+02 4.84640E+02
Water Flow (cm)     =-1.50002E-02-7.24115E-04 3.74390E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR           STORAGE
 22.6684+ 0.0000+ 0.0000 - 0.0182- 0.0000-   0.0037 = 22.6465  Versus  22.6471

Mass Balance = -6.1798E-04 cm;  Time step attempts = 5094 and successes = 5094
  Evaporation:  Potential =  2.8784 cm, Actual =  0.0182 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 38.0 %;  TMEAN = 282.9 K;  HDRY =  1.3264E+06 cm;  DAYUBC =  3727

-------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  41, Simulated Time = 24.0000 hr
-------------
Node Number         =       2            12            25
Depth (cm)          =     5.00000     30.70000      91.50000
Water (cm3/cm3)     =     0.24942      0.25011       0.25281
Head (cm)           = 6.79013E+02 5.20429E+02 4.85409E+02
Water Flow (cm)     =-1.54454E-02-7.51127E-04 3.72780E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR           STORAGE
 22.6471+ 0.0000+ 0.0000 - 0.0167- 0.0000-   0.0037 = 22.6267  Versus  22.6270

Mass Balance = -3.5286E-04 cm;  Time step attempts = 3398 and successes = 3398
  Evaporation:  Potential =  1.9546 cm, Actual =  0.0167 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 49.5 %;  TMEAN = 281.2 K;  HDRY =  9.6390E+05 cm;  DAYUBC =  3372

-------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  42, Simulated Time = 24.0000 hr
-------------
Node Number         =       2            12            25
Depth (cm)          =     5.00000     30.70000      91.50000
Water (cm3/cm3)     =     0.24887      0.25002       0.25275
Head (cm)           = 6.84473E+02 5.21659E+02 4.86178E+02
Water Flow (cm)     =-1.52985E-02-7.75892E-04 3.71194E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR           STORAGE
 22.6270+ 0.0000+ 0.0000 - 0.0187- 0.0000-   0.0037 = 22.6046  Versus  22.6054

Mass Balance = -8.0109E-04 cm;  Time step attempts = 7593 and successes = 7593
  Evaporation:  Potential =  1.3669 cm, Actual =  0.0187 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 45.1 %;  TMEAN = 271.8 K;  HDRY =  1.0915E+06 cm;  DAYUBC =  4613

-------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  43, Simulated Time = 24.0000 hr
-------------
Node Number         =       2            12            25
Depth (cm)          =     5.00000     30.70000      91.50000
```

```
                                   EOAK SUBD
Water (cm3/cm3)    =      0.24817      0.24993      0.25268
Head (cm)          = 6.91285E+02 5.22894E+02 4.86977E+02
Water Flow (cm)    =-1.55961E-02-8.04747E-04 3.69545E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 22.6054+ 0.0000+ 0.0000 - 0.0175- 0.0000-  0.0037 = 22.5843  Versus  22.5845

Mass Balance = -2.3079E-04 cm;  Time step attempts = 2760 and successes = 2760
  Evaporation:  Potential =  0.5118 cm, Actual =  0.0175 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 51.8 %;  TMEAN = 267.9 K;  HDRY =  9.0174E+05 cm;  DAYUBC =  2739

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  44, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12          25
Depth (cm)         =      5.00000     30.70000     91.50000
Water (cm3/cm3)    =      0.24748      0.24983      0.25262
Head (cm)          = 6.98270E+02 5.24127E+02 4.87792E+02
Water Flow (cm)    =-1.59754E-02-8.28634E-04 3.67880E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 22.5845+ 0.0000+ 0.0000 - 0.0184- 0.0000-  0.0037 = 22.5624  Versus  22.5626

Mass Balance = -2.0027E-04 cm;  Time step attempts = 2258 and successes = 2258
  Evaporation:  Potential =  0.4374 cm, Actual =  0.0184 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 55.2 %;  TMEAN = 271.8 K;  HDRY =  8.1459E+05 cm;  DAYUBC =  2238

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  45, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12          25
Depth (cm)         =      5.00000     30.70000     91.50000
Water (cm3/cm3)    =      0.23536      0.24976      0.25257
Head (cm)          = 8.34392E+02 5.25089E+02 4.88393E+02
Water Flow (cm)    =-6.46545E-02-8.57564E-04 3.66500E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 22.5626+ 0.0508+ 0.0000 - 0.0629- 0.0000-  0.0037 = 22.5468  Versus  22.5490

Mass Balance = -2.1553E-03 cm;  Time step attempts =23273 and successes =23273
  Evaporation:  Potential =  0.2540 cm, Actual =  0.0629 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 79.5 %;  TMEAN = 276.8 K;  HDRY =  3.1506E+05 cm;  DAYUBC =     0

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  46, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12          25
Depth (cm)         =      5.00000     30.70000     91.50000
Water (cm3/cm3)    =      0.23438      0.24968      0.25252
Head (cm)          = 8.46811E+02 5.26207E+02 4.89060E+02
Water Flow (cm)    =-7.91656E-02-9.06722E-04 3.65115E-03
```

```
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR            STORAGE
 22.5490+ 0.0000+ 0.0000 - 0.1853- 0.0000-  0.0037 = 22.3600  Versus  22.3615

Mass Balance = -1.4439E-03 cm;  Time step attempts =31360 and successes =31360
  Evaporation:  Potential =  0.9993 cm, Actual =  0.1853 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 73.1 %;  TMEAN = 278.7 K;  HDRY =  4.2912E+05 cm;  DAYUBC =  3445
```

```
DAILY SUMMARY:  Day =  47, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.23647     0.24965     0.25250
Head (cm)           = 8.20548E+02 5.26674E+02 4.89257E+02
Water Flow (cm)     =-3.69560E-02-9.87803E-04 3.64146E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR            STORAGE
 22.3615+ 0.0254+ 0.0000 - 0.0585- 0.0000-  0.0036 = 22.3248  Versus  22.3357

Mass Balance = -1.0946E-02 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  0.6463 cm, Actual =  0.0585 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 53.7 %;  TMEAN = 274.5 K;  HDRY =  8.5115E+05 cm;  DAYUBC = 96161
```

```
DAILY SUMMARY:  Day =  48, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.23674     0.24965     0.25250
Head (cm)           = 8.17288E+02 5.26674E+02 4.89257E+02
Water Flow (cm)     =-2.24858E-02-1.00705E-03 3.64025E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR            STORAGE
 22.3357+ 0.0000+ 0.0000 - 0.0169- 0.0000-  0.0036 = 22.3152  Versus  22.3349

Mass Balance = -1.9735E-02 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  1.4377 cm, Actual =  0.0169 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 42.9 %;  TMEAN = 277.6 K;  HDRY =  1.1608E+06 cm;  DAYUBC = *****
```

```
DAILY SUMMARY:  Day =  49, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.23678     0.24965     0.25250
Head (cm)           = 8.16788E+02 5.26674E+02 4.89257E+02
Water Flow (cm)     =-2.19324E-02-1.00705E-03 3.64025E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR            STORAGE
```

```
 22.3349+ 0.0000+ 0.0000 - 0.0150- 0.0000-  0.0036 = 22.3162  Versus  22.3347

Mass Balance = -1.8473E-02 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  2.5694 cm, Actual =  0.0150 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 41.3 %;  TMEAN = 282.9 K;  HDRY =  1.2123E+06 cm;  DAYUBC = *****

----------------------------------------------------------------------------


DAILY SUMMARY:  Day =  50, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12          25
Depth (cm)        =    5.00000    30.70000    91.50000
Water (cm3/cm3)   =    0.23692     0.24964     0.25250
Head (cm)         = 8.15083E+02 5.26767E+02 4.89293E+02
Water Flow (cm)   =-2.20064E-02-1.03194E-03 3.63966E-03
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 22.3347+ 0.0000+ 0.0000 - 0.0142- 0.0000-  0.0036 = 22.3169  Versus  22.3346

Mass Balance = -1.7693E-02 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  2.1349 cm, Actual =  0.0142 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 47.6 %;  TMEAN = 283.2 K;  HDRY =  1.0170E+06 cm;  DAYUBC = *****

----------------------------------------------------------------------------


DAILY SUMMARY:  Day =  51, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12          25
Depth (cm)        =    5.00000    30.70000    91.50000
Water (cm3/cm3)   =    0.23697     0.24964     0.25250
Head (cm)         = 8.14488E+02 5.26767E+02 4.89293E+02
Water Flow (cm)   =-2.14574E-02-1.03282E-03 3.63962E-03
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 22.3346+ 0.0000+ 0.0000 - 0.0163- 0.0000-  0.0036 = 22.3146  Versus  22.3329

Mass Balance = -1.8293E-02 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  2.8467 cm, Actual =  0.0163 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 36.6 %;  TMEAN = 286.8 K;  HDRY =  1.3793E+06 cm;  DAYUBC = *****

----------------------------------------------------------------------------


DAILY SUMMARY:  Day =  52, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12          25
Depth (cm)        =    5.00000    30.70000    91.50000
Water (cm3/cm3)   =    0.23702     0.24964     0.25250
Head (cm)         = 8.13819E+02 5.26767E+02 4.89293E+02
Water Flow (cm)   =-2.09971E-02-1.03282E-03 3.63962E-03
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 22.3329+ 0.0000+ 0.0000 - 0.0149- 0.0000-  0.0036 = 22.3143  Versus  22.3323

Mass Balance = -1.8009E-02 cm;  Time step attempts =***** and successes =*****
```

```
  Evaporation:  Potential =  2.6205 cm, Actual =  0.0149 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 31.2 %;  TMEAN = 286.5 K;  HDRY =  1.5982E+06 cm;  DAYUBC = *****

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  53, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.23708     0.24964     0.25250
Head (cm)          = 8.13132E+02 5.26784E+02 4.89293E+02
Water Flow (cm)    =-2.09801E-02-1.03876E-03 3.63962E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 22.3323+ 0.0000+ 0.0000 - 0.0139- 0.0000-  0.0036 = 22.3148  Versus  22.3323

Mass Balance = -1.7580E-02 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  4.5482 cm, Actual =  0.0139 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 34.1 %;  TMEAN = 291.2 K;  HDRY =  1.4740E+06 cm;  DAYUBC = *****

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  54, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.23722     0.24963     0.25250
Head (cm)          = 8.11491E+02 5.26864E+02 4.89323E+02
Water Flow (cm)    =-2.07110E-02-1.04999E-03 3.63905E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 22.3323+ 0.0000+ 0.0000 - 0.0138- 0.0000-  0.0036 = 22.3149  Versus  22.3322

Mass Balance = -1.7328E-02 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  3.3091 cm, Actual =  0.0138 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 40.4 %;  TMEAN = 288.7 K;  HDRY =  1.2425E+06 cm;  DAYUBC = *****

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  55, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.23726     0.24963     0.25250
Head (cm)          = 8.10975E+02 5.26864E+02 4.89323E+02
Water Flow (cm)    =-2.02063E-02-1.05048E-03 3.63902E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 22.3322+ 0.0000+ 0.0000 - 0.0156- 0.0000-  0.0036 = 22.3130  Versus  22.3309

Mass Balance = -1.7935E-02 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  2.7289 cm, Actual =  0.0156 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 31.0 %;  TMEAN = 284.0 K;  HDRY =  1.6044E+06 cm;  DAYUBC = *****
```

```
-----------------------------------------------------------------------------

 DAILY SUMMARY:  Day =  56, Simulated Time = 24.0000 hr
 -------------
 Node Number       =        2           12           25
 Depth (cm)        =      5.00000     30.70000     91.50000
 Water (cm3/cm3)   =      0.23753      0.24961      0.25248
 Head (cm)         = 8.07747E+02 5.27212E+02 4.89494E+02
 Water Flow (cm)   =-2.02387E-02-1.07313E-03 3.63602E-03
 Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

  PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
  22.3309+ 0.0000+ 0.0000 - 0.0123- 0.0000-  0.0036 = 22.3150  Versus  22.3293

 Mass Balance = -1.4320E-02 cm;  Time step attempts =***** and successes =*****
   Evaporation:  Potential =  3.3829 cm, Actual =  0.0123 cm
 Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
 RHMEAN = 51.8 %;  TMEAN = 288.4 K;  HDRY =  9.0254E+05 cm;  DAYUBC = *****

-----------------------------------------------------------------------------

 DAILY SUMMARY:  Day =  57, Simulated Time = 24.0000 hr
 -------------
 Node Number       =        2           12           25
 Depth (cm)        =      5.00000     30.70000     91.50000
 Water (cm3/cm3)   =      0.23768      0.24958      0.25247
 Head (cm)         = 8.05864E+02 5.27612E+02 4.89689E+02
 Water Flow (cm)   =-2.00445E-02-1.09893E-03 3.63212E-03
 Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

  PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
  22.3293+ 0.0000+ 0.0000 - 0.0141- 0.0000-  0.0036 = 22.3116  Versus  22.3284

 Mass Balance = -1.6882E-02 cm;  Time step attempts =***** and successes =*****
   Evaporation:  Potential =  2.1397 cm, Actual =  0.0141 cm
 Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
 RHMEAN = 69.1 %;  TMEAN = 292.0 K;  HDRY =  5.0637E+05 cm;  DAYUBC = *****

-----------------------------------------------------------------------------

 DAILY SUMMARY:  Day =  58, Simulated Time = 24.0000 hr
 -------------
 Node Number       =        2           12           25
 Depth (cm)        =      5.00000     30.70000     91.50000
 Water (cm3/cm3)   =      0.23574      0.24948      0.25241
 Head (cm)         = 8.29631E+02 5.28924E+02 4.90415E+02
 Water Flow (cm)   =-2.45575E-02-1.13818E-03 3.62347E-03
 Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

  PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
  22.3284+ 0.0000+ 0.0000 - 0.0005- 0.0000-  0.0036 = 22.3243  Versus  22.3288

 Mass Balance = -4.4136E-03 cm;  Time step attempts =36440 and successes =36440
   Evaporation:  Potential =  0.0564 cm, Actual =  0.0005 cm
 Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
 RHMEAN = 94.2 %;  TMEAN = 284.0 K;  HDRY =  8.1829E+04 cm;  DAYUBC =     0

-----------------------------------------------------------------------------
```

```
DAILY SUMMARY:  Day =  59, Simulated Time = 24.0000 hr
-------------
Node Number       =        2           12          25
Depth (cm)        =     5.00000    30.70000    91.50000
Water (cm3/cm3)   =     0.23431     0.24948     0.25241
Head (cm)         = 8.47649E+02 5.28924E+02 4.90415E+02
Water Flow (cm)   =-3.76367E-02-1.16160E-03 3.61692E-03
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 22.3288+ 0.0000+ 0.0000 - 0.0677- 0.0000-  0.0036 = 22.2574  Versus  22.2834

Mass Balance = -2.5925E-02 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  0.3598 cm, Actual =  0.0677 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 80.7 %;  TMEAN = 274.5 K;  HDRY =  2.9438E+05 cm;  DAYUBC = 47214

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  60, Simulated Time = 24.0000 hr
-------------
Node Number       =        2           12          25
Depth (cm)        =     5.00000    30.70000    91.50000
Water (cm3/cm3)   =     0.23452     0.24948     0.25241
Head (cm)         = 8.44958E+02 5.28924E+02 4.90415E+02
Water Flow (cm)   =-3.23423E-02-1.16160E-03 3.61692E-03
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 22.2834+ 0.0000+ 0.0000 - 0.0240- 0.0000-  0.0036 = 22.2558  Versus  22.2815

Mass Balance = -2.5711E-02 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  0.3097 cm, Actual =  0.0240 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 75.7 %;  TMEAN = 269.3 K;  HDRY =  3.8069E+05 cm;  DAYUBC = 96294

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  61, Simulated Time = 24.0000 hr
-------------
Node Number       =        2           12          25
Depth (cm)        =     5.00000    30.70000    91.50000
Water (cm3/cm3)   =     0.23425     0.24944     0.25239
Head (cm)         = 8.48458E+02 5.29495E+02 4.90737E+02
Water Flow (cm)   =-2.86171E-02-1.17867E-03 3.61179E-03
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 22.2815+ 0.0000+ 0.0000 - 0.0083- 0.0000-  0.0036 = 22.2696  Versus  22.2906

Mass Balance = -2.0931E-02 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  0.0433 cm, Actual =  0.0083 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 88.6 %;  TMEAN = 267.9 K;  HDRY =  1.6595E+05 cm;  DAYUBC =      0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  62, Simulated Time = 24.0000 hr
-------------
```

```
Node Number         =        2           12           25
Depth (cm)          =     5.00000     30.70000     91.50000
Water (cm3/cm3)     =     0.25083      0.24944      0.25239
Head (cm)           = 6.65529E+02 5.29495E+02 4.90737E+02
Water Flow (cm)     = 1.26355E-01-1.18349E-03 3.61035E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 22.2906+ 0.6350+ 0.0000 - 0.0535- 0.0000-  0.0036 = 22.8684  Versus  22.8778

Mass Balance = -9.4013E-03 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  0.2163 cm, Actual =  0.0535 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 89.2 %;  TMEAN = 270.4 K;  HDRY =  1.5696E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  63, Simulated Time = 24.0000 hr
-------------
Node Number         =        2           12           25
Depth (cm)          =     5.00000     30.70000     91.50000
Water (cm3/cm3)     =     0.26707      0.24943      0.25236
Head (cm)           = 5.30330E+02 5.29699E+02 4.91033E+02
Water Flow (cm)     = 2.38795E-01-1.15854E-03 3.60941E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 22.8778+ 0.3556+ 0.0000 - 0.0000- 0.0000-  0.0036 = 23.2298  Versus  23.2328

Mass Balance = -3.0327E-03 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 97.8 %;  TMEAN = 275.4 K;  HDRY =  3.0950E+04 cm;  DAYUBC =     0

------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  64, Simulated Time = 24.0000 hr
-------------
Node Number         =        2           12           25
Depth (cm)          =     5.00000     30.70000     91.50000
Water (cm3/cm3)     =     0.26312      0.24941      0.25229
Head (cm)           = 5.60063E+02 5.29919E+02 4.91895E+02
Water Flow (cm)     = 5.44677E-02-8.55598E-04 3.59621E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 23.2328+ 0.0254+ 0.0000 - 0.0000- 0.0000-  0.0036 = 23.2546  Versus  23.2548

Mass Balance = -1.5259E-04 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 89.5 %;  TMEAN = 278.2 K;  HDRY =  1.5203E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  65, Simulated Time = 24.0000 hr
-------------
Node Number         =        2           12           25
Depth (cm)          =     5.00000     30.70000     91.50000
Water (cm3/cm3)     =     0.31257      0.25005      0.25222
```

```
Head (cm)           = 2.83420E+02 5.21184E+02 4.92767E+02
Water Flow (cm)     = 1.20491E+00 8.59669E-04 3.57893E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 23.2548+ 1.5494+ 0.0000 - 0.0000- 0.0000-  0.0036 = 24.8006  Versus  24.8009

Mass Balance = -3.0136E-04 cm;  Time step attempts = 2417 and successes = 2417
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 98.6 %;  TMEAN = 279.8 K;  HDRY =  1.9871E+04 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  66, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.29728     0.25072     0.25216
Head (cm)           = 3.51018E+02 5.12199E+02 4.93646E+02
Water Flow (cm)     =-1.05451E-01 4.87730E-03 3.56164E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 24.8009+ 0.0254+ 0.0000 - 0.2437- 0.0000-  0.0036 = 24.5790  Versus  24.5791

Mass Balance = -6.2943E-05 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.9847 cm, Actual =  0.2437 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 80.9 %;  TMEAN = 267.3 K;  HDRY =  2.9057E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  67, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.28701     0.25097     0.25209
Head (cm)           = 4.03930E+02 5.09015E+02 4.94532E+02
Water Flow (cm)     =-1.36718E-01 5.05667E-03 3.54427E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 24.5791+ 0.1270+ 0.0000 - 0.3403- 0.0000-  0.0035 = 24.3623  Versus  24.3623

Mass Balance = -4.7684E-05 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  1.3749 cm, Actual =  0.3403 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 51.1 %;  TMEAN = 271.5 K;  HDRY =  9.1989E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  68, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.28093     0.25094     0.25203
Head (cm)           = 4.38811E+02 5.09409E+02 4.95286E+02
Water Flow (cm)     =-2.13543E-01 4.21158E-03 3.52758E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00
```

```
 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR             STORAGE
 24.3623+ 0.0000+ 0.0000 - 0.7347- 0.0000-  0.0035 = 23.6241  Versus  23.6241

Mass Balance =  5.5313E-05 cm;  Time step attempts =25306 and successes =25306
  Evaporation:  Potential =  3.2775 cm, Actual =  0.7347 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 36.5 %;  TMEAN = 280.1 K;  HDRY =  1.3804E+06 cm;  DAYUBC =  3752

-------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  69, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.28442     0.25083     0.25196
Head (cm)          = 4.18456E+02 5.10825E+02 4.96148E+02
Water Flow (cm)    =-4.28129E-02 3.04709E-03 3.51242E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR             STORAGE
 23.6241+ 0.0000+ 0.0000 - 0.0269- 0.0000-  0.0035 = 23.5936  Versus  23.5936

Mass Balance =  1.3351E-05 cm;  Time step attempts = 2291 and successes = 2291
  Evaporation:  Potential =  4.2635 cm, Actual =  0.0269 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 37.5 %;  TMEAN = 284.8 K;  HDRY =  1.3426E+06 cm;  DAYUBC =  2269

-------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  70, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.28315     0.25077     0.25189
Head (cm)          = 4.25762E+02 5.11583E+02 4.96980E+02
Water Flow (cm)    =-3.06022E-02 2.54017E-03 3.49581E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR             STORAGE
 23.5936+ 0.0000+ 0.0000 - 0.0317- 0.0000-  0.0035 = 23.5584  Versus  23.5584

Mass Balance = -1.9073E-05 cm;  Time step attempts =  665 and successes =  665
  Evaporation:  Potential =  3.0758 cm, Actual =  0.0317 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 61.4 %;  TMEAN = 287.6 K;  HDRY =  6.6799E+05 cm;  DAYUBC =   628

-------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  71, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.28909     0.25094     0.25184
Head (cm)          = 3.92642E+02 5.09321E+02 4.97707E+02
Water Flow (cm)    = 2.28142E-01 2.86540E-03 3.48114E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR             STORAGE
 23.5584+ 1.0414+ 0.0000 - 0.2888- 0.0000-  0.0035 = 24.3076  Versus  24.3079
```

```
Mass Balance = -3.3188E-04 cm;  Time step attempts = 4999 and successes = 4999
  Evaporation:  Potential =  1.1787 cm, Actual =  0.2888 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 81.4 %;  TMEAN = 289.8 K;  HDRY =  2.8275E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  72, Simulated Time = 24.0000 hr
-------------
Node Number        =      2          12          25
Depth (cm)         =    5.00000    30.70000    91.50000
Water (cm3/cm3)    =    0.37027     0.25621     0.25179
Head (cm)          = 9.85221E+01 4.44877E+02 4.98362E+02
Water Flow (cm)    = 1.87391E+00 2.21545E-02 3.46787E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 24.3079+ 2.4463+ 1.5161 - 0.0000- 0.0000-  0.0035 = 26.7507  Versus  26.7508

Mass Balance = -8.0109E-05 cm;  Time step attempts = 2633 and successes = 2633
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 91.8 %;  TMEAN = 287.3 K;  HDRY =  1.1730E+05 cm;  DAYUBC =   354

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  73, Simulated Time = 24.0000 hr
-------------
Node Number        =      2          12          25
Depth (cm)         =    5.00000    30.70000    91.50000
Water (cm3/cm3)    =    0.37926     0.26131     0.25174
Head (cm)          = 7.39755E+01 3.90293E+02 4.98952E+02
Water Flow (cm)    = 2.75672E-01 5.26980E-02 3.45601E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 26.7508+ 0.5231+ 0.1627 - 0.1848- 0.0000-  0.0035 = 27.0856  Versus  27.0857

Mass Balance = -1.0490E-04 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.7468 cm, Actual =  0.1848 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 84.3 %;  TMEAN = 288.2 K;  HDRY =  2.3434E+05 cm;  DAYUBC =   649

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  74, Simulated Time = 24.0000 hr
-------------
Node Number        =      2          12          25
Depth (cm)         =    5.00000    30.70000    91.50000
Water (cm3/cm3)    =    0.36846     0.26249     0.25170
Head (cm)          = 1.03479E+02 3.78637E+02 4.99463E+02
Water Flow (cm)    =-1.87911E-01 5.10805E-02 3.44549E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 27.0857+ 0.1524+ 0.0000 - 0.4166- 0.0000-  0.0034 = 26.8181  Versus  26.8181

Mass Balance = -1.7166E-05 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  1.6834 cm, Actual =  0.4166 cm
```

```
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 64.4 %;   TMEAN = 290.7 K;   HDRY =   6.0320E+05 cm;   DAYUBC =      0
-----------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  75, Simulated Time = 24.0000 hr
-------------
Node Number        =       2           12           25
Depth (cm)         =     5.00000    30.70000     91.50000
Water (cm3/cm3)    =     0.34871     0.26170      0.25168
Head (cm)          = 1.59221E+02 3.86458E+02 4.99795E+02
Water Flow (cm)    =-4.08294E-01 3.48889E-02 3.43704E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 26.8181+ 0.0000+ 0.0000 - 0.5476- 0.0000-  0.0034 = 26.2671  Versus  26.2671

Mass Balance = -7.6294E-06 cm;  Time step attempts =   96 and successes =   96
  Evaporation:  Potential =  2.1903 cm, Actual =  0.5476 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 52.5 %;   TMEAN = 289.5 K;   HDRY =   8.8434E+05 cm;   DAYUBC =      0
-----------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  76, Simulated Time = 24.0000 hr
-------------
Node Number        =       2           12           25
Depth (cm)         =     5.00000    30.70000     91.50000
Water (cm3/cm3)    =     0.32941     0.26059      0.25169
Head (cm)          = 2.20648E+02 3.97615E+02 4.99653E+02
Water Flow (cm)    =-3.87623E-01 2.22792E-02 3.43474E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 26.2671+ 0.0000+ 0.0000 - 0.5242- 0.0000-  0.0034 = 25.7395  Versus  25.7395

Mass Balance = -1.5259E-05 cm;  Time step attempts =   96 and successes =   96
  Evaporation:  Potential =  2.0967 cm, Actual =  0.5242 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 48.8 %;   TMEAN = 290.4 K;   HDRY =   9.8280E+05 cm;   DAYUBC =      0
-----------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  77, Simulated Time = 24.0000 hr
-------------
Node Number        =       2           12           25
Depth (cm)         =     5.00000    30.70000     91.50000
Water (cm3/cm3)    =     0.29176     0.25942      0.25176
Head (cm)          = 3.78587E+02 4.09778E+02 4.98747E+02
Water Flow (cm)    =-5.26599E-01 1.43264E-02 3.44427E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 25.7395+ 0.0000+ 0.0000 - 0.8101- 0.0000-  0.0034 = 24.9259  Versus  24.9259

Mass Balance = -2.4796E-05 cm;  Time step attempts =  490 and successes =  490
  Evaporation:  Potential =  3.2406 cm, Actual =  0.8101 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 48.8 %;   TMEAN = 291.5 K;   HDRY =   9.8379E+05 cm;   DAYUBC =      0
```

```
DAILY SUMMARY:  Day =  78, Simulated Time = 24.0000 hr
-------------
Node Number         =       2           12           25
Depth (cm)          =     5.00000     30.70000     91.50000
Water (cm3/cm3)     =     0.29526      0.25821      0.25188
Head (cm)           = 3.60897E+02 4.22671E+02 4.97168E+02
Water Flow (cm)     =-2.80488E-01 8.17518E-03 3.46801E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 24.9259+ 0.0000+ 0.0000 - 0.7541- 0.0000-  0.0035 = 24.1684  Versus  24.1678

Mass Balance =  5.6839E-04 cm;  Time step attempts =15747 and successes =15747
  Evaporation:  Potential =  5.5130 cm, Actual =  0.7541 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 41.2 %;  TMEAN = 295.9 K;  HDRY =  1.2150E+06 cm;  DAYUBC =  4389
```

```
DAILY SUMMARY:  Day =  79, Simulated Time = 24.0000 hr
-------------
Node Number         =       2           12           25
Depth (cm)          =     5.00000     30.70000     91.50000
Water (cm3/cm3)     =     0.29648      0.25739      0.25207
Head (cm)           = 3.54909E+02 4.31599E+02 4.94708E+02
Water Flow (cm)     =-4.20421E-02 5.29356E-03 3.50679E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 24.1678+ 0.0000+ 0.0000 - 0.0356- 0.0000-  0.0035 = 24.1287  Versus  24.1287

Mass Balance =  3.2425E-05 cm;  Time step attempts = 1846 and successes = 1846
  Evaporation:  Potential =  2.9163 cm, Actual =  0.0356 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 46.9 %;  TMEAN = 289.8 K;  HDRY =  1.0376E+06 cm;  DAYUBC =  1821
```

```
DAILY SUMMARY:  Day =  80, Simulated Time = 24.0000 hr
-------------
Node Number         =       2           12           25
Depth (cm)          =     5.00000     30.70000     91.50000
Water (cm3/cm3)     =     0.29531      0.25683      0.25230
Head (cm)           = 3.60639E+02 4.37855E+02 4.91823E+02
Water Flow (cm)     =-3.01271E-02 4.46182E-03 3.55895E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 24.1287+ 0.0000+ 0.0000 - 0.0358- 0.0000-  0.0036 = 24.0894  Versus  24.0897

Mass Balance = -3.5858E-04 cm;  Time step attempts = 5094 and successes = 5094
  Evaporation:  Potential =  5.0258 cm, Actual =  0.0358 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 45.0 %;  TMEAN = 293.7 K;  HDRY =  1.0934E+06 cm;  DAYUBC =  4800
```

```
DAILY SUMMARY:  Day =  81, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =    5.00000    30.70000    91.50000
Water (cm3/cm3)    =    0.29434     0.25639     0.25254
Head (cm)          = 3.65480E+02 4.42772E+02 4.88760E+02
Water Flow (cm)    =-2.55421E-02 4.02923E-03 3.61855E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 24.0897+ 0.0000+ 0.0000 - 0.0319- 0.0000-  0.0036 = 24.0542  Versus  24.0546

Mass Balance = -4.1962E-04 cm;  Time step attempts = 5094 and successes = 5094
  Evaporation:  Potential =  5.8025 cm, Actual =  0.0319 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 32.5 %;  TMEAN = 298.2 K;  HDRY =  1.5407E+06 cm;  DAYUBC =  3612

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  82, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =    5.00000    30.70000    91.50000
Water (cm3/cm3)    =    0.29307     0.25603     0.25279
Head (cm)          = 3.71896E+02 4.46924E+02 4.85672E+02
Water Flow (cm)    =-2.59367E-02 3.71862E-03 3.68231E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 24.0546+ 0.0000+ 0.0000 - 0.0308- 0.0000-  0.0037 = 24.0202  Versus  24.0202

Mass Balance = -5.3406E-05 cm;  Time step attempts =  874 and successes =  874
  Evaporation:  Potential =  3.2170 cm, Actual =  0.0308 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 38.7 %;  TMEAN = 290.4 K;  HDRY =  1.3025E+06 cm;  DAYUBC =   857

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  83, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =    5.00000    30.70000    91.50000
Water (cm3/cm3)    =    0.29157     0.25572     0.25302
Head (cm)          = 3.79568E+02 4.50489E+02 4.82829E+02
Water Flow (cm)    =-2.88675E-02 3.45452E-03 3.74380E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 24.0202+ 0.0000+ 0.0000 - 0.0337- 0.0000-  0.0037 = 23.9828  Versus  23.9829

Mass Balance = -1.6022E-04 cm;  Time step attempts = 3246 and successes = 3246
  Evaporation:  Potential =  3.6655 cm, Actual =  0.0337 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 49.8 %;  TMEAN = 291.8 K;  HDRY =  9.5685E+05 cm;  DAYUBC =  3222

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  84, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
```

```
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.26094     0.25540     0.25322
Head (cm)           = 5.77238E+02 4.54223E+02 4.80313E+02
Water Flow (cm)     =-2.70856E-01 3.10449E-03 3.80013E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR           STORAGE
 23.9829+ 0.3810+ 0.0000 - 0.3886- 0.0000-  0.0038 = 23.9715  Versus  23.9722

Mass Balance = -6.4468E-04 cm;  Time step attempts = 7860 and successes = 7860
  Evaporation:  Potential =  1.5701 cm, Actual =  0.3886 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 68.6 %;  TMEAN = 291.8 K;  HDRY =  5.1698E+05 cm;  DAYUBC =     0

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  85, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.26345     0.25509     0.25334
Head (cm)           = 5.57529E+02 4.57816E+02 4.78896E+02
Water Flow (cm)     =-1.80418E-01 2.10314E-03 3.84889E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR           STORAGE
 23.9722+ 0.0508+ 0.0000 - 0.6183- 0.0000-  0.0038 = 23.4008  Versus  23.4025

Mass Balance = -1.6537E-03 cm;  Time step attempts =77080 and successes =77080
  Evaporation:  Potential =  2.5186 cm, Actual =  0.6183 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 62.0 %;  TMEAN = 286.5 K;  HDRY =  6.5413E+05 cm;  DAYUBC =  4362

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  86, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.26888     0.25468     0.25350
Head (cm)           = 5.17270E+02 4.62683E+02 4.76850E+02
Water Flow (cm)     =-4.92401E-02 1.24087E-03 3.88076E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR           STORAGE
 23.4025+ 0.0000+ 0.0000 - 0.0273- 0.0000-  0.0039 = 23.3713  Versus  23.3713

Mass Balance =  2.2888E-05 cm;  Time step attempts = 7593 and successes = 7593
  Evaporation:  Potential =  2.4844 cm, Actual =  0.0273 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 51.0 %;  TMEAN = 282.3 K;  HDRY =  9.2314E+05 cm;  DAYUBC =  2739

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  87, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.26863     0.25433     0.25365
Head (cm)           = 5.19072E+02 4.66833E+02 4.75019E+02
```

```
Water Flow (cm)    =-2.94790E-02 7.87795E-04 3.92460E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS     DRAIN    NEWSTOR          STORAGE
 23.3713+ 0.0000+ 0.0000 - 0.0272- 0.0000-  0.0039 = 23.3402  Versus  23.3402

Mass Balance = -3.8147E-05 cm;  Time step attempts = 1096 and successes = 1096
  Evaporation:  Potential =  0.8864 cm, Actual =  0.0272 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 65.4 %;  TMEAN = 279.5 K;  HDRY =  5.8242E+05 cm;  DAYUBC =  1069

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  88, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.26768     0.25404     0.25378
Head (cm)          = 5.25912E+02 4.70333E+02 4.73500E+02
Water Flow (cm)    =-2.70674E-02 5.73661E-04 3.96178E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS     DRAIN    NEWSTOR          STORAGE
 23.3402+ 0.0000+ 0.0000 - 0.0309- 0.0000-  0.0040 = 23.3053  Versus  23.3056

Mass Balance = -2.9755E-04 cm;  Time step attempts = 3546 and successes = 3546
  Evaporation:  Potential =  1.0736 cm, Actual =  0.0309 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 66.8 %;  TMEAN = 281.2 K;  HDRY =  5.5366E+05 cm;  DAYUBC =  3534

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  89, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.26712     0.25380     0.25387
Head (cm)          = 5.29985E+02 4.73231E+02 4.72317E+02
Water Flow (cm)    =-2.34872E-02 4.38566E-04 3.99156E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS     DRAIN    NEWSTOR          STORAGE
 23.3056+ 0.0000+ 0.0000 - 0.0293- 0.0000-  0.0040 = 23.2724  Versus  23.2749

Mass Balance = -2.4738E-03 cm;  Time step attempts =20088 and successes =20088
  Evaporation:  Potential =  1.2627 cm, Actual =  0.0293 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 54.7 %;  TMEAN = 279.5 K;  HDRY =  8.2642E+05 cm;  DAYUBC =  4236

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  90, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.26612     0.25356     0.25396
Head (cm)          = 5.37316E+02 4.76100E+02 4.71267E+02
Water Flow (cm)    =-2.29278E-02 3.28555E-04 4.01825E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00
```

```
 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN    NEWSTOR              STORAGE
 23.2749+ 0.0000+ 0.0000 - 0.0262- 0.0000-   0.0040 = 23.2446   Versus   23.2448

Mass Balance = -1.8692E-04 cm;  Time step attempts = 2886 and successes = 2886
  Evaporation:  Potential =  1.8291 cm, Actual =   0.0262 cm
Transpiration:  Potential =  0.0000 cm, Actual =   0.0000 cm
RHMEAN = 60.1 %;  TMEAN = 283.2 K;  HDRY =  6.9820E+05 cm;  DAYUBC =  2865

---------------------------------------------------------------------------

DAILY SUMMARY:  Day =  91, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12          25
Depth (cm)        =     5.00000    30.70000    91.50000
Water (cm3/cm3)   =     0.26562     0.25335     0.25403
Head (cm)         = 5.40993E+02 4.78652E+02 4.70456E+02
Water Flow (cm)   =-1.99321E-02 2.31305E-04 4.03952E-03
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN    NEWSTOR              STORAGE
 23.2448+ 0.0000+ 0.0000 - 0.0258- 0.0000-   0.0040 = 23.2150   Versus   23.2158

Mass Balance = -7.9727E-04 cm;  Time step attempts = 7593 and successes = 7593
  Evaporation:  Potential =  3.3740 cm, Actual =   0.0258 cm
Transpiration:  Potential =  0.0000 cm, Actual =   0.0000 cm
RHMEAN = 42.0 %;  TMEAN = 287.9 K;  HDRY =  1.1886E+06 cm;  DAYUBC =  2743

---------------------------------------------------------------------------

DAILY SUMMARY:  Day =  92, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12          25
Depth (cm)        =     5.00000    30.70000    91.50000
Water (cm3/cm3)   =     0.26507     0.25317     0.25408
Head (cm)         = 5.45136E+02 4.80985E+02 4.69848E+02
Water Flow (cm)   =-1.78254E-02 1.51314E-04 4.05601E-03
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN    NEWSTOR              STORAGE
 23.2158+ 0.0000+ 0.0000 - 0.0217- 0.0000-   0.0041 = 23.1901   Versus   23.1911

Mass Balance = -1.0834E-03 cm;  Time step attempts =10092 and successes =10092
  Evaporation:  Potential =  1.2628 cm, Actual =   0.0217 cm
Transpiration:  Potential =  3.6120 cm, Actual =   0.0000 cm
RHMEAN = 33.8 %;  TMEAN = 290.9 K;  HDRY =  1.4878E+06 cm;  DAYUBC =  4540

---------------------------------------------------------------------------

DAILY SUMMARY:  Day =  93, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12          25
Depth (cm)        =     5.00000    30.70000    91.50000
Water (cm3/cm3)   =     0.26049     0.25298     0.25411
Head (cm)         = 5.80912E+02 4.83235E+02 4.69408E+02
Water Flow (cm)   =-4.45623E-02 7.54580E-05 4.06836E-03
Plant Sink (cm)   = 4.64816E-03 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN    NEWSTOR              STORAGE
 23.1911+ 0.4064+ 0.0000 - 0.0135- 0.0387-   0.0041 = 23.5412   Versus   23.5418
```

```
Mass Balance = -6.2180E-04 cm;  Time step attempts = 7335 and successes = 7335
  Evaporation:  Potential =  0.0547 cm, Actual =  0.0135 cm
Transpiration:  Potential =  0.1564 cm, Actual =  0.0387 cm
RHMEAN = 86.1 %;  TMEAN = 285.9 K;  HDRY =  2.0491E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  94, Simulated Time = 24.0000 hr
-------------
Node Number          =        2           12           25
Depth (cm)           =     5.00000     30.70000     91.50000
Water (cm3/cm3)      =     0.23276      0.25279      0.25414
Head (cm)            = 8.67790E+02 4.85637E+02 4.69117E+02
Water Flow (cm)      =-7.37371E-02-6.61003E-05 4.07711E-03
Plant Sink (cm)      = 4.11124E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL   RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 23.5418+ 0.0254+ 0.0000 - 0.1197- 0.3425-  0.0041 = 23.1009  Versus  23.1010

Mass Balance = -1.0681E-04 cm;  Time step attempts = 2176 and successes = 2176
  Evaporation:  Potential =  0.4838 cm, Actual =  0.1197 cm
Transpiration:  Potential =  1.3838 cm, Actual =  0.3425 cm
RHMEAN = 63.4 %;  TMEAN = 287.3 K;  HDRY =  6.2486E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  95, Simulated Time = 24.0000 hr
-------------
Node Number          =        2           12           25
Depth (cm)           =     5.00000     30.70000     91.50000
Water (cm3/cm3)      =     0.19627      0.25255      0.25415
Head (cm)            = 1.59891E+03 4.88645E+02 4.68966E+02
Water Flow (cm)      =-1.12356E-01-4.11634E-04 4.08244E-03
Plant Sink (cm)      = 5.27339E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL   RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 23.1010+ 0.0000+ 0.0000 - 0.1536- 0.4393-  0.0041 = 22.5041  Versus  22.5041

Mass Balance = -3.8147E-06 cm;  Time step attempts =  523 and successes =  523
  Evaporation:  Potential =  0.6143 cm, Actual =  0.1536 cm
Transpiration:  Potential =  1.7572 cm, Actual =  0.4393 cm
RHMEAN = 61.3 %;  TMEAN = 288.2 K;  HDRY =  6.6988E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  96, Simulated Time = 24.0000 hr
-------------
Node Number          =        2           12           25
Depth (cm)           =     5.00000     30.70000     91.50000
Water (cm3/cm3)      =     0.15943      0.25229      0.25415
Head (cm)            = 3.61179E+03 4.91985E+02 4.68943E+02
Water Flow (cm)      =-9.27274E-02-8.86724E-04 4.08436E-03
Plant Sink (cm)      = 5.19592E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL   RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 22.5041+ 0.0000+ 0.0000 - 0.1561- 0.4391-  0.0041 = 21.9048  Versus  21.9049

Mass Balance = -1.0109E-04 cm;  Time step attempts = 3595 and successes = 3595
  Evaporation:  Potential =  0.6245 cm, Actual =  0.1561 cm
Transpiration:  Potential =  1.7861 cm, Actual =  0.4391 cm
```

```
RHMEAN = 65.8 %;  TMEAN = 290.7 K;  HDRY =  5.7436E+05 cm;  DAYUBC =     0
------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  97, Simulated Time = 24.0000 hr
-------------
Node Number       =       2           12           25
Depth (cm)        =     5.00000    30.70000    91.50000
Water (cm3/cm3)   =     0.13177     0.25221     0.25415
Head (cm)         = 8.87336E+03 4.92905E+02 4.68943E+02
Water Flow (cm)   =-4.61253E-02-1.20942E-03 4.08440E-03
Plant Sink (cm)   = 3.64159E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 21.9049+ 0.0000+ 0.0000 - 0.1106- 0.4414-  0.0041 = 21.3488  Versus  21.3529

Mass Balance = -4.1237E-03 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  0.8448 cm, Actual =  0.1106 cm
Transpiration:  Potential =  2.4164 cm, Actual =  0.4414 cm
RHMEAN = 65.9 %;  TMEAN = 293.4 K;  HDRY =  5.7093E+05 cm;  DAYUBC = *****
------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  98, Simulated Time = 24.0000 hr
-------------
Node Number       =       2           12           25
Depth (cm)        =     5.00000    30.70000    91.50000
Water (cm3/cm3)   =     0.12094     0.25221     0.25415
Head (cm)         = 1.44832E+04 4.92914E+02 4.68943E+02
Water Flow (cm)   =-1.03867E-02-1.22755E-03 4.08438E-03
Plant Sink (cm)   = 1.17274E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 21.3529+ 0.0000+ 0.0000 - 0.0089- 0.4126-  0.0041 = 20.9274  Versus  20.9336

Mass Balance = -6.2675E-03 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  1.4007 cm, Actual =  0.0089 cm
Transpiration:  Potential =  4.0063 cm, Actual =  0.4126 cm
RHMEAN = 53.2 %;  TMEAN = 297.6 K;  HDRY =  8.6567E+05 cm;  DAYUBC = *****
------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  99, Simulated Time = 24.0000 hr
-------------
Node Number       =       2           12           25
Depth (cm)        =     5.00000    30.70000    91.50000
Water (cm3/cm3)   =     0.12015     0.25188     0.25414
Head (cm)         = 1.50843E+04 4.97166E+02 4.69055E+02
Water Flow (cm)   =-2.14892E-03-1.73378E-03 4.08346E-03
Plant Sink (cm)   = 2.59891E-04 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 20.9336+ 0.0000+ 0.0000 - 0.0000- 0.1215-  0.0041 = 20.8080  Versus  20.8082

Mass Balance = -1.5068E-04 cm;  Time step attempts = 2595 and successes = 2595
  Evaporation:  Potential =  0.6071 cm, Actual =  0.0000 cm
Transpiration:  Potential =  1.7365 cm, Actual =  0.1215 cm
RHMEAN = 74.9 %;  TMEAN = 289.8 K;  HDRY =  3.9616E+05 cm;  DAYUBC =     0
------------------------------------------------------------------------------
```

```
DAILY SUMMARY:  Day = 100, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.26323     0.25188     0.25414
Head (cm)          = 5.59175E+02 4.97167E+02 4.69055E+02
Water Flow (cm)    = 9.82381E-01-1.93491E-03 4.08176E-03
Plant Sink (cm)    = 9.52360E-03 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 20.8082+ 2.1405+ 0.7551 - 0.0277- 0.0793-  0.0041 = 22.8375  Versus  22.8452

Mass Balance = -7.6714E-03 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  0.1144 cm, Actual =  0.0277 cm
Transpiration:  Potential =  0.3272 cm, Actual =  0.0793 cm
RHMEAN = 76.0 %;  TMEAN = 283.7 K;  HDRY =  3.7666E+05 cm;  DAYUBC = 14197

----------------------------------------------------------------------------

DAILY SUMMARY:  Day = 101, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.20151     0.25188     0.25414
Head (cm)          = 1.45201E+03 4.97168E+02 4.69055E+02
Water Flow (cm)    =-1.29050E-02-1.93533E-03 4.08176E-03
Plant Sink (cm)    = 6.35299E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 22.8452+ 0.0000+ 0.0000 - 0.1850- 0.5292-  0.0041 = 22.1269  Versus  22.1321

Mass Balance = -5.1842E-03 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  0.7401 cm, Actual =  0.1850 cm
Transpiration:  Potential =  2.1169 cm, Actual =  0.5292 cm
RHMEAN = 51.2 %;  TMEAN = 279.5 K;  HDRY =  9.1795E+05 cm;  DAYUBC =      0

----------------------------------------------------------------------------

DAILY SUMMARY:  Day = 102, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.14934     0.25188     0.25414
Head (cm)          = 4.80940E+03 4.97168E+02 4.69055E+02
Water Flow (cm)    =-5.24979E-02-1.93564E-03 4.08176E-03
Plant Sink (cm)    = 6.03208E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 22.1321+ 0.0000+ 0.0000 - 0.1930- 0.5252-  0.0041 = 21.4098  Versus  21.4157

Mass Balance = -5.8994E-03 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  0.7719 cm, Actual =  0.1930 cm
Transpiration:  Potential =  2.2078 cm, Actual =  0.5252 cm
RHMEAN = 42.8 %;  TMEAN = 284.5 K;  HDRY =  1.1635E+06 cm;  DAYUBC =      0

----------------------------------------------------------------------------

DAILY SUMMARY:  Day = 103, Simulated Time = 24.0000 hr
```

```
-------------
Node Number         =        2           12           25
Depth (cm)          =     5.00000     30.70000     91.50000
Water (cm3/cm3)     =     0.12767      0.25188      0.25414
Head (cm)           = 1.05411E+04 4.97168E+02 4.69055E+02
Water Flow (cm)     =-2.08287E-02-1.93564E-03 4.08176E-03
Plant Sink (cm)     = 2.51887E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 21.4157+ 0.0000+ 0.0000 - 0.0989- 0.3662-  0.0041 = 20.9465  Versus  20.9543

Mass Balance = -7.7953E-03 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  0.8254 cm, Actual =  0.0989 cm
Transpiration:  Potential =  2.3609 cm, Actual =  0.3662 cm
RHMEAN = 42.5 %;  TMEAN = 287.9 K;  HDRY =  1.1731E+06 cm;  DAYUBC = *****

-------------------------------------------------------------------------


DAILY SUMMARY:  Day = 104, Simulated Time = 24.0000 hr
-------------
Node Number         =        2           12           25
Depth (cm)          =     5.00000     30.70000     91.50000
Water (cm3/cm3)     =     0.12017      0.25188      0.25414
Head (cm)           = 1.50700E+04 4.97168E+02 4.69055E+02
Water Flow (cm)     =-3.93779E-03-1.93583E-03 4.08176E-03
Plant Sink (cm)     = 6.92673E-03 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 20.9543+ 0.0000+ 0.0000 - 0.0069- 0.3323-  0.0041 = 20.6110  Versus  20.6181

Mass Balance = -7.0877E-03 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  1.5768 cm, Actual =  0.0069 cm
Transpiration:  Potential =  4.5102 cm, Actual =  0.3323 cm
RHMEAN = 42.5 %;  TMEAN = 294.8 K;  HDRY =  1.1718E+06 cm;  DAYUBC = *****

-------------------------------------------------------------------------


DAILY SUMMARY:  Day = 105, Simulated Time = 24.0000 hr
-------------
Node Number         =        2           12           25
Depth (cm)          =     5.00000     30.70000     91.50000
Water (cm3/cm3)     =     0.11918      0.25160      0.25413
Head (cm)           = 1.58752E+04 5.00710E+02 4.69270E+02
Water Flow (cm)     =-7.97721E-04-2.11661E-03 4.07959E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 20.6181+ 0.0000+ 0.0000 - 0.0001- 0.0845-  0.0041 = 20.5294  Versus  20.5297

Mass Balance = -2.2507E-04 cm;  Time step attempts = 5973 and successes = 5973
  Evaporation:  Potential =  0.6506 cm, Actual =  0.0001 cm
Transpiration:  Potential =  1.8608 cm, Actual =  0.0845 cm
RHMEAN = 66.2 %;  TMEAN = 293.4 K;  HDRY =  5.6623E+05 cm;  DAYUBC =  3364

-------------------------------------------------------------------------


DAILY SUMMARY:  Day = 106, Simulated Time = 24.0000 hr
-------------
Node Number         =        2           12           25
Depth (cm)          =     5.00000     30.70000     91.50000
```

```
Water (cm3/cm3)    =     0.11857     0.25137     0.25410
Head (cm)          = 1.64072E+04 5.03785E+02 4.69580E+02
Water Flow (cm)    =-7.63837E-04-2.25954E-03 4.07350E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 20.5297+ 0.0000+ 0.0000 - 0.0000- 0.0528-  0.0041 = 20.4728  Versus  20.4729

Mass Balance = -1.4305E-04 cm;  Time step attempts = 2595 and successes = 2595
  Evaporation:  Potential =  0.3975 cm, Actual =  0.0000 cm
Transpiration:  Potential =  1.1369 cm, Actual =  0.0528 cm
RHMEAN = 85.5 %;  TMEAN = 294.3 K;  HDRY =  2.1402E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 107, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.26407     0.25137     0.25410
Head (cm)          = 5.52705E+02 5.03786E+02 4.69580E+02
Water Flow (cm)    = 9.99320E-01-2.30571E-03 4.06951E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 20.4729+ 2.0995+ 0.7452 - 0.0000- 0.0000-  0.0041 = 22.5684  Versus  22.5761

Mass Balance = -7.7019E-03 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 91.6 %;  TMEAN = 289.5 K;  HDRY =  1.1984E+05 cm;  DAYUBC = 13258

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 108, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.18757     0.25137     0.25410
Head (cm)          = 1.89247E+03 5.03786E+02 4.69580E+02
Water Flow (cm)    = 4.37517E-03-2.30573E-03 4.06951E-03
Plant Sink (cm)    = 7.60782E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 22.5761+ 0.0000+ 0.0000 - 0.2216- 0.6338-  0.0041 = 21.7167  Versus  21.7240

Mass Balance = -7.3586E-03 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  0.8863 cm, Actual =  0.2216 cm
Transpiration:  Potential =  2.5351 cm, Actual =  0.6338 cm
RHMEAN = 53.6 %;  TMEAN = 287.3 K;  HDRY =  8.5508E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 109, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.22295     0.25137     0.25410
Head (cm)          = 1.01066E+03 5.03786E+02 4.69580E+02
Water Flow (cm)    = 2.13138E-01-2.30573E-03 4.06951E-03
```

```
Plant Sink (cm)     = 3.00132E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR              STORAGE
 21.7240+ 0.7112+ 0.0000 - 0.0874- 0.2500-  0.0041 = 22.0937  Versus  22.0932

Mass Balance =  4.8828E-04 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  0.3532 cm, Actual =  0.0874 cm
Transpiration:  Potential =  1.0102 cm, Actual =  0.2500 cm
RHMEAN = 74.0 %;  TMEAN = 285.1 K;  HDRY =  4.1180E+05 cm;  DAYUBC =     0

---------------------------------------------------------------------------

DAILY SUMMARY:  Day = 110, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.16164     0.25137     0.25410
Head (cm)           = 3.40878E+03 5.03786E+02 4.69580E+02
Water Flow (cm)     =-2.15924E-02-2.30573E-03 4.06951E-03
Plant Sink (cm)     = 6.49076E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR              STORAGE
 22.0932+ 0.0000+ 0.0000 - 0.1904- 0.5425-  0.0041 = 21.3563  Versus  21.3556

Mass Balance =  7.0190E-04 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  0.7616 cm, Actual =  0.1904 cm
Transpiration:  Potential =  2.1785 cm, Actual =  0.5425 cm
RHMEAN = 64.2 %;  TMEAN = 289.0 K;  HDRY =  6.0660E+05 cm;  DAYUBC =     0

---------------------------------------------------------------------------

DAILY SUMMARY:  Day = 111, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.13205     0.25137     0.25410
Head (cm)           = 8.77415E+03 5.03786E+02 4.69580E+02
Water Flow (cm)     =-2.11256E-02-2.30573E-03 4.06951E-03
Plant Sink (cm)     = 3.36121E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR              STORAGE
 21.3556+ 0.0254+ 0.0000 - 0.1860- 0.3874-  0.0041 = 20.8036  Versus  20.8084

Mass Balance = -4.7989E-03 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  0.7659 cm, Actual =  0.1860 cm
Transpiration:  Potential =  2.1908 cm, Actual =  0.3874 cm
RHMEAN = 62.5 %;  TMEAN = 287.3 K;  HDRY =  6.4469E+05 cm;  DAYUBC = 21055

---------------------------------------------------------------------------

DAILY SUMMARY:  Day = 112, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.30849     0.25147     0.25409
Head (cm)           = 3.00301E+02 5.02408E+02 4.69681E+02
Water Flow (cm)     = 2.29699E+00-2.11690E-03 4.06921E-03
Plant Sink (cm)     = 9.89406E-05 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR              STORAGE
```

```
 20.8084+ 3.6467+ 1.2046 - 0.0003- 0.0008-  0.0041 = 24.4499  Versus  24.4562

Mass Balance = -6.2847E-03 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  0.0012 cm, Actual =  0.0003 cm
Transpiration:  Potential =  0.0035 cm, Actual =  0.0008 cm
RHMEAN = 89.0 %;  TMEAN = 280.4 K;  HDRY =  1.5926E+05 cm;  DAYUBC = 35865

------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 113, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =    5.00000    30.70000    91.50000
Water (cm3/cm3)    =    0.28139     0.25198     0.25406
Head (cm)          = 4.36066E+02 4.95850E+02 4.70106E+02
Water Flow (cm)    = 7.33281E-02 1.02871E-03 4.06255E-03
Plant Sink (cm)    = 3.35142E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 24.4562+ 0.1270+ 0.0000 - 0.0976- 0.2792-  0.0041 = 24.2023  Versus  24.2025

Mass Balance = -1.4114E-04 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.3944 cm, Actual =  0.0976 cm
Transpiration:  Potential =  1.1280 cm, Actual =  0.2792 cm
RHMEAN = 69.5 %;  TMEAN = 283.4 K;  HDRY =  4.9797E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 114, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =    5.00000    30.70000    91.50000
Water (cm3/cm3)    =    0.25901     0.25208     0.25401
Head (cm)          = 5.92960E+02 4.94622E+02 4.70618E+02
Water Flow (cm)    =-1.16908E-01 2.03501E-03 4.05164E-03
Plant Sink (cm)    = 4.11158E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 24.2025+ 0.0254+ 0.0000 - 0.1197- 0.3425-  0.0041 = 23.7616  Versus  23.7616

Mass Balance = -8.0109E-05 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.4838 cm, Actual =  0.1197 cm
Transpiration:  Potential =  1.3839 cm, Actual =  0.3425 cm
RHMEAN = 62.6 %;  TMEAN = 285.1 K;  HDRY =  6.4149E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 115, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =    5.00000    30.70000    91.50000
Water (cm3/cm3)    =    0.20387     0.25195     0.25396
Head (cm)          = 1.39184E+03 4.96324E+02 4.71233E+02
Water Flow (cm)    =-1.68701E-01 1.24849E-03 4.03830E-03
Plant Sink (cm)    = 8.02056E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 23.7616+ 0.0000+ 0.0000 - 0.2336- 0.6681-  0.0040 = 22.8559  Versus  22.8559

Mass Balance = -9.5367E-06 cm;  Time step attempts =  651 and successes =  651
```

```
  Evaporation:  Potential =  0.9344 cm, Actual =  0.2336 cm
Transpiration:  Potential =  2.6726 cm, Actual =  0.6681 cm
RHMEAN = 57.1 %;  TMEAN = 288.2 K;  HDRY =  7.6914E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 116, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.16081     0.25170     0.25391
Head (cm)          = 3.48298E+03 4.99446E+02 4.71833E+02
Water Flow (cm)    =-1.37439E-01 1.71456E-04 4.02399E-03
Plant Sink (cm)    = 6.55199E-02 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS    DRAIN   NEWSTOR          STORAGE
 22.8559+ 0.0000+ 0.0000 - 0.1956- 0.5521-  0.0040 = 22.1041  Versus  22.1044

Mass Balance = -3.2425E-04 cm;  Time step attempts = 5668 and successes = 5668
  Evaporation:  Potential =  0.7826 cm, Actual =  0.1956 cm
Transpiration:  Potential =  2.2384 cm, Actual =  0.5521 cm
RHMEAN = 67.7 %;  TMEAN = 287.6 K;  HDRY =  5.3488E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 117, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.14150     0.25148     0.25387
Head (cm)          = 6.18701E+03 5.02292E+02 4.72352E+02
Water Flow (cm)    =-8.08367E-02-6.57541E-04 4.01158E-03
Plant Sink (cm)    = 3.55973E-02 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS    DRAIN   NEWSTOR          STORAGE
 22.1044+ 0.0000+ 0.0000 - 0.0930- 0.3681-  0.0040 = 21.6393  Versus  21.6406

Mass Balance = -1.2913E-03 cm;  Time step attempts =38499 and successes =38499
  Evaporation:  Potential =  0.6324 cm, Actual =  0.0930 cm
Transpiration:  Potential =  1.8087 cm, Actual =  0.3681 cm
RHMEAN = 54.8 %;  TMEAN = 283.7 K;  HDRY =  8.2392E+05 cm;  DAYUBC =  4159

------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 118, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.13581     0.25123     0.25381
Head (cm)          = 7.58134E+03 5.05518E+02 4.73050E+02
Water Flow (cm)    =-4.98030E-02-1.19560E-03 3.99721E-03
Plant Sink (cm)    = 1.57012E-02 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS    DRAIN   NEWSTOR          STORAGE
 21.6406+ 0.0000+ 0.0000 - 0.0015- 0.2199-  0.0040 = 21.4152  Versus  21.4152

Mass Balance = -7.2479E-05 cm;  Time step attempts = 1104 and successes = 1104
  Evaporation:  Potential =  0.4540 cm, Actual =  0.0015 cm
Transpiration:  Potential =  1.2987 cm, Actual =  0.2199 cm
RHMEAN = 67.3 %;  TMEAN = 287.9 K;  HDRY =  5.4344E+05 cm;  DAYUBC =  1030
```

```
------------------------------------------------------------------------------

 DAILY SUMMARY:  Day = 119, Simulated Time = 24.0000 hr
 -------------
 Node Number        =        2          12          25
 Depth (cm)         =     5.00000    30.70000    91.50000
 Water (cm3/cm3)    =     0.13551     0.25122     0.25381
 Head (cm)          = 7.66770E+03 5.05645E+02 4.73069E+02
 Water Flow (cm)    =-3.29503E-02-1.41944E-03 3.98869E-03
 Plant Sink (cm)    = 1.71443E-02 0.00000E+00 0.00000E+00

  PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN  NEWSTOR          STORAGE
  21.4152+ 0.3302+ 0.0000 - 0.1239- 0.2401-  0.0040 = 21.3775  Versus  21.3823

 Mass Balance = -4.8275E-03 cm;  Time step attempts =***** and successes =*****
   Evaporation:  Potential =  0.5006 cm, Actual =  0.1239 cm
 Transpiration:  Potential =  1.4319 cm, Actual =  0.2401 cm
 RHMEAN = 74.7 %;  TMEAN = 291.5 K;  HDRY =  4.0020E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------

 DAILY SUMMARY:  Day = 120, Simulated Time = 24.0000 hr
 -------------
 Node Number        =        2          12          25
 Depth (cm)         =     5.00000    30.70000    91.50000
 Water (cm3/cm3)    =     0.21366     0.25122     0.25381
 Head (cm)          = 1.17582E+03 5.05645E+02 4.73069E+02
 Water Flow (cm)    = 1.26104E-01-1.42063E-03 3.98865E-03
 Plant Sink (cm)    = 9.75981E-03 0.00000E+00 0.00000E+00

  PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN  NEWSTOR          STORAGE
  21.3823+ 0.7149+ 0.0979 - 0.0284- 0.0813-  0.0040 = 21.9835  Versus  21.9922

 Mass Balance = -8.6937E-03 cm;  Time step attempts =***** and successes =*****
   Evaporation:  Potential =  0.1149 cm, Actual =  0.0284 cm
 Transpiration:  Potential =  0.3286 cm, Actual =  0.0813 cm
 RHMEAN = 87.5 %;  TMEAN = 287.9 K;  HDRY =  1.8275E+05 cm;  DAYUBC =  1986

------------------------------------------------------------------------------

 DAILY SUMMARY:  Day = 121, Simulated Time = 24.0000 hr
 -------------
 Node Number        =        2          12          25
 Depth (cm)         =     5.00000    30.70000    91.50000
 Water (cm3/cm3)    =     0.19340     0.25122     0.25381
 Head (cm)          = 1.68824E+03 5.05646E+02 4.73069E+02
 Water Flow (cm)    = 5.06740E-03-1.42139E-03 3.98865E-03
 Plant Sink (cm)    = 2.09246E-02 0.00000E+00 0.00000E+00

  PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN  NEWSTOR          STORAGE
  21.9922+ 0.0000+ 0.0000 - 0.0609- 0.1743-  0.0040 = 21.7530  Versus  21.7632

 Mass Balance = -1.0292E-02 cm;  Time step attempts =***** and successes =*****
   Evaporation:  Potential =  0.2438 cm, Actual =  0.0609 cm
 Transpiration:  Potential =  0.6972 cm, Actual =  0.1743 cm
 RHMEAN = 87.3 %;  TMEAN = 287.5 K;  HDRY =  1.8574E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------
```

```
DAILY SUMMARY:  Day = 122, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =    5.00000    30.70000    91.50000
Water (cm3/cm3)    =    0.17775     0.25122     0.25381
Head (cm)          = 2.32460E+03 5.05646E+02 4.73069E+02
Water Flow (cm)    =-2.32123E-02-1.42183E-03 3.98865E-03
Plant Sink (cm)    = 2.20005E-02 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 21.7632+ 0.0254+ 0.0000 - 0.0641- 0.1833-  0.0040 = 21.5373  Versus  21.5475

Mass Balance = -1.0235E-02 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  0.2589 cm, Actual =  0.0641 cm
Transpiration:  Potential =  0.7405 cm, Actual =  0.1833 cm
RHMEAN = 87.3 %;  TMEAN = 287.5 K;  HDRY =  1.8574E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 123, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =    5.00000    30.70000    91.50000
Water (cm3/cm3)    =    0.19583     0.25122     0.25381
Head (cm)          = 1.61217E+03 5.05646E+02 4.73069E+02
Water Flow (cm)    =-1.30472E-04-1.42183E-03 3.98865E-03
Plant Sink (cm)    = 3.71635E-03 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 21.5475+ 0.1778+ 0.0000 - 0.0108- 0.0310-  0.0040 = 21.6796  Versus  21.6937

Mass Balance = -1.4103E-02 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  0.0437 cm, Actual =  0.0108 cm
Transpiration:  Potential =  0.1251 cm, Actual =  0.0310 cm
RHMEAN = 87.1 %;  TMEAN = 287.0 K;  HDRY =  1.8876E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 124, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =    5.00000    30.70000    91.50000
Water (cm3/cm3)    =    0.14717     0.25122     0.25381
Head (cm)          = 5.14210E+03 5.05648E+02 4.73069E+02
Water Flow (cm)    =-9.91962E-03-1.42228E-03 3.98865E-03
Plant Sink (cm)    = 5.37628E-02 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 21.6937+ 0.0254+ 0.0000 - 0.1754- 0.4721-  0.0040 = 21.0676  Versus  21.0759

Mass Balance = -8.3027E-03 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  0.7085 cm, Actual =  0.1754 cm
Transpiration:  Potential =  2.0266 cm, Actual =  0.4721 cm
RHMEAN = 67.4 %;  TMEAN = 288.7 K;  HDRY =  5.3974E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 125, Simulated Time = 24.0000 hr
-------------
```

```
Node Number         =       2            12           25
Depth (cm)          =     5.00000     30.70000     91.50000
Water (cm3/cm3)     =     0.22333      0.25122      0.25381
Head (cm)           = 1.00449E+03 5.05648E+02 4.73069E+02
Water Flow (cm)     = 3.68978E-01-1.42343E-03 3.98865E-03
Plant Sink (cm)     = 2.80349E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS     DRAIN   NEWSTOR          STORAGE
 21.0759+ 1.1450+ 0.1757 - 0.0816- 0.2335-  0.0040 = 21.9018  Versus  21.9099

Mass Balance = -8.1425E-03 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  0.3333 cm, Actual =  0.0816 cm
Transpiration:  Potential =  0.9532 cm, Actual =  0.2335 cm
RHMEAN = 79.2 %;  TMEAN = 286.8 K;  HDRY =  3.1885E+05 cm;  DAYUBC =  3074

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 126, Simulated Time = 24.0000 hr
-------------
Node Number         =       2            12           25
Depth (cm)          =     5.00000     30.70000     91.50000
Water (cm3/cm3)     =     0.29719      0.25127      0.25379
Head (cm)           = 3.51433E+02 5.05041E+02 4.73320E+02
Water Flow (cm)     = 1.86663E+00-1.28764E-03 3.98771E-03
Plant Sink (cm)     = 2.13878E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS     DRAIN   NEWSTOR          STORAGE
 21.9099+ 2.5346+ 0.5133 - 0.0623- 0.1782-  0.0040 = 24.2001  Versus  24.2056

Mass Balance = -5.4703E-03 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  0.2595 cm, Actual =  0.0623 cm
Transpiration:  Potential =  0.7424 cm, Actual =  0.1782 cm
RHMEAN = 83.5 %;  TMEAN = 290.9 K;  HDRY =  2.4767E+05 cm;  DAYUBC = 17885

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 127, Simulated Time = 24.0000 hr
-------------
Node Number         =       2            12           25
Depth (cm)          =     5.00000     30.70000     91.50000
Water (cm3/cm3)     =     0.37309      0.25742      0.25373
Head (cm)           = 9.08659E+01 4.31242E+02 4.74012E+02
Water Flow (cm)     = 2.22423E+00 2.22119E-02 3.97554E-03
Plant Sink (cm)     = 3.87418E-03 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS     DRAIN   NEWSTOR          STORAGE
 24.2056+ 2.7799+ 2.0207 - 0.0113- 0.0323-  0.0040 = 26.9380  Versus  26.9382

Mass Balance = -2.4414E-04 cm;  Time step attempts = 2602 and successes = 2602
  Evaporation:  Potential =  0.0475 cm, Actual =  0.0113 cm
Transpiration:  Potential =  0.1359 cm, Actual =  0.0323 cm
RHMEAN = 89.0 %;  TMEAN = 290.9 K;  HDRY =  1.5983E+05 cm;  DAYUBC =   458

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 128, Simulated Time = 24.0000 hr
-------------
Node Number         =       2            12           25
Depth (cm)          =     5.00000     30.70000     91.50000
Water (cm3/cm3)     =     0.33222      0.25778      0.25367
```

```
Head (cm)           = 2.11101E+02 4.27350E+02 4.74740E+02
Water Flow (cm)     =-4.45055E-01 3.18520E-02 3.95917E-03
Plant Sink (cm)     = 9.88136E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 26.9382+ 0.0000+ 0.0000 - 0.2878- 0.8231-  0.0040 = 25.8233  Versus  25.8233

Mass Balance = -1.5259E-05 cm;  Time step attempts =    96 and successes =    96
  Evaporation:  Potential =  1.1511 cm, Actual =  0.2878 cm
Transpiration:  Potential =  3.2926 cm, Actual =  0.8231 cm
RHMEAN = 55.3 %;  TMEAN = 292.0 K;  HDRY =  8.1283E+05 cm;  DAYUBC =     0

-----------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 129, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =      5.00000    30.70000    91.50000
Water (cm3/cm3)     =      0.29605     0.25677     0.25362
Head (cm)           = 3.57016E+02 4.38475E+02 4.75454E+02
Water Flow (cm)     =-3.41051E-01 1.50943E-02 3.94278E-03
Plant Sink (cm)     = 8.06687E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 25.8233+ 0.0000+ 0.0000 - 0.2349- 0.6720-  0.0039 = 24.9125  Versus  24.9125

Mass Balance = -4.5776E-05 cm;  Time step attempts =    96 and successes =    96
  Evaporation:  Potential =  0.9398 cm, Actual =  0.2349 cm
Transpiration:  Potential =  2.6880 cm, Actual =  0.6720 cm
RHMEAN = 56.3 %;  TMEAN = 291.5 K;  HDRY =  7.8728E+05 cm;  DAYUBC =     0

-----------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 130, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =      5.00000    30.70000    91.50000
Water (cm3/cm3)     =      0.27039     0.25582     0.25357
Head (cm)           = 5.06672E+02 4.49314E+02 4.76028E+02
Water Flow (cm)     =-2.58034E-01 7.63879E-03 3.92799E-03
Plant Sink (cm)     = 5.95064E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 24.9125+ 0.0000+ 0.0000 - 0.1733- 0.4957-  0.0039 = 24.2396  Versus  24.2396

Mass Balance = -3.0518E-05 cm;  Time step attempts =   112 and successes =   112
  Evaporation:  Potential =  0.6932 cm, Actual =  0.1733 cm
Transpiration:  Potential =  1.9828 cm, Actual =  0.4957 cm
RHMEAN = 62.7 %;  TMEAN = 287.3 K;  HDRY =  6.3973E+05 cm;  DAYUBC =     0

-----------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 131, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =      5.00000    30.70000    91.50000
Water (cm3/cm3)     =      0.25082     0.25505     0.25355
Head (cm)           = 6.65576E+02 4.58302E+02 4.76293E+02
Water Flow (cm)     =-2.01658E-01 3.94005E-03 3.91838E-03
Plant Sink (cm)     = 4.61069E-02 0.00000E+00 0.00000E+00
```

```
 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR              STORAGE
 24.2396+ 0.0000+ 0.0000 - 0.1343- 0.3841-  0.0039 = 23.7173  Versus  23.7173

Mass Balance = -1.3351E-05 cm;  Time step attempts =  144 and successes =  144
  Evaporation:  Potential =  0.5371 cm, Actual =  0.1343 cm
Transpiration:  Potential =  1.5363 cm, Actual =  0.3841 cm
RHMEAN = 68.2 %;  TMEAN = 288.7 K;  HDRY =  5.2518E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 132, Simulated Time = 24.0000 hr
-------------
Node Number       =        2           12           25
Depth (cm)        =     5.00000     30.70000     91.50000
Water (cm3/cm3)   =     0.23501      0.25441      0.25356
Head (cm)         = 8.38814E+02 4.65809E+02 4.76191E+02
Water Flow (cm)   =-1.61823E-01 1.86964E-03 3.91660E-03
Plant Sink (cm)   = 3.71549E-02 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR              STORAGE
 23.7173+ 0.0000+ 0.0000 - 0.1082- 0.3095-  0.0039 = 23.2957  Versus  23.2957

Mass Balance = -3.8147E-06 cm;  Time step attempts =  176 and successes =  176
  Evaporation:  Potential =  0.4328 cm, Actual =  0.1082 cm
Transpiration:  Potential =  1.2381 cm, Actual =  0.3095 cm
RHMEAN = 81.0 %;  TMEAN = 291.5 K;  HDRY =  2.8823E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 133, Simulated Time = 24.0000 hr
-------------
Node Number       =        2           12           25
Depth (cm)        =     5.00000     30.70000     91.50000
Water (cm3/cm3)   =     0.14958      0.25387      0.25358
Head (cm)         = 4.77366E+03 4.72309E+02 4.75945E+02
Water Flow (cm)   =-1.14304E-01 5.82287E-04 3.92155E-03
Plant Sink (cm)   = 1.03687E-01 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR              STORAGE
 23.2957+ 0.0000+ 0.0000 - 0.3239- 0.8925-  0.0039 = 22.0754  Versus  22.0751

Mass Balance =  2.4223E-04 cm;  Time step attempts =10632 and successes =10632
  Evaporation:  Potential =  1.2954 cm, Actual =  0.3239 cm
Transpiration:  Potential =  3.7053 cm, Actual =  0.8925 cm
RHMEAN = 46.0 %;  TMEAN = 300.4 K;  HDRY =  1.0641E+06 cm;  DAYUBC =     0

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 134, Simulated Time = 24.0000 hr
-------------
Node Number       =        2           12           25
Depth (cm)        =     5.00000     30.70000     91.50000
Water (cm3/cm3)   =     0.13268      0.25343      0.25360
Head (cm)         = 8.55492E+03 4.77790E+02 4.75593E+02
Water Flow (cm)   =-6.15591E-02-3.74393E-04 3.92660E-03
Plant Sink (cm)   = 2.96454E-02 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR              STORAGE
 22.0751+ 0.0000+ 0.0000 - 0.0622- 0.3924-  0.0039 = 21.6167  Versus  21.6172
```

```
Mass Balance = -5.3787E-04 cm;  Time step attempts =35010 and successes =35010
  Evaporation:  Potential =  0.7876 cm, Actual =  0.0622 cm
Transpiration:  Potential =  2.2528 cm, Actual =  0.3924 cm
RHMEAN = 70.2 %;  TMEAN = 293.7 K;  HDRY =  4.8563E+05 cm;  DAYUBC =  3821

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 135, Simulated Time = 24.0000 hr
-------------
Node Number         =       2           12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.12731     0.25299     0.25365
Head (cm)           = 1.07106E+04 4.83176E+02 4.74977E+02
Water Flow (cm)     =-3.11460E-02-1.07784E-03 3.93864E-03
Plant Sink (cm)     = 1.15199E-02 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 21.6172+ 0.0000+ 0.0000 - 0.0016- 0.2589-  0.0039 = 21.3528  Versus  21.3528

Mass Balance = -3.2425E-05 cm;  Time step attempts = 1823 and successes = 1823
  Evaporation:  Potential =  0.6301 cm, Actual =  0.0016 cm
Transpiration:  Potential =  1.8022 cm, Actual =  0.2589 cm
RHMEAN = 74.7 %;  TMEAN = 295.7 K;  HDRY =  4.0059E+05 cm;  DAYUBC =  1768

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 136, Simulated Time = 24.0000 hr
-------------
Node Number         =       2           12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.12538     0.25280     0.25368
Head (cm)           = 1.16826E+04 4.85493E+02 4.74698E+02
Water Flow (cm)     =-1.92768E-02-1.46821E-03 3.95036E-03
Plant Sink (cm)     = 5.42308E-03 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 21.3528+ 0.0000+ 0.0000 - 0.0019- 0.1747-  0.0040 = 21.1723  Versus  21.1754

Mass Balance = -3.1776E-03 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  0.4692 cm, Actual =  0.0019 cm
Transpiration:  Potential =  1.3420 cm, Actual =  0.1747 cm
RHMEAN = 77.0 %;  TMEAN = 297.6 K;  HDRY =  3.5870E+05 cm;  DAYUBC = *****

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 137, Simulated Time = 24.0000 hr
-------------
Node Number         =       2           12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.12131     0.25280     0.25368
Head (cm)           = 1.42175E+04 4.85493E+02 4.74698E+02
Water Flow (cm)     =-9.74361E-03-1.51506E-03 3.95172E-03
Plant Sink (cm)     = 4.91319E-03 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 21.1754+ 0.0000+ 0.0000 - 0.0111- 0.2693-  0.0040 = 20.8911  Versus  20.8976

Mass Balance = -6.4449E-03 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  0.9183 cm, Actual =  0.0111 cm
```

```
Transpiration:  Potential =  2.6265 cm, Actual =  0.2693 cm
RHMEAN = 59.1 %;  TMEAN = 296.2 K;  HDRY =  7.2029E+05 cm;  DAYUBC = *****
--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 138, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.12064     0.25264     0.25369
Head (cm)          = 1.47112E+04 4.87495E+02 4.74503E+02
Water Flow (cm)    =-3.66316E-03-1.78943E-03 3.95530E-03
Plant Sink (cm)    = 6.83413E-04 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 20.8976+ 0.0000+ 0.0000 - 0.0027- 0.1286-  0.0040 = 20.7623  Versus  20.7673

Mass Balance = -5.0697E-03 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  0.5668 cm, Actual =  0.0027 cm
Transpiration:  Potential =  1.6211 cm, Actual =  0.1286 cm
RHMEAN = 65.3 %;  TMEAN = 287.6 K;  HDRY =  5.8399E+05 cm;  DAYUBC = *****
--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 139, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.11984     0.25264     0.25369
Head (cm)          = 1.53289E+04 4.87496E+02 4.74503E+02
Water Flow (cm)    =-2.42109E-03-1.82679E-03 3.95610E-03
Plant Sink (cm)    = 8.27943E-05 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 20.7673+ 0.0000+ 0.0000 - 0.0063- 0.1240-  0.0040 = 20.6330  Versus  20.6389

Mass Balance = -5.8403E-03 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  0.6365 cm, Actual =  0.0063 cm
Transpiration:  Potential =  1.8206 cm, Actual =  0.1240 cm
RHMEAN = 60.0 %;  TMEAN = 287.9 K;  HDRY =  7.0116E+05 cm;  DAYUBC = *****
--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 140, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.11881     0.25264     0.25369
Head (cm)          = 1.61978E+04 4.87499E+02 4.74503E+02
Water Flow (cm)    =-1.39326E-03-1.82884E-03 3.95610E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 20.6389+ 0.0000+ 0.0000 - 0.0061- 0.1289-  0.0040 = 20.5000  Versus  20.5070

Mass Balance = -7.0305E-03 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  0.8345 cm, Actual =  0.0061 cm
Transpiration:  Potential =  2.3868 cm, Actual =  0.1289 cm
RHMEAN = 56.6 %;  TMEAN = 292.6 K;  HDRY =  7.8017E+05 cm;  DAYUBC = *****
```

```
DAILY SUMMARY:  Day = 141, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.11823     0.25264     0.25369
Head (cm)          = 1.67128E+04 4.87508E+02 4.74503E+02
Water Flow (cm)    =-8.59512E-04-1.83145E-03 3.95610E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

  PRESTOR    INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR             STORAGE
  20.5070+ 0.0508+ 0.0000 - 0.0533- 0.0855-  0.0040 = 20.4151  Versus  20.4219

Mass Balance = -6.7863E-03 cm;  Time step attempts =***** and successes =*****
   Evaporation:  Potential =  0.6775 cm, Actual =  0.0533 cm
 Transpiration:  Potential =  1.9377 cm, Actual =  0.0855 cm
RHMEAN = 59.9 %;  TMEAN = 295.1 K;  HDRY =  7.0326E+05 cm;  DAYUBC = *****
```

```
DAILY SUMMARY:  Day = 142, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.11728     0.25263     0.25369
Head (cm)          = 1.76088E+04 4.87656E+02 4.74503E+02
Water Flow (cm)    =-6.20075E-04-1.90865E-03 3.95610E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

  PRESTOR    INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR             STORAGE
  20.4219+ 0.0000+ 0.0000 - 0.0047- 0.1050-  0.0040 = 20.3081  Versus  20.3142

Mass Balance = -6.0654E-03 cm;  Time step attempts =***** and successes =*****
   Evaporation:  Potential =  1.0101 cm, Actual =  0.0047 cm
 Transpiration:  Potential =  2.8892 cm, Actual =  0.1050 cm
RHMEAN = 60.3 %;  TMEAN = 295.9 K;  HDRY =  6.9389E+05 cm;  DAYUBC = *****
```

```
DAILY SUMMARY:  Day = 143, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.19036     0.25263     0.25369
Head (cm)          = 1.79051E+03 4.87658E+02 4.74503E+02
Water Flow (cm)    = 4.97507E-02-1.91035E-03 3.95610E-03
Plant Sink (cm)    = 1.83569E-02 0.00000E+00 0.00000E+00

  PRESTOR    INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR             STORAGE
  20.3142+ 0.8049+ 0.0079 - 0.0540- 0.1083-  0.0040 = 20.9529  Versus  20.9589

Mass Balance = -5.9814E-03 cm;  Time step attempts =***** and successes =*****
   Evaporation:  Potential =  0.2182 cm, Actual =  0.0540 cm
 Transpiration:  Potential =  0.6242 cm, Actual =  0.1083 cm
RHMEAN = 86.6 %;  TMEAN = 293.2 K;  HDRY =  1.9776E+05 cm;  DAYUBC =   123
```

```
DAILY SUMMARY:  Day = 144, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12           25
Depth (cm)         =     5.00000     30.70000     91.50000
Water (cm3/cm3)    =     0.25340      0.25263      0.25369
Head (cm)          = 6.41654E+02 4.87660E+02 4.74503E+02
Water Flow (cm)    = 7.91633E-01-1.91145E-03 3.95610E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 20.9589+ 1.2119+ 0.0581 - 0.0000- 0.0000-  0.0040 = 22.1668  Versus  22.1748

Mass Balance = -7.9174E-03 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 92.7 %;  TMEAN = 287.0 K;  HDRY =  1.0339E+05 cm;  DAYUBC =  3174

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 145, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12           25
Depth (cm)         =     5.00000     30.70000     91.50000
Water (cm3/cm3)    =     0.26440      0.25263      0.25369
Head (cm)          = 5.50250E+02 4.87660E+02 4.74503E+02
Water Flow (cm)    = 4.60966E-01-1.91250E-03 3.95610E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 22.1748+ 0.5334+ 0.0000 - 0.0000- 0.0000-  0.0040 = 22.7042  Versus  22.7113

Mass Balance = -7.1259E-03 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 94.6 %;  TMEAN = 286.5 K;  HDRY =  7.5435E+04 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 146, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12           25
Depth (cm)         =     5.00000     30.70000     91.50000
Water (cm3/cm3)    =     0.34073      0.25493      0.25372
Head (cm)          = 1.83535E+02 4.59697E+02 4.74137E+02
Water Flow (cm)    = 2.83761E+00 5.50906E-03 3.95899E-03
Plant Sink (cm)    = 2.48558E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 22.7113+ 3.5478+ 2.1164 - 0.0724- 0.2071-  0.0040 = 25.9757  Versus  25.9778

Mass Balance = -2.1057E-03 cm;  Time step attempts =75082 and successes =75082
  Evaporation:  Potential =  0.3080 cm, Actual =  0.0724 cm
Transpiration:  Potential =  0.8811 cm, Actual =  0.2071 cm
RHMEAN = 88.8 %;  TMEAN = 292.3 K;  HDRY =  1.6260E+05 cm;  DAYUBC = 49848

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 147, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12           25
```

EOAK SUBD

```
Depth (cm)          =     5.00000     30.70000     91.50000
Water (cm3/cm3)     =     0.32201      0.25608      0.25376
Head (cm)           = 2.46945E+02 4.46338E+02 4.73694E+02
Water Flow (cm)     =-3.77224E-02 1.66556E-02 3.96959E-03
Plant Sink (cm)     = 7.09540E-02 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN    NEWSTOR          STORAGE
 25.9778+ 0.3556+ 0.0000 - 0.2066- 0.5911-   0.0040 = 25.5317  Versus  25.5317

Mass Balance = -3.6240E-05 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.8349 cm, Actual =  0.2066 cm
Transpiration:  Potential =  2.3882 cm, Actual =  0.5911 cm
RHMEAN = 69.7 %;  TMEAN = 294.8 K;  HDRY =  4.9513E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 148, Simulated Time = 24.0000 hr
-------------
Node Number         =        2           12           25
Depth (cm)          =     5.00000     30.70000     91.50000
Water (cm3/cm3)     =     0.28729      0.25569      0.25379
Head (cm)           = 4.02428E+02 4.50844E+02 4.73365E+02
Water Flow (cm)     =-3.02796E-01 1.09246E-02 3.97858E-03
Plant Sink (cm)     = 7.43026E-02 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN    NEWSTOR          STORAGE
 25.5317+ 0.0000+ 0.0000 - 0.2164- 0.6190-   0.0040 = 24.6924  Versus  24.6924

Mass Balance = -4.5776E-05 cm;  Time step attempts =   96 and successes =   96
  Evaporation:  Potential =  0.8656 cm, Actual =  0.2164 cm
Transpiration:  Potential =  2.4759 cm, Actual =  0.6190 cm
RHMEAN = 58.0 %;  TMEAN = 292.6 K;  HDRY =  7.4647E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 149, Simulated Time = 24.0000 hr
-------------
Node Number         =        2           12           25
Depth (cm)          =     5.00000     30.70000     91.50000
Water (cm3/cm3)     =     0.27890      0.25508      0.25381
Head (cm)           = 4.51113E+02 4.57866E+02 4.73127E+02
Water Flow (cm)     =-1.89761E-01 5.87726E-03 3.98488E-03
Plant Sink (cm)     = 3.30630E-02 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN    NEWSTOR          STORAGE
 24.6924+ 0.0000+ 0.0000 - 0.0963- 0.2754-   0.0040 = 24.3167  Versus  24.3167

Mass Balance = -3.8147E-06 cm;  Time step attempts =   96 and successes =   96
  Evaporation:  Potential =  0.3852 cm, Actual =  0.0963 cm
Transpiration:  Potential =  1.1017 cm, Actual =  0.2754 cm
RHMEAN = 74.3 %;  TMEAN = 289.3 K;  HDRY =  4.0751E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 150, Simulated Time = 24.0000 hr
-------------
Node Number         =        2           12           25
Depth (cm)          =     5.00000     30.70000     91.50000
Water (cm3/cm3)     =     0.27908      0.25461      0.25383
Head (cm)           = 4.49972E+02 4.63469E+02 4.72881E+02
```

```
Water Flow (cm)    =-9.16782E-02 3.46413E-03 3.99022E-03
Plant Sink (cm)    = 1.17778E-02 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN    NEWSTOR          STORAGE
 24.3167+ 0.0000+ 0.0000 - 0.0343- 0.0981-  0.0040 = 24.1803  Versus  24.1803

Mass Balance =  1.9073E-06 cm;  Time step attempts =    96 and successes =   96
  Evaporation:  Potential =  0.1372 cm, Actual =  0.0343 cm
Transpiration:  Potential =  0.3925 cm, Actual =  0.0981 cm
RHMEAN = 83.3 %;  TMEAN = 291.8 K;  HDRY =  2.5061E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 151, Simulated Time = 24.0000 hr
-------------
Node Number        =      2           12          25
Depth (cm)         =     5.00000     30.70000    91.50000
Water (cm3/cm3)    =     0.32991      0.25632     0.25385
Head (cm)          = 2.18916E+02 4.43594E+02 4.72587E+02
Water Flow (cm)    = 1.40191E+00 1.06746E-02 3.99610E-03
Plant Sink (cm)    = 5.25000E-02 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN    NEWSTOR          STORAGE
 24.1803+ 2.1461+ 0.5209 - 0.1529- 0.4373-  0.0040 = 25.7322  Versus  25.7322

Mass Balance = -4.5776E-05 cm;  Time step attempts = 2790 and successes = 2790
  Evaporation:  Potential =  0.6305 cm, Actual =  0.1529 cm
Transpiration:  Potential =  1.8035 cm, Actual =  0.4373 cm
RHMEAN = 72.2 %;  TMEAN = 294.3 K;  HDRY =  4.4650E+05 cm;  DAYUBC =   256

------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 152, Simulated Time = 24.0000 hr
-------------
Node Number        =      2           12          25
Depth (cm)         =     5.00000     30.70000    91.50000
Water (cm3/cm3)    =     0.31049      0.25640     0.25388
Head (cm)          = 2.91918E+02 4.42673E+02 4.72214E+02
Water Flow (cm)    =-1.74657E-01 1.26200E-02 4.00385E-03
Plant Sink (cm)    = 5.23000E-02 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN    NEWSTOR          STORAGE
 25.7322+ 0.0762+ 0.0000 - 0.1523- 0.4357-  0.0040 = 25.2164  Versus  25.2163

Mass Balance =  8.0109E-05 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.6154 cm, Actual =  0.1523 cm
Transpiration:  Potential =  1.7603 cm, Actual =  0.4357 cm
RHMEAN = 75.9 %;  TMEAN = 294.0 K;  HDRY =  3.7842E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 153, Simulated Time = 24.0000 hr
-------------
Node Number        =      2           12          25
Depth (cm)         =     5.00000     30.70000    91.50000
Water (cm3/cm3)    =     0.29944      0.25625     0.25392
Head (cm)          = 3.40719E+02 4.44397E+02 4.71797E+02
Water Flow (cm)    = 2.96263E-02 9.50168E-03 4.01292E-03
Plant Sink (cm)    = 5.79879E-02 0.00000E+00 0.00000E+00
```

```
 PRESTOR    INFIL   RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR              STORAGE
 25.2163+ 0.3810+ 0.0000 - 0.1689- 0.4831-  0.0040 = 24.9414  Versus  24.9413

Mass Balance =  7.2479E-05 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.6824 cm, Actual =  0.1689 cm
Transpiration:  Potential =  1.9517 cm, Actual =  0.4831 cm
RHMEAN = 65.0 %;  TMEAN = 297.0 K;  HDRY =  5.9112E+05 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day = 154, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12           25
Depth (cm)         =     5.00000    30.70000     91.50000
Water (cm3/cm3)    =     0.33651     0.25758      0.25396
Head (cm)          = 1.96955E+02 4.29487E+02 4.71329E+02
Water Flow (cm)    = 8.70900E-01 1.42769E-02 4.02307E-03
Plant Sink (cm)    = 3.67559E-02 0.00000E+00 0.00000E+00

 PRESTOR    INFIL   RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR              STORAGE
 24.9413+ 1.4051+ 0.0427 - 0.1070- 0.3062-  0.0040 = 25.9291  Versus  25.9291

Mass Balance = -2.6703E-05 cm;  Time step attempts = 2191 and successes = 2191
  Evaporation:  Potential =  0.4369 cm, Actual =  0.1070 cm
Transpiration:  Potential =  1.2497 cm, Actual =  0.3062 cm
RHMEAN = 83.1 %;  TMEAN = 294.8 K;  HDRY =  2.5352E+05 cm;  DAYUBC =   132
```

```
DAILY SUMMARY:  Day = 155, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12           25
Depth (cm)         =     5.00000    30.70000     91.50000
Water (cm3/cm3)    =     0.38158     0.26574      0.25400
Head (cm)          = 6.75458E+01 3.48172E+02 4.70785E+02
Water Flow (cm)    = 1.24198E+00 6.75687E-02 4.03470E-03
Plant Sink (cm)    = 3.41220E-02 0.00000E+00 0.00000E+00

 PRESTOR    INFIL   RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR              STORAGE
 25.9291+ 1.8127+ 2.5561 - 0.1035- 0.2787-  0.0040 = 27.3556  Versus  27.3570

Mass Balance = -1.4153E-03 cm;  Time step attempts = 2231 and successes = 2231
  Evaporation:  Potential =  0.4349 cm, Actual =  0.1035 cm
Transpiration:  Potential =  1.2439 cm, Actual =  0.2787 cm
RHMEAN = 78.0 %;  TMEAN = 294.3 K;  HDRY =  3.4100E+05 cm;  DAYUBC =   787
```

```
DAILY SUMMARY:  Day = 156, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12           25
Depth (cm)         =     5.00000    30.70000     91.50000
Water (cm3/cm3)    =     0.36746     0.26610      0.25405
Head (cm)          = 1.06212E+02 3.45010E+02 4.70140E+02
Water Flow (cm)    =-7.85676E-02 5.60100E-02 4.04835E-03
Plant Sink (cm)    = 4.79516E-02 0.00000E+00 0.00000E+00

 PRESTOR    INFIL   RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR              STORAGE
 27.3570+ 0.1778+ 0.0000 - 0.1397- 0.3995-  0.0040 = 26.9917  Versus  26.9916
```

```
Mass Balance =  1.0872E-04 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.5643 cm, Actual =  0.1397 cm
Transpiration:  Potential =  1.6139 cm, Actual =  0.3995 cm
RHMEAN = 80.0 %;  TMEAN = 293.7 K;  HDRY =  3.0592E+05 cm;  DAYUBC =     0

-----------------------------------------------------------------------------

DAILY SUMMARY:  Day = 157, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12          25
Depth (cm)        =    5.00000    30.70000    91.50000
Water (cm3/cm3)   =    0.36243     0.26677     0.25413
Head (cm)         = 1.20031E+02 3.39043E+02 4.69223E+02
Water Flow (cm)   = 1.59793E-01 4.92432E-02 4.06593E-03
Plant Sink (cm)   = 5.78634E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 26.9916+ 0.5534+ 0.1832 - 0.1685- 0.4820-  0.0041 = 26.8903  Versus  26.8904

Mass Balance = -6.1035E-05 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.6809 cm, Actual =  0.1685 cm
Transpiration:  Potential =  1.9477 cm, Actual =  0.4820 cm
RHMEAN = 80.7 %;  TMEAN = 297.0 K;  HDRY =  2.9341E+05 cm;  DAYUBC =   675

-----------------------------------------------------------------------------

DAILY SUMMARY:  Day = 158, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12          25
Depth (cm)        =    5.00000    30.70000    91.50000
Water (cm3/cm3)   =    0.32701     0.26495     0.25427
Head (cm)         = 2.28977E+02 3.55397E+02 4.67583E+02
Water Flow (cm)   =-3.84502E-01 2.85425E-02 4.09541E-03
Plant Sink (cm)   = 8.54759E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 26.8904+ 0.0000+ 0.0000 - 0.2489- 0.7120-  0.0041 = 25.9253  Versus  25.9253

Mass Balance = -1.9073E-05 cm;  Time step attempts =   96 and successes =   96
  Evaporation:  Potential =  0.9958 cm, Actual =  0.2489 cm
Transpiration:  Potential =  2.8482 cm, Actual =  0.7120 cm
RHMEAN = 74.6 %;  TMEAN = 300.9 K;  HDRY =  4.0153E+05 cm;  DAYUBC =     0

-----------------------------------------------------------------------------

DAILY SUMMARY:  Day = 159, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12          25
Depth (cm)        =    5.00000    30.70000    91.50000
Water (cm3/cm3)   =    0.31316     0.26330     0.25449
Head (cm)         = 2.81020E+02 3.70826E+02 4.64893E+02
Water Flow (cm)   =-1.93887E-01 1.42175E-02 4.14657E-03
Plant Sink (cm)   = 3.91206E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 25.9253+ 0.0000+ 0.0000 - 0.1139- 0.3259-  0.0041 = 25.4813  Versus  25.4813

Mass Balance = -3.8147E-06 cm;  Time step attempts =   96 and successes =   96
  Evaporation:  Potential =  0.4557 cm, Actual =  0.1139 cm
Transpiration:  Potential =  1.3035 cm, Actual =  0.3259 cm
```

```
RHMEAN = 80.4 %;   TMEAN = 298.7 K;   HDRY =  2.9831E+05 cm;   DAYUBC =     0
--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 160, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.39137     0.27317     0.25480
Head (cm)          = 3.87090E+01 2.86337E+02 4.61183E+02
Water Flow (cm)    = 1.86906E+00 8.57249E-02 4.22422E-03
Plant Sink (cm)    = 9.85443E-03 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 25.4813+ 2.4973+ 7.4849 - 0.0353- 0.0764-  0.0042 = 27.8627  Versus  27.8617

Mass Balance =  9.8610E-04 cm;  Time step attempts = 2236 and successes = 2236
  Evaporation:  Potential =  0.1961 cm, Actual =  0.0353 cm
Transpiration:  Potential =  0.5609 cm, Actual =  0.0764 cm
RHMEAN = 83.7 %;  TMEAN = 295.4 K;  HDRY =  2.4343E+05 cm;  DAYUBC =   535
--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 161, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.39095     0.27682     0.25518
Head (cm)          = 4.00501E+01 2.59289E+02 4.56736E+02
Water Flow (cm)    = 1.39300E-01 1.13418E-01 4.32695E-03
Plant Sink (cm)    = 7.24138E-03 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 27.8617+ 0.1903+ 1.0289 - 0.0215- 0.0594-  0.0043 = 27.9667  Versus  27.9668

Mass Balance = -1.0109E-04 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.0879 cm, Actual =  0.0215 cm
Transpiration:  Potential =  0.2513 cm, Actual =  0.0594 cm
RHMEAN = 87.9 %;  TMEAN = 292.0 K;  HDRY =  1.7667E+05 cm;  DAYUBC =  1860
--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 162, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.37039     0.27574     0.25563
Head (cm)          = 9.82031E+01 2.67084E+02 4.51564E+02
Water Flow (cm)    =-1.24828E-01 8.87406E-02 4.45048E-03
Plant Sink (cm)    = 6.21160E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 27.9668+ 0.1937+ 0.1365 - 0.1836- 0.5136-  0.0045 = 27.4589  Versus  27.4587

Mass Balance =  1.3924E-04 cm;  Time step attempts = 3150 and successes = 3150
  Evaporation:  Potential =  0.7420 cm, Actual =  0.1836 cm
Transpiration:  Potential =  2.1222 cm, Actual =  0.5136 cm
RHMEAN = 69.5 %;  TMEAN = 290.4 K;  HDRY =  4.9894E+05 cm;  DAYUBC =  1487
--------------------------------------------------------------------------------
```

```
DAILY SUMMARY:  Day = 163, Simulated Time = 24.0000 hr
-------------
Node Number        =       2           12           25
Depth (cm)         =     5.00000    30.70000     91.50000
Water (cm3/cm3)    =     0.34510     0.27280      0.25622
Head (cm)          = 1.70050E+02 2.89162E+02 4.44762E+02
Water Flow (cm)    =-2.95491E-01 3.68392E-02 4.60910E-03
Plant Sink (cm)    = 6.37565E-02 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 27.4587+ 0.0000+ 0.0000 - 0.1857- 0.5311-  0.0046 = 26.7373  Versus  26.7373

Mass Balance = -1.9073E-06 cm;  Time step attempts =   96 and successes =   96
   Evaporation:  Potential =  0.7427 cm, Actual =  0.1857 cm
Transpiration:  Potential =  2.1244 cm, Actual =  0.5311 cm
RHMEAN = 61.7 %;  TMEAN = 291.5 K;  HDRY =  6.6147E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 164, Simulated Time = 24.0000 hr
-------------
Node Number        =       2           12           25
Depth (cm)         =     5.00000    30.70000     91.50000
Water (cm3/cm3)    =     0.30847     0.27035      0.25703
Head (cm)          = 3.00411E+02 3.08656E+02 4.35549E+02
Water Flow (cm)    =-3.55627E-01 1.87444E-02 4.83644E-03
Plant Sink (cm)    = 8.29508E-02 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 26.7373+ 0.0000+ 0.0000 - 0.2416- 0.6910-  0.0048 = 25.7999  Versus  25.7999

Mass Balance = -3.4332E-05 cm;  Time step attempts =   96 and successes =   96
   Evaporation:  Potential =  0.9663 cm, Actual =  0.2416 cm
Transpiration:  Potential =  2.7640 cm, Actual =  0.6910 cm
RHMEAN = 58.0 %;  TMEAN = 294.8 K;  HDRY =  7.4731E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 165, Simulated Time = 24.0000 hr
-------------
Node Number        =       2           12           25
Depth (cm)         =     5.00000    30.70000     91.50000
Water (cm3/cm3)    =     0.25467     0.26825      0.25802
Head (cm)          = 6.30232E+02 3.26166E+02 4.24724E+02
Water Flow (cm)    =-3.42245E-01 8.35540E-03 5.14577E-03
Plant Sink (cm)    = 1.00023E-01 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 25.7999+ 0.0000+ 0.0000 - 0.2913- 0.8332-  0.0051 = 24.6702  Versus  24.6703

Mass Balance = -1.9073E-05 cm;  Time step attempts =  284 and successes =  284
   Evaporation:  Potential =  1.1652 cm, Actual =  0.2913 cm
Transpiration:  Potential =  3.3329 cm, Actual =  0.8332 cm
RHMEAN = 60.5 %;  TMEAN = 297.6 K;  HDRY =  6.8925E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 166, Simulated Time = 24.0000 hr
```

```
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.18812     0.26653     0.25902
Head (cm)          = 1.87173E+03 3.41153E+02 4.13912E+02
Water Flow (cm)    =-2.59444E-01 2.82556E-03 5.50830E-03
Plant Sink (cm)    = 1.05850E-01 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR          STORAGE
 24.6703+ 0.0000+ 0.0000 - 0.3083- 0.8818-  0.0055 = 23.4747  Versus  23.4747

Mass Balance = -1.5259E-05 cm;  Time step attempts = 1497 and successes = 1497
  Evaporation:  Potential =  1.2331 cm, Actual =  0.3083 cm
Transpiration:  Potential =  3.5271 cm, Actual =  0.8818 cm
RHMEAN = 57.8 %;  TMEAN = 298.2 K;  HDRY =  7.5055E+05 cm;  DAYUBC =     0

---------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 167, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.14280     0.26517     0.25987
Head (cm)          = 5.92072E+03 3.53411E+02 4.05078E+02
Water Flow (cm)    =-1.45549E-01-4.93290E-05 5.86465E-03
Plant Sink (cm)    = 7.23354E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR          STORAGE
 23.4747+ 0.0000+ 0.0000 - 0.1878- 0.6696-  0.0059 = 22.6114  Versus  22.6110

Mass Balance =  4.3488E-04 cm;  Time step attempts =31593 and successes =31593
  Evaporation:  Potential =  1.0465 cm, Actual =  0.1878 cm
Transpiration:  Potential =  2.9933 cm, Actual =  0.6696 cm
RHMEAN = 63.6 %;  TMEAN = 297.6 K;  HDRY =  6.2045E+05 cm;  DAYUBC =  3777

---------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 168, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.12981     0.26406     0.26065
Head (cm)          = 9.61639E+03 3.63628E+02 3.97040E+02
Water Flow (cm)    =-6.17125E-02-1.50128E-03 6.19207E-03
Plant Sink (cm)    = 2.56644E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR          STORAGE
 22.6110+ 0.0000+ 0.0000 - 0.0045- 0.4009-  0.0062 = 22.1994  Versus  22.1994

Mass Balance = -2.8610E-05 cm;  Time step attempts = 2666 and successes = 2666
  Evaporation:  Potential =  0.8681 cm, Actual =  0.0045 cm
Transpiration:  Potential =  2.4829 cm, Actual =  0.4009 cm
RHMEAN = 64.1 %;  TMEAN = 297.0 K;  HDRY =  6.0945E+05 cm;  DAYUBC =  2662

---------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 169, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
```

```
Water (cm3/cm3)     =      0.12378      0.26315      0.26126
Head (cm)           = 1.25960E+04 3.72305E+02 3.90852E+02
Water Flow (cm)     =-2.52683E-02-2.29163E-03 6.48289E-03
Plant Sink (cm)     = 1.05860E-02 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR           STORAGE
 22.1994+ 0.0000+ 0.0000 - 0.0056- 0.3249-  0.0065 = 21.8625  Versus  21.8626

Mass Balance = -1.0109E-04 cm;  Time step attempts = 9003 and successes = 9003
  Evaporation:  Potential =  0.8713 cm, Actual =  0.0056 cm
Transpiration:  Potential =  2.4921 cm, Actual =  0.3249 cm
RHMEAN = 61.2 %;  TMEAN = 296.5 K;  HDRY =  6.7224E+05 cm;  DAYUBC =  5077
```

```
DAILY SUMMARY:  Day = 170, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12           25
Depth (cm)          =      5.00000     30.70000     91.50000
Water (cm3/cm3)     =      0.12132      0.26237      0.26174
Head (cm)           = 1.42121E+04 3.79898E+02 3.86074E+02
Water Flow (cm)     =-9.44073E-03-2.74407E-03 6.72461E-03
Plant Sink (cm)     = 3.52014E-03 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR           STORAGE
 21.8626+ 0.0000+ 0.0000 - 0.0045- 0.2437-  0.0067 = 21.6077  Versus  21.6077

Mass Balance =  9.5367E-06 cm;  Time step attempts = 2416 and successes = 2416
  Evaporation:  Potential =  0.8387 cm, Actual =  0.0045 cm
Transpiration:  Potential =  2.3988 cm, Actual =  0.2437 cm
RHMEAN = 62.1 %;  TMEAN = 297.3 K;  HDRY =  6.5396E+05 cm;  DAYUBC =  2417
```

```
DAILY SUMMARY:  Day = 171, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12           25
Depth (cm)          =      5.00000     30.70000     91.50000
Water (cm3/cm3)     =      0.12027      0.26171      0.26208
Head (cm)           = 1.49957E+04 3.86384E+02 3.82708E+02
Water Flow (cm)     =-4.10289E-03-3.06036E-03 6.90574E-03
Plant Sink (cm)     = 8.68102E-04 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR           STORAGE
 21.6077+ 0.0000+ 0.0000 - 0.0056- 0.1972-  0.0069 = 21.3979  Versus  21.3984

Mass Balance = -4.4441E-04 cm;  Time step attempts = 8745 and successes = 8745
  Evaporation:  Potential =  0.8581 cm, Actual =  0.0056 cm
Transpiration:  Potential =  2.4546 cm, Actual =  0.1972 cm
RHMEAN = 59.4 %;  TMEAN = 298.2 K;  HDRY =  7.1372E+05 cm;  DAYUBC =  5286
```

```
DAILY SUMMARY:  Day = 172, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12           25
Depth (cm)          =      5.00000     30.70000     91.50000
Water (cm3/cm3)     =      0.11957      0.26113      0.26232
Head (cm)           = 1.55510E+04 3.92176E+02 3.80330E+02
Water Flow (cm)     =-1.89873E-03-3.26733E-03 7.04084E-03
```

```
Plant Sink (cm)     = 1.00669E-08 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 21.3984+ 0.0000+ 0.0000 - 0.0052- 0.1612-  0.0070 = 21.2250  Versus  21.2252

Mass Balance = -2.1553E-04 cm;  Time step attempts = 6296 and successes = 6296
  Evaporation:  Potential =  0.8924 cm, Actual =  0.0052 cm
Transpiration:  Potential =  2.5525 cm, Actual =  0.1612 cm
RHMEAN = 58.8 %;  TMEAN = 298.7 K;  HDRY =  7.2887E+05 cm;  DAYUBC =  5537

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 173, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.11873     0.26061     0.26248
Head (cm)           = 1.62628E+04 3.97371E+02 3.78748E+02
Water Flow (cm)     =-1.03155E-03-3.41363E-03 7.13608E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 21.2252+ 0.0000+ 0.0000 - 0.0044- 0.1196-  0.0071 = 21.0941  Versus  21.0941

Mass Balance =  3.8147E-06 cm;  Time step attempts = 1147 and successes = 1147
  Evaporation:  Potential =  0.8215 cm, Actual =  0.0044 cm
Transpiration:  Potential =  2.3497 cm, Actual =  0.1196 cm
RHMEAN = 60.6 %;  TMEAN = 299.0 K;  HDRY =  6.8619E+05 cm;  DAYUBC =  1132

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 174, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.11795     0.26016     0.26257
Head (cm)           = 1.69662E+04 4.02008E+02 3.77868E+02
Water Flow (cm)     =-7.57192E-04-3.51855E-03 7.19482E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 21.0941+ 0.0000+ 0.0000 - 0.0028- 0.0900-  0.0072 = 20.9941  Versus  20.9941

Mass Balance = -7.4387E-05 cm;  Time step attempts = 2428 and successes = 2428
  Evaporation:  Potential =  0.7094 cm, Actual =  0.0028 cm
Transpiration:  Potential =  2.0291 cm, Actual =  0.0900 cm
RHMEAN = 66.0 %;  TMEAN = 297.6 K;  HDRY =  5.7028E+05 cm;  DAYUBC =  2402

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 175, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.11724     0.25976     0.26261
Head (cm)           = 1.76504E+04 4.06189E+02 3.77499E+02
Water Flow (cm)     =-6.47151E-04-3.58706E-03 7.22514E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
```

```
 20.9941+ 0.0000+ 0.0000 - 0.0029- 0.0867-  0.0072 = 20.8973  Versus  20.8973

Mass Balance = -1.7166E-05 cm;  Time step attempts = 1165 and successes = 1165
  Evaporation:  Potential =  0.7672 cm, Actual =  0.0029 cm
Transpiration:  Potential =  2.1943 cm, Actual =  0.0867 cm
RHMEAN = 68.7 %;  TMEAN = 295.9 K;  HDRY =  5.1361E+05 cm;  DAYUBC =  1146

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 176, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =      5.00000    30.70000    91.50000
Water (cm3/cm3)    =      0.11629     0.25942     0.26261
Head (cm)          = 1.86291E+04 4.09761E+02 3.77540E+02
Water Flow (cm)    =-5.47306E-04-3.63566E-03 7.23245E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 20.8973+ 0.0000+ 0.0000 - 0.0076- 0.0961-  0.0072 = 20.7863  Versus  20.7871

Mass Balance = -8.6021E-04 cm;  Time step attempts =16053 and successes =16053
  Evaporation:  Potential =  1.0224 cm, Actual =  0.0076 cm
Transpiration:  Potential =  2.9244 cm, Actual =  0.0961 cm
RHMEAN = 59.3 %;  TMEAN = 295.4 K;  HDRY =  7.1576E+05 cm;  DAYUBC =  4610

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 177, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =      5.00000    30.70000    91.50000
Water (cm3/cm3)    =      0.11522     0.25910     0.26257
Head (cm)          = 1.98273E+04 4.13153E+02 3.77891E+02
Water Flow (cm)    =-5.02435E-04-3.66805E-03 7.22325E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 20.7871+ 0.0000+ 0.0000 - 0.0061- 0.0700-  0.0072 = 20.7038  Versus  20.7042

Mass Balance = -4.7112E-04 cm;  Time step attempts = 8505 and successes = 8505
  Evaporation:  Potential =  0.9060 cm, Actual =  0.0061 cm
Transpiration:  Potential =  2.5913 cm, Actual =  0.0700 cm
RHMEAN = 55.9 %;  TMEAN = 295.1 K;  HDRY =  7.9764E+05 cm;  DAYUBC =  4633

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 178, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =      5.00000    30.70000    91.50000
Water (cm3/cm3)    =      0.11428     0.25879     0.26251
Head (cm)          = 2.09817E+04 4.16368E+02 3.78523E+02
Water Flow (cm)    =-5.24367E-04-3.68544E-03 7.19873E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 20.7042+ 0.0000+ 0.0000 - 0.0035- 0.0508-  0.0072 = 20.6427  Versus  20.6428

Mass Balance = -1.0109E-04 cm;  Time step attempts = 2259 and successes = 2259
```

```
  Evaporation:  Potential =  0.7327 cm, Actual =  0.0035 cm
Transpiration:  Potential =  2.0959 cm, Actual =  0.0508 cm
RHMEAN = 61.2 %;  TMEAN = 297.0 K;  HDRY =  6.7386E+05 cm;  DAYUBC =  2242

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 179, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.11338     0.25851     0.26242
Head (cm)          = 2.21693E+04 4.19353E+02 3.79364E+02
Water Flow (cm)    =-5.53022E-04-3.69574E-03 7.16306E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 20.6428+ 0.0000+ 0.0000 - 0.0043- 0.0576-  0.0072 = 20.5737  Versus  20.5739

Mass Balance = -1.6785E-04 cm;  Time step attempts = 2680 and successes = 2680
  Evaporation:  Potential =  0.9356 cm, Actual =  0.0043 cm
Transpiration:  Potential =  2.6761 cm, Actual =  0.0576 cm
RHMEAN = 62.1 %;  TMEAN = 299.3 K;  HDRY =  6.5291E+05 cm;  DAYUBC =  2671

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 180, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.15300     0.25827     0.26233
Head (cm)          = 4.31626E+03 4.22015E+02 3.80270E+02
Water Flow (cm)    = 7.69337E-03-3.69409E-03 7.12302E-03
Plant Sink (cm)    = 2.50138E-02 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 20.5739+ 0.6604+ 0.0000 - 0.0993- 0.1378-  0.0071 = 20.9901  Versus  20.9910

Mass Balance = -9.0790E-04 cm;  Time step attempts =12885 and successes =12885
  Evaporation:  Potential =  0.4013 cm, Actual =  0.0993 cm
Transpiration:  Potential =  1.1477 cm, Actual =  0.1378 cm
RHMEAN = 79.5 %;  TMEAN = 295.7 K;  HDRY =  3.1468E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 181, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.16402     0.25803     0.26221
Head (cm)          = 3.20773E+03 4.24632E+02 3.81413E+02
Water Flow (cm)    = 2.58307E-02-3.69288E-03 7.07187E-03
Plant Sink (cm)    = 3.40889E-02 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 20.9910+ 0.3048+ 0.0000 - 0.0998- 0.1874-  0.0071 = 21.0015  Versus  21.0018

Mass Balance = -2.7847E-04 cm;  Time step attempts = 4782 and successes = 4782
  Evaporation:  Potential =  0.4031 cm, Actual =  0.0998 cm
Transpiration:  Potential =  1.1530 cm, Actual =  0.1874 cm
RHMEAN = 74.5 %;  TMEAN = 293.4 K;  HDRY =  4.0319E+05 cm;  DAYUBC =     0
```

```
--------------------------------------------------------------------------------

 DAILY SUMMARY:  Day = 182, Simulated Time = 24.0000 hr
 -------------
 Node Number        =       2          12          25
 Depth (cm)         =    5.00000    30.70000    91.50000
 Water (cm3/cm3)    =    0.13020     0.25783     0.26211
 Head (cm)          = 9.46312E+03 4.26777E+02 3.82375E+02
 Water Flow (cm)    = 6.99066E-03-3.68850E-03 7.01693E-03
 Plant Sink (cm)    = 3.37419E-02 0.00000E+00 0.00000E+00

  PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
  21.0018+ 0.0000+ 0.0000 - 0.1975- 0.2181-  0.0070 = 20.5791  Versus  20.5812

 Mass Balance = -2.1114E-03 cm;  Time step attempts =22871 and successes =22871
   Evaporation:  Potential =  0.7902 cm, Actual =  0.1975 cm
 Transpiration:  Potential =  2.2601 cm, Actual =  0.2181 cm
 RHMEAN = 62.3 %;  TMEAN = 292.9 K;  HDRY =  6.4928E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

 DAILY SUMMARY:  Day = 183, Simulated Time = 24.0000 hr
 -------------
 Node Number        =       2          12          25
 Depth (cm)         =    5.00000    30.70000    91.50000
 Water (cm3/cm3)    =    0.13106     0.25761     0.26198
 Head (cm)          = 9.13104E+03 4.29145E+02 3.83712E+02
 Water Flow (cm)    = 1.56783E-03-3.67298E-03 6.96803E-03
 Plant Sink (cm)    = 1.16847E-02 0.00000E+00 0.00000E+00

  PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
  20.5812+ 0.3302+ 0.0000 - 0.1162- 0.0849-  0.0070 = 20.7033  Versus  20.7036

 Mass Balance = -3.3569E-04 cm;  Time step attempts = 6560 and successes = 6560
   Evaporation:  Potential =  0.4697 cm, Actual =  0.1162 cm
 Transpiration:  Potential =  1.3434 cm, Actual =  0.0849 cm
 RHMEAN = 75.8 %;  TMEAN = 294.8 K;  HDRY =  3.8045E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

 DAILY SUMMARY:  Day = 184, Simulated Time = 24.0000 hr
 -------------
 Node Number        =       2          12          25
 Depth (cm)         =    5.00000    30.70000    91.50000
 Water (cm3/cm3)    =    0.12129     0.25743     0.26186
 Head (cm)          = 1.42294E+04 4.31122E+02 3.84894E+02
 Water Flow (cm)    = 4.76355E-04-3.67037E-03 6.90833E-03
 Plant Sink (cm)    = 9.95329E-03 0.00000E+00 0.00000E+00

  PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
  20.7036+ 0.0000+ 0.0000 - 0.1883- 0.1070-  0.0069 = 20.4013  Versus  20.4034

 Mass Balance = -2.0714E-03 cm;  Time step attempts =30015 and successes =30015
   Evaporation:  Potential =  1.1370 cm, Actual =  0.1883 cm
 Transpiration:  Potential =  3.2523 cm, Actual =  0.1070 cm
 RHMEAN = 65.1 %;  TMEAN = 299.5 K;  HDRY =  5.8841E+05 cm;  DAYUBC =  3778

--------------------------------------------------------------------------------
```

```
DAILY SUMMARY:  Day = 185, Simulated Time = 24.0000 hr
-------------
Node Number       =       2           12           25
Depth (cm)        =     5.00000    30.70000     91.50000
Water (cm3/cm3)   =     0.11968     0.25724      0.26172
Head (cm)         = 1.54651E+04 4.33251E+02 3.86299E+02
Water Flow (cm)   =-5.54531E-05-3.64363E-03 6.85073E-03
Plant Sink (cm)   = 3.91000E-04 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 20.4034+ 0.0000+ 0.0000 - 0.0083- 0.0542-  0.0069 = 20.3341  Versus  20.3347

Mass Balance = -6.3515E-04 cm;  Time step attempts =13457 and successes =13457
  Evaporation:  Potential =  1.4304 cm, Actual =  0.0083 cm
Transpiration:  Potential =  4.0912 cm, Actual =  0.0542 cm
RHMEAN = 54.1 %;  TMEAN = 300.4 K;  HDRY =  8.4204E+05 cm;  DAYUBC =  5363

---------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 186, Simulated Time = 24.0000 hr
-------------
Node Number       =       2           12           25
Depth (cm)        =     5.00000    30.70000     91.50000
Water (cm3/cm3)   =     0.11843     0.25705      0.26157
Head (cm)         = 1.65336E+04 4.35385E+02 3.87788E+02
Water Flow (cm)   =-1.34112E-04-3.62740E-03 6.78415E-03
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 20.3347+ 0.0000+ 0.0000 - 0.0061- 0.0280-  0.0068 = 20.2938  Versus  20.2941

Mass Balance = -3.6049E-04 cm;  Time step attempts = 5586 and successes = 5586
  Evaporation:  Potential =  0.9484 cm, Actual =  0.0061 cm
Transpiration:  Potential =  2.7126 cm, Actual =  0.0280 cm
RHMEAN = 52.4 %;  TMEAN = 298.2 K;  HDRY =  8.8515E+05 cm;  DAYUBC =  3990

---------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 187, Simulated Time = 24.0000 hr
-------------
Node Number       =       2           12           25
Depth (cm)        =     5.00000    30.70000     91.50000
Water (cm3/cm3)   =     0.11731     0.25686      0.26141
Head (cm)         = 1.75805E+04 4.37475E+02 3.89338E+02
Water Flow (cm)   =-2.22450E-04-3.60718E-03 6.71495E-03
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 20.2941+ 0.0000+ 0.0000 - 0.0042- 0.0283-  0.0067 = 20.2549  Versus  20.2551

Mass Balance = -2.0599E-04 cm;  Time step attempts = 2509 and successes = 2509
  Evaporation:  Potential =  1.0404 cm, Actual =  0.0042 cm
Transpiration:  Potential =  2.9757 cm, Actual =  0.0283 cm
RHMEAN = 57.2 %;  TMEAN = 300.9 K;  HDRY =  7.6569E+05 cm;  DAYUBC =  2505

---------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 188, Simulated Time = 24.0000 hr
-------------
```

```
Node Number          =      2           12           25
Depth (cm)           =      5.00000     30.70000     91.50000
Water (cm3/cm3)      =      0.11610      0.25669      0.26126
Head (cm)            = 1.88318E+04 4.39462E+02 3.90881E+02
Water Flow (cm)      =-3.03580E-04-3.58043E-03 6.64730E-03
Plant Sink (cm)      = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
 20.2551+ 0.0000+ 0.0000 - 0.0068- 0.0316-  0.0066 = 20.2101  Versus  20.2108

Mass Balance = -7.3242E-04 cm;  Time step attempts = 8130 and successes = 8130
  Evaporation:  Potential =  1.3324 cm, Actual =  0.0068 cm
Transpiration:  Potential =  3.8110 cm, Actual =  0.0316 cm
RHMEAN = 52.2 %;  TMEAN = 302.0 K;  HDRY =  8.8979E+05 cm;  DAYUBC =  4731

-------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 189, Simulated Time = 24.0000 hr
-------------
Node Number          =      2           12           25
Depth (cm)           =      5.00000     30.70000     91.50000
Water (cm3/cm3)      =      0.11485      0.25651      0.26110
Head (cm)            = 2.02716E+04 4.41429E+02 3.92452E+02
Water Flow (cm)      =-3.84109E-04-3.55755E-03 6.57901E-03
Plant Sink (cm)      = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
 20.2108+ 0.0000+ 0.0000 - 0.0065- 0.0275-  0.0066 = 20.1703  Versus  20.1707

Mass Balance = -4.8637E-04 cm;  Time step attempts = 5713 and successes = 5713
  Evaporation:  Potential =  1.3541 cm, Actual =  0.0065 cm
Transpiration:  Potential =  3.8732 cm, Actual =  0.0275 cm
RHMEAN = 49.9 %;  TMEAN = 302.6 K;  HDRY =  9.5391E+05 cm;  DAYUBC =  4253

-------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 190, Simulated Time = 24.0000 hr
-------------
Node Number          =      2           12           25
Depth (cm)           =      5.00000     30.70000     91.50000
Water (cm3/cm3)      =      0.11370      0.25634      0.26094
Head (cm)            = 2.17429E+04 4.43406E+02 3.94085E+02
Water Flow (cm)      =-4.54716E-04-3.53311E-03 6.50886E-03
Plant Sink (cm)      = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
 20.1707+ 0.0000+ 0.0000 - 0.0049- 0.0202-  0.0065 = 20.1391  Versus  20.1392

Mass Balance = -7.6294E-05 cm;  Time step attempts = 1886 and successes = 1886
  Evaporation:  Potential =  1.0684 cm, Actual =  0.0049 cm
Transpiration:  Potential =  3.0559 cm, Actual =  0.0202 cm
RHMEAN = 53.3 %;  TMEAN = 302.9 K;  HDRY =  8.6139E+05 cm;  DAYUBC =  1868

-------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 191, Simulated Time = 24.0000 hr
-------------
Node Number          =      2           12           25
Depth (cm)           =      5.00000     30.70000     91.50000
Water (cm3/cm3)      =      0.11273      0.25617      0.26078
```

```
Head (cm)            = 2.31025E+04 4.45324E+02 3.95710E+02
Water Flow (cm)      =-5.09567E-04-3.50764E-03 6.43949E-03
Plant Sink (cm)      = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 20.1392+ 0.0000+ 0.0000 - 0.0031- 0.0177-  0.0064 = 20.1118  Versus  20.1120

Mass Balance = -1.9264E-04 cm;  Time step attempts = 2298 and successes = 2298
  Evaporation:  Potential =  0.9414 cm, Actual =  0.0031 cm
Transpiration:  Potential =  2.6928 cm, Actual =  0.0177 cm
RHMEAN = 60.8 %;  TMEAN = 301.5 K;  HDRY =  6.8159E+05 cm;  DAYUBC =  2268

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 192, Simulated Time = 24.0000 hr
-------------
Node Number          =       2          12          25
Depth (cm)           =     5.00000    30.70000    91.50000
Water (cm3/cm3)      =     0.11146     0.25601     0.26062
Head (cm)            = 2.50989E+04 4.47134E+02 3.97274E+02
Water Flow (cm)      =-5.60427E-04-3.48360E-03 6.37433E-03
Plant Sink (cm)      = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 20.1120+ 0.0000+ 0.0000 - 0.0093- 0.0227-  0.0064 = 20.0737  Versus  20.0747

Mass Balance = -1.0452E-03 cm;  Time step attempts =13416 and successes =13416
  Evaporation:  Potential =  1.2766 cm, Actual =  0.0093 cm
Transpiration:  Potential =  3.6515 cm, Actual =  0.0227 cm
RHMEAN = 46.8 %;  TMEAN = 304.8 K;  HDRY =  1.0406E+06 cm;  DAYUBC =  3439

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 193, Simulated Time = 24.0000 hr
-------------
Node Number          =       2          12          25
Depth (cm)           =     5.00000    30.70000    91.50000
Water (cm3/cm3)      =     0.11025     0.25584     0.26046
Head (cm)            = 2.72336E+04 4.49026E+02 3.98935E+02
Water Flow (cm)      =-6.11313E-04-3.45890E-03 6.30561E-03
Plant Sink (cm)      = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 20.0747+ 0.0000+ 0.0000 - 0.0056- 0.0199-  0.0063 = 20.0430  Versus  20.0430

Mass Balance = -3.8147E-05 cm;  Time step attempts = 1473 and successes = 1473
  Evaporation:  Potential =  1.2276 cm, Actual =  0.0056 cm
Transpiration:  Potential =  3.5113 cm, Actual =  0.0199 cm
RHMEAN = 49.5 %;  TMEAN = 304.3 K;  HDRY =  9.6385E+05 cm;  DAYUBC =  1469

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 194, Simulated Time = 24.0000 hr
-------------
Node Number          =       2          12          25
Depth (cm)           =     5.00000    30.70000    91.50000
Water (cm3/cm3)      =     0.10925     0.25568     0.26030
Head (cm)            = 2.91983E+04 4.50891E+02 4.00594E+02
Water Flow (cm)      =-6.50468E-04-3.43376E-03 6.23774E-03
Plant Sink (cm)      = 0.00000E+00 0.00000E+00 0.00000E+00
```

```
 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR              STORAGE
 20.0430+ 0.0000+ 0.0000 - 0.0032- 0.0162-  0.0062 = 20.0174  Versus  20.0174

Mass Balance = -6.1035E-05 cm;  Time step attempts = 1545 and successes = 1545
  Evaporation:  Potential =  1.0417 cm, Actual =  0.0032 cm
Transpiration:  Potential =  2.9796 cm, Actual =  0.0162 cm
RHMEAN = 58.5 %;  TMEAN = 303.2 K;  HDRY =  7.3454E+05 cm;  DAYUBC =  1510

----------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 195, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =    5.00000    30.70000    91.50000
Water (cm3/cm3)    =    0.10845     0.25553     0.26014
Head (cm)          = 3.09360E+04 4.52722E+02 4.02247E+02
Water Flow (cm)    =-6.77424E-04-3.41048E-03 6.17094E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR              STORAGE
 20.0174+ 0.0000+ 0.0000 - 0.0025- 0.0149-  0.0062 = 19.9938  Versus  19.9940

Mass Balance = -1.3542E-04 cm;  Time step attempts = 2006 and successes = 2006
  Evaporation:  Potential =  0.9632 cm, Actual =  0.0025 cm
Transpiration:  Potential =  2.7551 cm, Actual =  0.0149 cm
RHMEAN = 65.1 %;  TMEAN = 301.5 K;  HDRY =  5.8823E+05 cm;  DAYUBC =  1965

----------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 196, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =    5.00000    30.70000    91.50000
Water (cm3/cm3)    =    0.10754     0.25538     0.25999
Head (cm)          = 3.31261E+04 4.54452E+02 4.03828E+02
Water Flow (cm)    =-7.01373E-04-3.38749E-03 6.10820E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR              STORAGE
 19.9940+ 0.0000+ 0.0000 - 0.0065- 0.0145-  0.0061 = 19.9669  Versus  19.9677

Mass Balance = -8.7738E-04 cm;  Time step attempts =10886 and successes =10886
  Evaporation:  Potential =  0.9410 cm, Actual =  0.0065 cm
Transpiration:  Potential =  2.6916 cm, Actual =  0.0145 cm
RHMEAN = 59.1 %;  TMEAN = 301.5 K;  HDRY =  7.2187E+05 cm;  DAYUBC =  3439

----------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 197, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =    5.00000    30.70000    91.50000
Water (cm3/cm3)    =    0.10668     0.25522     0.25983
Head (cm)          = 3.53705E+04 4.56252E+02 4.05482E+02
Water Flow (cm)    =-7.25840E-04-3.35982E-03 6.04332E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR              STORAGE
 19.9677+ 0.0000+ 0.0000 - 0.0040- 0.0132-  0.0060 = 19.9445  Versus  19.9446
```

```
Mass Balance = -6.2943E-05 cm;  Time step attempts = 1692 and successes = 1692
  Evaporation:  Potential =  0.8571 cm, Actual =  0.0040 cm
Transpiration:  Potential =  2.4514 cm, Actual =  0.0132 cm
RHMEAN = 61.5 %;  TMEAN = 300.9 K;  HDRY =  6.6667E+05 cm;  DAYUBC =  1682

-----------------------------------------------------------------------------


DAILY SUMMARY:  Day = 198, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12          25
Depth (cm)        =    5.00000    30.70000    91.50000
Water (cm3/cm3)   =    0.10601     0.25507     0.25967
Head (cm)         = 3.72990E+04 4.58035E+02 4.07133E+02
Water Flow (cm)   =-7.46034E-04-3.33506E-03 5.97908E-03
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 19.9446+ 0.0000+ 0.0000 - 0.0009- 0.0084-  0.0060 = 19.9293  Versus  19.9293

Mass Balance = -8.0109E-05 cm;  Time step attempts = 1520 and successes = 1520
  Evaporation:  Potential =  0.5100 cm, Actual =  0.0009 cm
Transpiration:  Potential =  1.4588 cm, Actual =  0.0084 cm
RHMEAN = 70.6 %;  TMEAN = 299.3 K;  HDRY =  4.7782E+05 cm;  DAYUBC =  1437

-----------------------------------------------------------------------------


DAILY SUMMARY:  Day = 199, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12          25
Depth (cm)        =    5.00000    30.70000    91.50000
Water (cm3/cm3)   =    0.10520     0.25493     0.25952
Head (cm)         = 3.98561E+04 4.59670E+02 4.08654E+02
Water Flow (cm)   =-7.65223E-04-3.31192E-03 5.92101E-03
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 19.9293+ 0.0000+ 0.0000 - 0.0072- 0.0149-  0.0059 = 19.9014  Versus  19.9028

Mass Balance = -1.4534E-03 cm;  Time step attempts =18348 and successes =18348
  Evaporation:  Potential =  0.8907 cm, Actual =  0.0072 cm
Transpiration:  Potential =  2.5477 cm, Actual =  0.0149 cm
RHMEAN = 61.8 %;  TMEAN = 300.4 K;  HDRY =  6.6063E+05 cm;  DAYUBC =  5038

-----------------------------------------------------------------------------


DAILY SUMMARY:  Day = 200, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12          25
Depth (cm)        =    5.00000    30.70000    91.50000
Water (cm3/cm3)   =    0.10452     0.25478     0.25937
Head (cm)         = 4.21996E+04 4.61432E+02 4.10302E+02
Water Flow (cm)   =-7.85810E-04-3.28807E-03 5.85891E-03
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 19.9028+ 0.0000+ 0.0000 - 0.0020- 0.0128-  0.0059 = 19.8821  Versus  19.8822

Mass Balance = -4.3869E-05 cm;  Time step attempts = 1149 and successes = 1149
  Evaporation:  Potential =  0.8003 cm, Actual =  0.0020 cm
```

```
Transpiration:  Potential =  2.2890 cm, Actual =  0.0128 cm
RHMEAN = 68.0 %;  TMEAN = 299.8 K;  HDRY =  5.2903E+05 cm;  DAYUBC =  1105
```

```
DAILY SUMMARY:  Day = 201, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.10422     0.25468     0.25926
Head (cm)           = 4.32675E+04 4.62594E+02 4.11414E+02
Water Flow (cm)     =-7.95149E-04-3.27278E-03 5.81304E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 19.8822+ 0.0254+ 0.0000 - 0.0252- 0.0082-  0.0058 = 19.8684  Versus  19.8730

Mass Balance = -4.5776E-03 cm;  Time step attempts =52293 and successes =52293
  Evaporation:  Potential =  0.4986 cm, Actual =  0.0252 cm
Transpiration:  Potential =  1.4261 cm, Actual =  0.0082 cm
RHMEAN = 74.1 %;  TMEAN = 299.5 K;  HDRY =  4.1038E+05 cm;  DAYUBC =  4466
```

```
DAILY SUMMARY:  Day = 202, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.10360     0.25455     0.25912
Head (cm)           = 4.56866E+04 4.64216E+02 4.12939E+02
Water Flow (cm)     =-8.08522E-04-3.24673E-03 5.76100E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 19.8730+ 0.0000+ 0.0000 - 0.0060- 0.0145-  0.0058 = 19.8468  Versus  19.8479

Mass Balance = -1.1101E-03 cm;  Time step attempts =15869 and successes =15869
  Evaporation:  Potential =  0.8837 cm, Actual =  0.0060 cm
Transpiration:  Potential =  2.5278 cm, Actual =  0.0145 cm
RHMEAN = 68.0 %;  TMEAN = 301.2 K;  HDRY =  5.2763E+05 cm;  DAYUBC =  4612
```

```
DAILY SUMMARY:  Day = 203, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.11241     0.25442     0.25898
Head (cm)           = 2.35898E+04 4.65771E+02 4.14411E+02
Water Flow (cm)     =-5.56980E-04-3.22411E-03 5.70672E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 19.8479+ 0.4064+ 0.0000 - 0.2133- 0.0130-  0.0057 = 20.0222  Versus  20.0234

Mass Balance = -1.1597E-03 cm;  Time step attempts =16169 and successes =16169
  Evaporation:  Potential =  0.8619 cm, Actual =  0.2133 cm
Transpiration:  Potential =  2.4654 cm, Actual =  0.0130 cm
RHMEAN = 66.3 %;  TMEAN = 300.9 K;  HDRY =  5.6420E+05 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day = 204, Simulated Time = 24.0000 hr
-------------
Node Number       =        2          12          25
Depth (cm)        =     5.00000    30.70000    91.50000
Water (cm3/cm3)   =     0.20935     0.25429     0.25885
Head (cm)         = 1.26491E+03 4.67246E+02 4.15785E+02
Water Flow (cm)   = 6.74614E-01-3.20568E-03 5.65686E-03
Plant Sink (cm)   = 7.22301E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 20.0234+ 1.8007+ 0.8917 - 0.2104- 0.5549-  0.0057 = 21.0532  Versus  21.0550

Mass Balance = -1.8101E-03 cm;  Time step attempts =21824 and successes =21824
  Evaporation:  Potential =  0.8675 cm, Actual =  0.2104 cm
Transpiration:  Potential =  2.4812 cm, Actual =  0.5549 cm
RHMEAN = 64.0 %;  TMEAN = 299.3 K;  HDRY =  6.1224E+05 cm;  DAYUBC =  6562
```

```
DAILY SUMMARY:  Day = 205, Simulated Time = 24.0000 hr
-------------
Node Number       =        2          12          25
Depth (cm)        =     5.00000    30.70000    91.50000
Water (cm3/cm3)   =     0.22976     0.25416     0.25870
Head (cm)         = 9.08518E+02 4.68904E+02 4.17359E+02
Water Flow (cm)   = 8.64816E-01-3.18487E-03 5.60166E-03
Plant Sink (cm)   = 6.44591E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 21.0550+ 1.4807+ 0.0179 - 0.1877- 0.5365-  0.0056 = 21.8059  Versus  21.8063

Mass Balance = -4.0627E-04 cm;  Time step attempts = 8683 and successes = 8683
  Evaporation:  Potential =  0.7662 cm, Actual =  0.1877 cm
Transpiration:  Potential =  2.1917 cm, Actual =  0.5365 cm
RHMEAN = 72.4 %;  TMEAN = 297.9 K;  HDRY =  4.4272E+05 cm;  DAYUBC =   434
```

```
DAILY SUMMARY:  Day = 206, Simulated Time = 24.0000 hr
-------------
Node Number       =        2          12          25
Depth (cm)        =     5.00000    30.70000    91.50000
Water (cm3/cm3)   =     0.15247     0.25401     0.25855
Head (cm)         = 4.38266E+03 4.70610E+02 4.18978E+02
Water Flow (cm)   =-1.38670E-02-3.16448E-03 5.54470E-03
Plant Sink (cm)   = 7.90804E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 21.8063+ 0.0000+ 0.0000 - 0.2401- 0.6716-  0.0055 = 20.8891  Versus  20.8891

Mass Balance = -1.9073E-06 cm;  Time step attempts = 2859 and successes = 2859
  Evaporation:  Potential =  0.9602 cm, Actual =  0.2401 cm
Transpiration:  Potential =  2.7466 cm, Actual =  0.6716 cm
RHMEAN = 67.5 %;  TMEAN = 300.7 K;  HDRY =  5.3882E+05 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day = 207, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.12488     0.25390     0.25842
Head (cm)           = 1.19581E+04 4.72021E+02 4.20311E+02
Water Flow (cm)     =-1.11626E-02-3.14856E-03 5.49425E-03
Plant Sink (cm)     = 2.90535E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 20.8891+ 0.0000+ 0.0000 - 0.1255- 0.4079-  0.0055 = 20.3502  Versus  20.3517

Mass Balance = -1.5106E-03 cm;  Time step attempts =30540 and successes =30540
  Evaporation:  Potential =  1.0712 cm, Actual =  0.1255 cm
Transpiration:  Potential =  3.0639 cm, Actual =  0.4079 cm
RHMEAN = 66.6 %;  TMEAN = 300.4 K;  HDRY =  5.5779E+05 cm;  DAYUBC =  4516

---------------------------------------------------------------------------

DAILY SUMMARY:  Day = 208, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.12027     0.25377     0.25828
Head (cm)           = 1.49955E+04 4.73622E+02 4.21819E+02
Water Flow (cm)     =-1.44151E-03-3.13895E-03 5.44642E-03
Plant Sink (cm)     = 3.78763E-03 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 20.3517+ 0.0000+ 0.0000 - 0.0075- 0.1765-  0.0054 = 20.1622  Versus  20.1629

Mass Balance = -6.6948E-04 cm;  Time step attempts =14555 and successes =14555
  Evaporation:  Potential =  1.2617 cm, Actual =  0.0075 cm
Transpiration:  Potential =  3.6088 cm, Actual =  0.1765 cm
RHMEAN = 57.7 %;  TMEAN = 303.7 K;  HDRY =  7.5342E+05 cm;  DAYUBC =  6507

---------------------------------------------------------------------------

DAILY SUMMARY:  Day = 209, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.11926     0.25363     0.25814
Head (cm)           = 1.58078E+04 4.75314E+02 4.23410E+02
Water Flow (cm)     =-3.90001E-04-3.12364E-03 5.39251E-03
Plant Sink (cm)     = 2.78186E-08 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 20.1629+ 0.0000+ 0.0000 - 0.0044- 0.0714-  0.0054 = 20.0817  Versus  20.0817

Mass Balance = -3.8147E-05 cm;  Time step attempts = 2045 and successes = 2045
  Evaporation:  Potential =  1.0429 cm, Actual =  0.0044 cm
Transpiration:  Potential =  2.9829 cm, Actual =  0.0714 cm
RHMEAN = 59.8 %;  TMEAN = 302.9 K;  HDRY =  7.0510E+05 cm;  DAYUBC =  2034

---------------------------------------------------------------------------

DAILY SUMMARY:  Day = 210, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
```

```
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.11841     0.25349     0.25799
Head (cm)           = 1.65509E+04 4.76989E+02 4.24996E+02
Water Flow (cm)     =-2.56514E-04-3.10547E-03 5.33920E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 20.0817+ 0.0000+ 0.0000 - 0.0014- 0.0432-  0.0053 = 20.0318  Versus  20.0319

Mass Balance = -3.8147E-05 cm;  Time step attempts = 1159 and successes = 1159
  Evaporation:  Potential =  0.8984 cm, Actual =  0.0014 cm
Transpiration:  Potential =  2.5695 cm, Actual =  0.0432 cm
RHMEAN = 69.1 %;  TMEAN = 301.2 K;  HDRY =  5.0562E+05 cm;  DAYUBC =  1079

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 211, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.11763     0.25336     0.25785
Head (cm)           = 1.72743E+04 4.78610E+02 4.26533E+02
Water Flow (cm)     =-2.59299E-04-3.08962E-03 5.28844E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 20.0319+ 0.0000+ 0.0000 - 0.0039- 0.0290-  0.0053 = 19.9937  Versus  19.9940

Mass Balance = -2.9373E-04 cm;  Time step attempts = 5472 and successes = 5472
  Evaporation:  Potential =  0.7382 cm, Actual =  0.0039 cm
Transpiration:  Potential =  2.1114 cm, Actual =  0.0290 cm
RHMEAN = 68.9 %;  TMEAN = 300.1 K;  HDRY =  5.1010E+05 cm;  DAYUBC =  5016

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 212, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.11755     0.25327     0.25776
Head (cm)           = 1.73531E+04 4.79681E+02 4.27547E+02
Water Flow (cm)     =-2.71046E-04-3.07421E-03 5.24628E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 19.9940+ 0.1016+ 0.0000 - 0.0982- 0.0158-  0.0052 = 19.9764  Versus  19.9816

Mass Balance = -5.1823E-03 cm;  Time step attempts =62793 and successes =62793
  Evaporation:  Potential =  0.4273 cm, Actual =  0.0982 cm
Transpiration:  Potential =  1.2221 cm, Actual =  0.0158 cm
RHMEAN = 78.6 %;  TMEAN = 298.2 K;  HDRY =  3.3055E+05 cm;  DAYUBC =  3263

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 213, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.31955     0.25342     0.25764
Head (cm)           = 2.56122E+02 4.77811E+02 4.28820E+02
```

```
Water Flow (cm)     = 3.65723E+00-2.76493E-03 5.21273E-03
Plant Sink (cm)     = 2.07312E-02 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
 19.9816+ 5.2952+ 3.5693 - 0.0604- 0.1727-  0.0052 = 25.0385  Versus  25.0406

Mass Balance = -2.0370E-03 cm;  Time step attempts =25513 and successes =25513
  Evaporation:  Potential =  0.2977 cm, Actual =  0.0604 cm
Transpiration:  Potential =  0.8516 cm, Actual =  0.1727 cm
RHMEAN = 84.0 %;  TMEAN = 297.9 K;  HDRY =  2.3862E+05 cm;  DAYUBC = 16881

------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 214, Simulated Time = 24.0000 hr
-------------
Node Number         =        2           12          25
Depth (cm)          =     5.00000     30.70000    91.50000
Water (cm3/cm3)     =     0.29493      0.25438     0.25750
Head (cm)           = 3.62541E+02 4.66159E+02 4.30359E+02
Water Flow (cm)     = 8.48072E-02 2.66303E-03 5.16457E-03
Plant Sink (cm)     = 3.63756E-02 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
 25.0406+ 0.1778+ 0.0000 - 0.1059- 0.3030-  0.0052 = 24.8043  Versus  24.8044

Mass Balance = -1.4877E-04 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.4280 cm, Actual =  0.1059 cm
Transpiration:  Potential =  1.2243 cm, Actual =  0.3030 cm
RHMEAN = 81.7 %;  TMEAN = 298.7 K;  HDRY =  2.7639E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 215, Simulated Time = 24.0000 hr
-------------
Node Number         =        2           12          25
Depth (cm)          =     5.00000     30.70000    91.50000
Water (cm3/cm3)     =     0.28425      0.25463     0.25736
Head (cm)           = 4.19395E+02 4.63249E+02 4.31888E+02
Water Flow (cm)     =-7.86904E-02 3.74086E-03 5.11601E-03
Plant Sink (cm)     = 3.10860E-02 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
 24.8044+ 0.0762+ 0.0000 - 0.0905- 0.2590-  0.0051 = 24.5260  Versus  24.5261

Mass Balance = -1.0300E-04 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.3658 cm, Actual =  0.0905 cm
Transpiration:  Potential =  1.0463 cm, Actual =  0.2590 cm
RHMEAN = 80.0 %;  TMEAN = 299.0 K;  HDRY =  3.0642E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 216, Simulated Time = 24.0000 hr
-------------
Node Number         =        2           12          25
Depth (cm)          =     5.00000     30.70000    91.50000
Water (cm3/cm3)     =     0.26380      0.25460     0.25722
Head (cm)           = 5.54839E+02 4.63597E+02 4.33429E+02
Water Flow (cm)     =-1.51474E-01 2.70627E-03 5.06742E-03
Plant Sink (cm)     = 4.03398E-02 0.00000E+00 0.00000E+00
```

```
 PRESTOR    INFIL  RUNOFF     EVAPO   TRANS     DRAIN    NEWSTOR             STORAGE
 24.5261+ 0.0000+ 0.0000 - 0.1175- 0.3360-  0.0051 = 24.0675  Versus  24.0675

Mass Balance = -1.3351E-05 cm;  Time step attempts =   96 and successes =   96
   Evaporation:  Potential =  0.4699 cm, Actual =  0.1175 cm
Transpiration:  Potential =  1.3442 cm, Actual =  0.3360 cm
RHMEAN = 77.3 %;  TMEAN = 299.5 K;  HDRY =  3.5320E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 217, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =    5.00000    30.70000    91.50000
Water (cm3/cm3)    =    0.23644     0.25442     0.25709
Head (cm)          = 8.20973E+02 4.65714E+02 4.34911E+02
Water Flow (cm)    =-1.66028E-01 1.40457E-03 5.02062E-03
Plant Sink (cm)    = 4.97212E-02 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO   TRANS     DRAIN    NEWSTOR             STORAGE
 24.0675+ 0.0000+ 0.0000 - 0.1448- 0.4142-  0.0050 = 23.5035  Versus  23.5035

Mass Balance = -1.1444E-05 cm;  Time step attempts =  216 and successes =  216
   Evaporation:  Potential =  0.5792 cm, Actual =  0.1448 cm
Transpiration:  Potential =  1.6568 cm, Actual =  0.4142 cm
RHMEAN = 74.8 %;  TMEAN = 299.5 K;  HDRY =  3.9715E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 218, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =    5.00000    30.70000    91.50000
Water (cm3/cm3)    =    0.26025     0.25441     0.25697
Head (cm)          = 5.82799E+02 4.65890E+02 4.36269E+02
Water Flow (cm)    = 5.71615E-01 8.63621E-04 4.97766E-03
Plant Sink (cm)    = 7.38886E-02 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO   TRANS     DRAIN    NEWSTOR             STORAGE
 23.5035+ 1.2954+ 0.0000 - 0.2152- 0.6155-  0.0050 = 23.9632  Versus  23.9634

Mass Balance = -1.7738E-04 cm;  Time step attempts = 2271 and successes = 2271
   Evaporation:  Potential =  0.8783 cm, Actual =  0.2152 cm
Transpiration:  Potential =  2.5123 cm, Actual =  0.6155 cm
RHMEAN = 71.3 %;  TMEAN = 300.7 K;  HDRY =  4.6378E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 219, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =    5.00000    30.70000    91.50000
Water (cm3/cm3)    =    0.19113     0.25427     0.25686
Head (cm)          = 1.76397E+03 4.67533E+02 4.37552E+02
Water Flow (cm)    =-1.72893E-01 9.27391E-04 4.93731E-03
Plant Sink (cm)    = 9.58117E-02 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO   TRANS     DRAIN    NEWSTOR             STORAGE
 23.9634+ 0.0000+ 0.0000 - 0.2790- 0.7981-  0.0049 = 22.8813  Versus  22.8813
```

```
Mass Balance = -1.1444E-05 cm;  Time step attempts =  915 and successes =  915
  Evaporation:  Potential =  1.1162 cm, Actual =  0.2790 cm
Transpiration:  Potential =  3.1926 cm, Actual =  0.7981 cm
RHMEAN = 64.8 %;  TMEAN = 302.0 K;  HDRY =  5.9446E+05 cm;  DAYUBC =     0

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 220, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12           25
Depth (cm)         =     5.00000    30.70000     91.50000
Water (cm3/cm3)    =     0.14928     0.25411      0.25680
Head (cm)          = 4.81783E+03 4.69453E+02 4.38155E+02
Water Flow (cm)    =-1.27530E-01-1.51620E-04 4.90477E-03
Plant Sink (cm)    = 6.47194E-02 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
 22.8813+ 0.0000+ 0.0000 - 0.2148- 0.5737-  0.0049 = 22.0880  Versus  22.0907

Mass Balance = -2.7561E-03 cm;  Time step attempts =77761 and successes =77761
  Evaporation:  Potential =  0.8590 cm, Actual =  0.2148 cm
Transpiration:  Potential =  2.4570 cm, Actual =  0.5737 cm
RHMEAN = 71.5 %;  TMEAN = 301.5 K;  HDRY =  4.6073E+05 cm;  DAYUBC =     0

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 221, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12           25
Depth (cm)         =     5.00000    30.70000     91.50000
Water (cm3/cm3)    =     0.12674     0.25382      0.25672
Head (cm)          = 1.09863E+04 4.72925E+02 4.39115E+02
Water Flow (cm)    =-5.02481E-02-9.59288E-04 4.88823E-03
Plant Sink (cm)    = 3.25014E-02 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
 22.0907+ 0.0000+ 0.0000 - 0.0126- 0.5011-  0.0049 = 21.5722  Versus  21.5734

Mass Balance = -1.1997E-03 cm;  Time step attempts =35249 and successes =35249
  Evaporation:  Potential =  1.0863 cm, Actual =  0.0126 cm
Transpiration:  Potential =  3.1071 cm, Actual =  0.5011 cm
RHMEAN = 58.0 %;  TMEAN = 300.9 K;  HDRY =  7.4761E+05 cm;  DAYUBC =  6301

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 222, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12           25
Depth (cm)         =     5.00000    30.70000     91.50000
Water (cm3/cm3)    =     0.12169     0.25355      0.25662
Head (cm)          = 1.39469E+04 4.76222E+02 4.40168E+02
Water Flow (cm)    =-1.22062E-02-1.62464E-03 4.85642E-03
Plant Sink (cm)    = 6.68930E-03 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
 21.5734+ 0.0000+ 0.0000 - 0.0040- 0.3097-  0.0049 = 21.2548  Versus  21.2549

Mass Balance = -1.6022E-04 cm;  Time step attempts = 3179 and successes = 3179
  Evaporation:  Potential =  0.9863 cm, Actual =  0.0040 cm
Transpiration:  Potential =  2.8210 cm, Actual =  0.3097 cm
```

```
RHMEAN = 61.2 %;   TMEAN = 299.5 K;   HDRY =  6.7409E+05 cm;   DAYUBC =   3175
-----------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 223, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.12032     0.25331     0.25653
Head (cm)          = 1.49551E+04 4.79244E+02 4.41188E+02
Water Flow (cm)    =-4.26250E-03-1.99857E-03 4.82596E-03
Plant Sink (cm)    = 1.28402E-03 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR           STORAGE
 21.2549+ 0.0000+ 0.0000 - 0.0044- 0.2274-  0.0048 = 21.0183  Versus  21.0184

Mass Balance = -3.6240E-05 cm;  Time step attempts = 2214 and successes = 2214
  Evaporation:  Potential =  0.9767 cm, Actual =  0.0044 cm
Transpiration:  Potential =  2.7937 cm, Actual =  0.2274 cm
RHMEAN = 62.0 %;  TMEAN = 301.5 K;   HDRY =  6.5483E+05 cm;  DAYUBC =  2200
-----------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 224, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.11971     0.25308     0.25645
Head (cm)          = 1.54397E+04 4.81992E+02 4.42162E+02
Water Flow (cm)    =-1.77715E-03-2.24640E-03 4.79736E-03
Plant Sink (cm)    = 1.57020E-06 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR           STORAGE
 21.0184+ 0.0000+ 0.0000 - 0.0042- 0.1794-  0.0048 = 20.8299  Versus  20.8301

Mass Balance = -1.8501E-04 cm;  Time step attempts = 3218 and successes = 3218
  Evaporation:  Potential =  1.0018 cm, Actual =  0.0042 cm
Transpiration:  Potential =  2.8655 cm, Actual =  0.1794 cm
RHMEAN = 63.1 %;  TMEAN = 301.8 K;   HDRY =  6.3119E+05 cm;  DAYUBC =  3220
-----------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 225, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.11891     0.25288     0.25636
Head (cm)          = 1.61038E+04 4.84591E+02 4.43160E+02
Water Flow (cm)    =-8.45394E-04-2.40484E-03 4.76860E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR           STORAGE
 20.8301+ 0.0000+ 0.0000 - 0.0042- 0.1456-  0.0048 = 20.6755  Versus  20.6755

Mass Balance = -1.9073E-06 cm;  Time step attempts = 1447 and successes = 1447
  Evaporation:  Potential =  1.0639 cm, Actual =  0.0042 cm
Transpiration:  Potential =  3.0429 cm, Actual =  0.1456 cm
RHMEAN = 63.9 %;  TMEAN = 301.8 K;   HDRY =  6.1346E+05 cm;  DAYUBC =  1442
-----------------------------------------------------------------------------------
```

```
DAILY SUMMARY:  Day = 226, Simulated Time = 24.0000 hr
-------------
Node Number        =       2           12           25
Depth (cm)         =     5.00000     30.70000     91.50000
Water (cm3/cm3)    =     0.11808      0.25268      0.25627
Head (cm)          = 1.68457E+04 4.87024E+02 4.44164E+02
Water Flow (cm)    =-5.31751E-04-2.51449E-03 4.74014E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
 20.6755+ 0.0000+ 0.0000 - 0.0039- 0.1071-  0.0047 = 20.5597  Versus  20.5598

Mass Balance = -5.3406E-05 cm;  Time step attempts = 2086 and successes = 2086
  Evaporation:  Potential =  0.9662 cm, Actual =  0.0039 cm
Transpiration:  Potential =  2.7637 cm, Actual =  0.1071 cm
RHMEAN = 65.1 %;  TMEAN = 302.3 K;  HDRY =  5.8876E+05 cm;  DAYUBC =  2080

----------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 227, Simulated Time = 24.0000 hr
-------------
Node Number        =       2           12           25
Depth (cm)         =     5.00000     30.70000     91.50000
Water (cm3/cm3)    =     0.11766      0.25255      0.25621
Head (cm)          = 1.72432E+04 4.88616E+02 4.44812E+02
Water Flow (cm)    =-4.64451E-04-2.59864E-03 4.71990E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
 20.5598+ 0.0254+ 0.0000 - 0.0253- 0.0717-  0.0047 = 20.4835  Versus  20.4866

Mass Balance = -3.1128E-03 cm;  Time step attempts =56704 and successes =56704
  Evaporation:  Potential =  0.7147 cm, Actual =  0.0253 cm
Transpiration:  Potential =  2.0443 cm, Actual =  0.0717 cm
RHMEAN = 73.0 %;  TMEAN = 300.1 K;  HDRY =  4.3055E+05 cm;  DAYUBC =  5193

----------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 228, Simulated Time = 24.0000 hr
-------------
Node Number        =       2           12           25
Depth (cm)         =     5.00000     30.70000     91.50000
Water (cm3/cm3)    =     0.11677      0.25239      0.25613
Head (cm)          = 1.81262E+04 4.90637E+02 4.45753E+02
Water Flow (cm)    =-4.62849E-04-2.64541E-03 4.69557E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
 20.4866+ 0.0000+ 0.0000 - 0.0085- 0.0842-  0.0047 = 20.3892  Versus  20.3903

Mass Balance = -1.1368E-03 cm;  Time step attempts =23457 and successes =23457
  Evaporation:  Potential =  0.9086 cm, Actual =  0.0085 cm
Transpiration:  Potential =  2.5990 cm, Actual =  0.0842 cm
RHMEAN = 61.2 %;  TMEAN = 302.3 K;  HDRY =  6.7266E+05 cm;  DAYUBC =  5063

----------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 229, Simulated Time = 24.0000 hr
```

```
-------------
Node Number        =        2          12           25
Depth (cm)         =     5.00000    30.70000     91.50000
Water (cm3/cm3)    =     0.11572     0.25223      0.25604
Head (cm)          = 1.92555E+04 4.92708E+02 4.46789E+02
Water Flow (cm)    =-4.56117E-04-2.68259E-03 4.66708E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 20.3903+ 0.0000+ 0.0000 - 0.0062- 0.0845-  0.0047 = 20.2950  Versus  20.2953

Mass Balance = -3.4332E-04 cm;  Time step attempts = 8600 and successes = 8600
  Evaporation:  Potential =  1.1011 cm, Actual =  0.0062 cm
Transpiration:  Potential =  3.1493 cm, Actual =  0.0845 cm
RHMEAN = 57.0 %;  TMEAN = 302.3 K;  HDRY =  7.7071E+05 cm;  DAYUBC =  4589

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 230, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12           25
Depth (cm)         =     5.00000    30.70000     91.50000
Water (cm3/cm3)    =     0.11472     0.25207      0.25594
Head (cm)          = 2.04234E+04 4.94776E+02 4.47912E+02
Water Flow (cm)    =-4.69389E-04-2.70828E-03 4.63634E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 20.2953+ 0.0000+ 0.0000 - 0.0044- 0.0643-  0.0046 = 20.2220  Versus  20.2220

Mass Balance = -1.3351E-05 cm;  Time step attempts = 1356 and successes = 1356
  Evaporation:  Potential =  1.0259 cm, Actual =  0.0044 cm
Transpiration:  Potential =  2.9343 cm, Actual =  0.0643 cm
RHMEAN = 59.2 %;  TMEAN = 302.0 K;  HDRY =  7.1869E+05 cm;  DAYUBC =  1355

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 231, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12           25
Depth (cm)         =     5.00000    30.70000     91.50000
Water (cm3/cm3)    =     0.11380     0.25191      0.25584
Head (cm)          = 2.16007E+04 4.96763E+02 4.49050E+02
Water Flow (cm)    =-5.06846E-04-2.72382E-03 4.60538E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 20.2220+ 0.0000+ 0.0000 - 0.0040- 0.0440-  0.0046 = 20.1693  Versus  20.1694

Mass Balance = -9.5367E-05 cm;  Time step attempts = 2215 and successes = 2215
  Evaporation:  Potential =  0.7755 cm, Actual =  0.0040 cm
Transpiration:  Potential =  2.2182 cm, Actual =  0.0440 cm
RHMEAN = 61.6 %;  TMEAN = 301.5 K;  HDRY =  6.6374E+05 cm;  DAYUBC =  2205

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 232, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12           25
Depth (cm)         =     5.00000    30.70000     91.50000
```

```
Water (cm3/cm3)      =     0.11303     0.25176     0.25574
Head (cm)            = 2.26645E+04 4.98659E+02 4.50217E+02
Water Flow (cm)      =-5.49754E-04-2.73491E-03 4.57364E-03
Plant Sink (cm)      = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR         STORAGE
 20.1694+ 0.0000+ 0.0000 - 0.0022- 0.0396-  0.0046 = 20.1231  Versus  20.1232

Mass Balance = -1.5831E-04 cm;  Time step attempts = 2374 and successes = 2374
  Evaporation:  Potential =  0.7222 cm, Actual =  0.0022 cm
Transpiration:  Potential =  2.0658 cm, Actual =  0.0396 cm
RHMEAN = 67.9 %;  TMEAN = 301.5 K;  HDRY =  5.3087E+05 cm;  DAYUBC =  2320

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 233, Simulated Time = 24.0000 hr
-------------
Node Number          =       2          12          25
Depth (cm)           =     5.00000    30.70000    91.50000
Water (cm3/cm3)      =     0.11210     0.25163     0.25564
Head (cm)            = 2.40555E+04 5.00399E+02 4.51337E+02
Water Flow (cm)      =-5.87377E-04-2.74168E-03 4.54384E-03
Plant Sink (cm)      = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR         STORAGE
 20.1232+ 0.0000+ 0.0000 - 0.0071- 0.0426-  0.0045 = 20.0690  Versus  20.0696

Mass Balance = -6.7139E-04 cm;  Time step attempts =15740 and successes =15740
  Evaporation:  Potential =  0.8329 cm, Actual =  0.0071 cm
Transpiration:  Potential =  2.3824 cm, Actual =  0.0426 cm
RHMEAN = 59.9 %;  TMEAN = 300.9 K;  HDRY =  7.0257E+05 cm;  DAYUBC =  3712

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 234, Simulated Time = 24.0000 hr
-------------
Node Number          =       2          12          25
Depth (cm)           =     5.00000    30.70000    91.50000
Water (cm3/cm3)      =     0.11128     0.25149     0.25554
Head (cm)            = 2.53875E+04 5.02211E+02 4.52556E+02
Water Flow (cm)      =-6.25264E-04-2.73858E-03 4.51130E-03
Plant Sink (cm)      = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR         STORAGE
 20.0696+ 0.0000+ 0.0000 - 0.0030- 0.0342-  0.0045 = 20.0279  Versus  20.0280

Mass Balance = -1.1826E-04 cm;  Time step attempts = 2100 and successes = 2100
  Evaporation:  Potential =  0.7163 cm, Actual =  0.0030 cm
Transpiration:  Potential =  2.0488 cm, Actual =  0.0342 cm
RHMEAN = 64.6 %;  TMEAN = 300.4 K;  HDRY =  5.9791E+05 cm;  DAYUBC =  2079

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 235, Simulated Time = 24.0000 hr
-------------
Node Number          =       2          12          25
Depth (cm)           =     5.00000    30.70000    91.50000
Water (cm3/cm3)      =     0.11042     0.25136     0.25544
Head (cm)            = 2.69201E+04 5.03926E+02 4.53759E+02
Water Flow (cm)      =-6.59066E-04-2.74029E-03 4.47970E-03
```

```
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

  PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
  20.0280+ 0.0000+ 0.0000 - 0.0054- 0.0346-  0.0045 = 19.9836  Versus  19.9841

Mass Balance = -4.4441E-04 cm;  Time step attempts = 8328 and successes = 8328
  Evaporation:  Potential =  0.7706 cm, Actual =  0.0054 cm
Transpiration:  Potential =  2.2041 cm, Actual =  0.0346 cm
RHMEAN = 61.8 %;  TMEAN = 300.4 K;  HDRY =  6.6063E+05 cm;  DAYUBC =  3738

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 236, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.10913     0.25123     0.25534
Head (cm)           = 2.94508E+04 5.05517E+02 4.54912E+02
Water Flow (cm)     =-6.97718E-04-2.73587E-03 4.44939E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

  PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
  19.9841+ 0.0000+ 0.0000 - 0.0101- 0.0383-  0.0044 = 19.9312  Versus  19.9323

Mass Balance = -1.0872E-03 cm;  Time step attempts =21014 and successes =21014
  Evaporation:  Potential =  0.9610 cm, Actual =  0.0101 cm
Transpiration:  Potential =  2.7487 cm, Actual =  0.0383 cm
RHMEAN = 44.7 %;  TMEAN = 300.1 K;  HDRY =  1.1040E+06 cm;  DAYUBC =  4586

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 237, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.10796     0.25110     0.25523
Head (cm)           = 3.20812E+04 5.07205E+02 4.56180E+02
Water Flow (cm)     =-7.40240E-04-2.72844E-03 4.41642E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

  PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
  19.9323+ 0.0000+ 0.0000 - 0.0051- 0.0312-  0.0044 = 19.8916  Versus  19.8918

Mass Balance = -1.4496E-04 cm;  Time step attempts = 2702 and successes = 2702
  Evaporation:  Potential =  0.8824 cm, Actual =  0.0051 cm
Transpiration:  Potential =  2.5239 cm, Actual =  0.0312 cm
RHMEAN = 49.8 %;  TMEAN = 301.2 K;  HDRY =  9.5533E+05 cm;  DAYUBC =  2686

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 238, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.10700     0.25098     0.25512
Head (cm)           = 3.45155E+04 5.08890E+02 4.57488E+02
Water Flow (cm)     =-7.76267E-04-2.71992E-03 4.38283E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

  PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
```

```
 19.8918+ 0.0000+ 0.0000 - 0.0034- 0.0245-  0.0044 = 19.8595  Versus  19.8595

Mass Balance = -3.0518E-05 cm;  Time step attempts = 1496 and successes = 1496
  Evaporation:  Potential =  0.7362 cm, Actual =  0.0034 cm
Transpiration:  Potential =  2.1057 cm, Actual =  0.0245 cm
RHMEAN = 58.0 %;  TMEAN = 302.0 K;  HDRY =  7.4552E+05 cm;  DAYUBC =  1472

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 239, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.10604     0.25085     0.25501
Head (cm)          = 3.72149E+04 5.10499E+02 4.58761E+02
Water Flow (cm)    =-8.07958E-04-2.70857E-03 4.35032E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 19.8595+ 0.0000+ 0.0000 - 0.0055- 0.0239-  0.0044 = 19.8259  Versus  19.8262

Mass Balance = -3.3379E-04 cm;  Time step attempts = 5911 and successes = 5911
  Evaporation:  Potential =  0.7435 cm, Actual =  0.0055 cm
Transpiration:  Potential =  2.1266 cm, Actual =  0.0239 cm
RHMEAN = 56.6 %;  TMEAN = 302.3 K;  HDRY =  7.7967E+05 cm;  DAYUBC =  3942

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 240, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.10504     0.25074     0.25490
Head (cm)          = 4.03904E+04 5.12063E+02 4.60035E+02
Water Flow (cm)    =-8.39814E-04-2.70182E-03 4.31801E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 19.8262+ 0.0000+ 0.0000 - 0.0058- 0.0225-  0.0043 = 19.7935  Versus  19.7941

Mass Balance = -6.3324E-04 cm;  Time step attempts = 8699 and successes = 8699
  Evaporation:  Potential =  0.7294 cm, Actual =  0.0058 cm
Transpiration:  Potential =  2.0864 cm, Actual =  0.0225 cm
RHMEAN = 54.5 %;  TMEAN = 301.8 K;  HDRY =  8.3277E+05 cm;  DAYUBC =  5793

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 241, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.10399     0.25062     0.25479
Head (cm)          = 4.41507E+04 5.13626E+02 4.61326E+02
Water Flow (cm)    =-8.72163E-04-2.69169E-03 4.28570E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 19.7941+ 0.0000+ 0.0000 - 0.0060- 0.0251-  0.0043 = 19.7587  Versus  19.7592

Mass Balance = -4.3488E-04 cm;  Time step attempts = 6367 and successes = 6367
```

```
  Evaporation:  Potential =  0.8712 cm, Actual =  0.0060 cm
Transpiration:  Potential =  2.4920 cm, Actual =  0.0251 cm
RHMEAN = 52.4 %;  TMEAN = 302.6 K;  HDRY =  8.8587E+05 cm;  DAYUBC =  4196

-----------------------------------------------------------------------------

DAILY SUMMARY:  Day = 242, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =      5.00000    30.70000    91.50000
Water (cm3/cm3)    =      0.10290     0.25050     0.25468
Head (cm)          = 4.86256E+04 5.15165E+02 4.62626E+02
Water Flow (cm)    =-9.05209E-04-2.67808E-03 4.25344E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 19.7592+ 0.0000+ 0.0000 - 0.0062- 0.0266-  0.0043 = 19.7221  Versus  19.7225

Mass Balance = -3.8147E-04 cm;  Time step attempts = 6671 and successes = 6671
  Evaporation:  Potential =  1.0395 cm, Actual =  0.0062 cm
Transpiration:  Potential =  2.9732 cm, Actual =  0.0266 cm
RHMEAN = 50.4 %;  TMEAN = 303.4 K;  HDRY =  9.3858E+05 cm;  DAYUBC =  5048

-----------------------------------------------------------------------------

DAILY SUMMARY:  Day = 243, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =      5.00000    30.70000    91.50000
Water (cm3/cm3)    =      0.10183     0.25039     0.25457
Head (cm)          = 5.37389E+04 5.16680E+02 4.63927E+02
Water Flow (cm)    =-9.39432E-04-2.66564E-03 4.22137E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 19.7225+ 0.0000+ 0.0000 - 0.0058- 0.0213-  0.0042 = 19.6912  Versus  19.6916

Mass Balance = -3.6621E-04 cm;  Time step attempts = 6779 and successes = 6779
  Evaporation:  Potential =  0.9234 cm, Actual =  0.0058 cm
Transpiration:  Potential =  2.6411 cm, Actual =  0.0213 cm
RHMEAN = 50.4 %;  TMEAN = 302.0 K;  HDRY =  9.3987E+05 cm;  DAYUBC =  6761

-----------------------------------------------------------------------------

DAILY SUMMARY:  Day = 244, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =      5.00000    30.70000    91.50000
Water (cm3/cm3)    =      0.10082     0.25027     0.25446
Head (cm)          = 5.93158E+04 5.18204E+02 4.65254E+02
Water Flow (cm)    =-9.75690E-04-2.65232E-03 4.18892E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 19.6916+ 0.0000+ 0.0000 - 0.0052- 0.0184-  0.0042 = 19.6638  Versus  19.6640

Mass Balance = -1.8120E-04 cm;  Time step attempts = 3937 and successes = 3937
  Evaporation:  Potential =  0.8421 cm, Actual =  0.0052 cm
Transpiration:  Potential =  2.4087 cm, Actual =  0.0184 cm
RHMEAN = 52.2 %;  TMEAN = 301.8 K;  HDRY =  8.9176E+05 cm;  DAYUBC =  3936
```

```
DAILY SUMMARY:  Day = 245, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =    5.00000    30.70000    91.50000
Water (cm3/cm3)    =    0.09972     0.25016     0.25435
Head (cm)          = 6.63973E+04 5.19673E+02 4.66547E+02
Water Flow (cm)    =-1.01884E-03-2.64230E-03 4.15762E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 19.6640+ 0.0000+ 0.0000 - 0.0067- 0.0211-  0.0042 = 19.6320  Versus  19.6325

Mass Balance = -4.6349E-04 cm;  Time step attempts =10091 and successes =10091
  Evaporation:  Potential =  1.0350 cm, Actual =  0.0067 cm
Transpiration:  Potential =  2.9603 cm, Actual =  0.0211 cm
RHMEAN = 48.1 %;  TMEAN = 303.2 K;  HDRY =  1.0042E+06 cm;  DAYUBC =  6773
```

```
DAILY SUMMARY:  Day = 246, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =    5.00000    30.70000    91.50000
Water (cm3/cm3)    =    0.09844     0.25006     0.25424
Head (cm)          = 7.64323E+04 5.21140E+02 4.67841E+02
Water Flow (cm)    =-1.07933E-03-2.63043E-03 4.12670E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 19.6325+ 0.0000+ 0.0000 - 0.0083- 0.0232-  0.0041 = 19.5968  Versus  19.5974

Mass Balance = -5.5313E-04 cm;  Time step attempts =10978 and successes =10978
  Evaporation:  Potential =  1.3168 cm, Actual =  0.0083 cm
Transpiration:  Potential =  3.7665 cm, Actual =  0.0232 cm
RHMEAN = 39.6 %;  TMEAN = 305.1 K;  HDRY =  1.2708E+06 cm;  DAYUBC =  6271
```

```
DAILY SUMMARY:  Day = 247, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =    5.00000    30.70000    91.50000
Water (cm3/cm3)    =    0.09728     0.24995     0.25413
Head (cm)          = 8.74959E+04 5.22620E+02 4.69190E+02
Water Flow (cm)    =-1.15682E-03-2.61530E-03 4.09473E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 19.5974+ 0.0000+ 0.0000 - 0.0057- 0.0173-  0.0041 = 19.5703  Versus  19.5704

Mass Balance = -1.8883E-04 cm;  Time step attempts = 5860 and successes = 5860
  Evaporation:  Potential =  1.0989 cm, Actual =  0.0057 cm
Transpiration:  Potential =  3.1432 cm, Actual =  0.0173 cm
RHMEAN = 43.6 %;  TMEAN = 304.3 K;  HDRY =  1.1363E+06 cm;  DAYUBC =  5838
```

```
DAILY SUMMARY:  Day = 248, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.09648     0.24983     0.25402
Head (cm)          = 9.64981E+04 5.24133E+02 4.70553E+02
Water Flow (cm)    =-1.23500E-03-2.60166E-03 4.06271E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 19.5704+ 0.0000+ 0.0000 - 0.0013- 0.0140-  0.0041 = 19.5511  Versus  19.5511

Mass Balance = -3.8147E-06 cm;  Time step attempts = 1281 and successes = 1281
  Evaporation:  Potential =  0.9117 cm, Actual =  0.0013 cm
Transpiration:  Potential =  2.6077 cm, Actual =  0.0140 cm
RHMEAN = 60.6 %;  TMEAN = 299.8 K;  HDRY =  6.8616E+05 cm;  DAYUBC =  1127

-------------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 249, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.09570     0.24973     0.25391
Head (cm)          = 1.06779E+05 5.25532E+02 4.71843E+02
Water Flow (cm)    =-1.30328E-03-2.58739E-03 4.03267E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 19.5511+ 0.0000+ 0.0000 - 0.0062- 0.0167-  0.0040 = 19.5242  Versus  19.5249

Mass Balance = -7.5150E-04 cm;  Time step attempts =13643 and successes =13643
  Evaporation:  Potential =  1.1449 cm, Actual =  0.0062 cm
Transpiration:  Potential =  3.2748 cm, Actual =  0.0167 cm
RHMEAN = 54.9 %;  TMEAN = 302.6 K;  HDRY =  8.2278E+05 cm;  DAYUBC =  8650

-------------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 250, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.10631     0.24966     0.25384
Head (cm)          = 3.64295E+04 5.26471E+02 4.72703E+02
Water Flow (cm)    =-9.04929E-04-2.56996E-03 4.00989E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 19.5249+ 0.4318+ 0.0000 - 0.1044- 0.0064-  0.0040 = 19.8419  Versus  19.8447

Mass Balance = -2.7657E-03 cm;  Time step attempts =34579 and successes =34579
  Evaporation:  Potential =  0.4218 cm, Actual =  0.1044 cm
Transpiration:  Potential =  1.2066 cm, Actual =  0.0064 cm
RHMEAN = 77.8 %;  TMEAN = 294.8 K;  HDRY =  3.4402E+05 cm;  DAYUBC =     0

-------------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 251, Simulated Time = 24.0000 hr
-------------
```

```
Node Number         =       2          12          25
Depth (cm)          =    5.00000    30.70000    91.50000
Water (cm3/cm3)     =    0.11031     0.24955     0.25373
Head (cm)           = 2.71190E+04 5.27967E+02 4.74068E+02
Water Flow (cm)     =-5.74853E-04-2.56433E-03 3.98163E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 19.8447+ 0.0000+ 0.0000 - 0.0795- 0.0056-  0.0040 = 19.7557  Versus  19.7557

Mass Balance = -5.7220E-06 cm;  Time step attempts = 3776 and successes = 3776
  Evaporation:  Potential =  0.3180 cm, Actual =  0.0795 cm
Transpiration:  Potential =  0.9094 cm, Actual =  0.0056 cm
RHMEAN = 71.9 %;  TMEAN = 290.4 K;  HDRY =  4.5128E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 252, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =    5.00000    30.70000    91.50000
Water (cm3/cm3)     =    0.11116     0.24945     0.25362
Head (cm)           = 2.56003E+04 5.29320E+02 4.75351E+02
Water Flow (cm)     =-4.79281E-04-2.54941E-03 3.95144E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 19.7557+ 0.0000+ 0.0000 - 0.1143- 0.0088-  0.0040 = 19.6286  Versus  19.6290

Mass Balance = -4.5204E-04 cm;  Time step attempts = 8171 and successes = 8171
  Evaporation:  Potential =  0.4573 cm, Actual =  0.1143 cm
Transpiration:  Potential =  1.3080 cm, Actual =  0.0088 cm
RHMEAN = 66.2 %;  TMEAN = 292.6 K;  HDRY =  5.6534E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 253, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =    5.00000    30.70000    91.50000
Water (cm3/cm3)     =    0.11081     0.24938     0.25354
Head (cm)           = 2.62067E+04 5.30359E+02 4.76342E+02
Water Flow (cm)     =-4.72093E-04-2.54183E-03 3.92638E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 19.6290+ 0.0000+ 0.0000 - 0.0659- 0.0077-  0.0039 = 19.5515  Versus  19.5547

Mass Balance = -3.1891E-03 cm;  Time step attempts =47266 and successes =47266
  Evaporation:  Potential =  0.3785 cm, Actual =  0.0659 cm
Transpiration:  Potential =  1.0827 cm, Actual =  0.0077 cm
RHMEAN = 63.7 %;  TMEAN = 294.5 K;  HDRY =  6.1716E+05 cm;  DAYUBC =  4326

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 254, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =    5.00000    30.70000    91.50000
Water (cm3/cm3)     =    0.11329     0.24928     0.25344
```

```
Head (cm)            = 2.23013E+04 5.31753E+02 4.77628E+02
Water Flow (cm)      =-4.14205E-04-2.52864E-03 3.90145E-03
Plant Sink (cm)      = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR           STORAGE
 19.5547+ 0.2286+ 0.0000 - 0.0572- 0.0050-  0.0039 = 19.7172  Versus  19.7176

Mass Balance = -4.7493E-04 cm;  Time step attempts = 9024 and successes = 9024
  Evaporation:  Potential =  0.2311 cm, Actual =  0.0572 cm
Transpiration:  Potential =  0.6611 cm, Actual =  0.0050 cm
RHMEAN = 77.4 %;  TMEAN = 293.7 K;  HDRY =  3.5170E+05 cm;  DAYUBC =     0

---------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 255, Simulated Time = 24.0000 hr
-------------
Node Number          =       2          12          25
Depth (cm)           =    5.00000    30.70000    91.50000
Water (cm3/cm3)      =    0.23908     0.24919     0.25335
Head (cm)            = 7.89253E+02 5.32887E+02 4.78693E+02
Water Flow (cm)      = 9.69559E-01-2.51842E-03 3.87721E-03
Plant Sink (cm)      = 4.03149E-02 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR           STORAGE
 19.7176+ 2.0614+ 1.0119 - 0.1174- 0.3285-  0.0039 = 21.3292  Versus  21.3310

Mass Balance = -1.7815E-03 cm;  Time step attempts =22931 and successes =22931
  Evaporation:  Potential =  0.4892 cm, Actual =  0.1174 cm
Transpiration:  Potential =  1.3993 cm, Actual =  0.3285 cm
RHMEAN = 78.4 %;  TMEAN = 295.7 K;  HDRY =  3.3270E+05 cm;  DAYUBC =  7532

---------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 256, Simulated Time = 24.0000 hr
-------------
Node Number          =       2          12          25
Depth (cm)           =    5.00000    30.70000    91.50000
Water (cm3/cm3)      =    0.17796     0.24909     0.25324
Head (cm)            = 2.31376E+03 5.34346E+02 4.80051E+02
Water Flow (cm)      = 2.30564E-02-2.50321E-03 3.84823E-03
Plant Sink (cm)      = 5.74264E-02 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR           STORAGE
 21.3310+ 0.0000+ 0.0000 - 0.1672- 0.4784-  0.0038 = 20.6816  Versus  20.6816

Mass Balance = -1.9073E-06 cm;  Time step attempts =  997 and successes =  997
  Evaporation:  Potential =  0.6690 cm, Actual =  0.1672 cm
Transpiration:  Potential =  1.9135 cm, Actual =  0.4784 cm
RHMEAN = 66.0 %;  TMEAN = 297.9 K;  HDRY =  5.6902E+05 cm;  DAYUBC =     0

---------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 257, Simulated Time = 24.0000 hr
-------------
Node Number          =       2          12          25
Depth (cm)           =    5.00000    30.70000    91.50000
Water (cm3/cm3)      =    0.14865     0.24899     0.25313
Head (cm)            = 4.91116E+03 5.35781E+02 4.81399E+02
Water Flow (cm)      =-1.47722E-02-2.49193E-03 3.81890E-03
Plant Sink (cm)      = 3.11492E-02 0.00000E+00 0.00000E+00
```

```
 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 20.6816+ 0.0000+ 0.0000 - 0.1059- 0.2786-  0.0038 = 20.2933  Versus  20.2933

Mass Balance = -7.6294E-06 cm;  Time step attempts = 2542 and successes = 2542
  Evaporation:  Potential =  0.4237 cm, Actual =  0.1059 cm
Transpiration:  Potential =  1.2118 cm, Actual =  0.2786 cm
RHMEAN = 73.2 %;  TMEAN = 297.3 K;  HDRY =  4.2669E+05 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day = 258, Simulated Time = 24.0000 hr
-------------
Node Number       =        2           12           25
Depth (cm)        =     5.00000     30.70000     91.50000
Water (cm3/cm3)   =     0.28025      0.24889      0.25303
Head (cm)         = 4.42904E+02 5.37109E+02 4.82637E+02
Water Flow (cm)   = 1.38857E+00-2.47842E-03 3.79206E-03
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 20.2933+ 2.3540+ 0.2876 - 0.0000- 0.0000-  0.0038 = 22.6434  Versus  22.6438

Mass Balance = -4.2152E-04 cm;  Time step attempts = 9590 and successes = 9590
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 92.8 %;  TMEAN = 294.5 K;  HDRY =  1.0175E+05 cm;  DAYUBC =   662
```

```
DAILY SUMMARY:  Day = 259, Simulated Time = 24.0000 hr
-------------
Node Number       =        2           12           25
Depth (cm)        =     5.00000     30.70000     91.50000
Water (cm3/cm3)   =     0.27584      0.24880      0.25293
Head (cm)         = 4.70279E+02 5.38408E+02 4.83923E+02
Water Flow (cm)   = 5.94632E-01-2.46611E-03 3.76483E-03
Plant Sink (cm)   = 2.03166E-02 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 22.6438+ 0.7112+ 0.0000 - 0.0592- 0.1692-  0.0038 = 23.1229  Versus  23.1231

Mass Balance = -2.3842E-04 cm;  Time step attempts = 5683 and successes = 5683
  Evaporation:  Potential =  0.2391 cm, Actual =  0.0592 cm
Transpiration:  Potential =  0.6838 cm, Actual =  0.1692 cm
RHMEAN = 87.0 %;  TMEAN = 297.3 K;  HDRY =  1.9128E+05 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day = 260, Simulated Time = 24.0000 hr
-------------
Node Number       =        2           12           25
Depth (cm)        =     5.00000     30.70000     91.50000
Water (cm3/cm3)   =     0.24208      0.24882      0.25282
Head (cm)         = 7.55184E+02 5.38067E+02 4.85261E+02
Water Flow (cm)   =-1.46156E-03-2.10062E-03 3.73661E-03
Plant Sink (cm)   = 3.29362E-02 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 23.1231+ 0.0000+ 0.0000 - 0.0959- 0.2744-  0.0037 = 22.7491  Versus  22.7491
```

```
Mass Balance = -1.5259E-05 cm;  Time step attempts =  203 and successes =  203
  Evaporation:  Potential =  0.3837 cm, Actual =  0.0959 cm
Transpiration:  Potential =  1.0975 cm, Actual =  0.2744 cm
RHMEAN = 82.3 %;  TMEAN = 297.0 K;  HDRY =  2.6677E+05 cm;  DAYUBC =     0

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 261, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.29807     0.24925     0.25272
Head (cm)           = 3.47211E+02 5.32124E+02 4.86546E+02
Water Flow (cm)     = 1.25179E+00-7.63010E-04 3.70972E-03
Plant Sink (cm)     = 1.92927E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 22.7491+ 1.7908+ 0.0634 - 0.0562- 0.1607-  0.0037 = 24.3193  Versus  24.3195

Mass Balance = -2.9373E-04 cm;  Time step attempts = 2909 and successes = 2909
  Evaporation:  Potential =  0.2293 cm, Actual =  0.0562 cm
Transpiration:  Potential =  0.6560 cm, Actual =  0.1607 cm
RHMEAN = 83.0 %;  TMEAN = 296.5 K;  HDRY =  2.5461E+05 cm;  DAYUBC =   185

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 262, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.28698     0.24981     0.25262
Head (cm)           = 4.04116E+02 5.24457E+02 4.87835E+02
Water Flow (cm)     = 7.89514E-02 2.24920E-03 3.68298E-03
Plant Sink (cm)     = 2.41685E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 24.3195+ 0.1778+ 0.0000 - 0.0704- 0.2013-  0.0037 = 24.2219  Versus  24.2221

Mass Balance = -1.1063E-04 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.2844 cm, Actual =  0.0704 cm
Transpiration:  Potential =  0.8135 cm, Actual =  0.2013 cm
RHMEAN = 86.3 %;  TMEAN = 293.7 K;  HDRY =  2.0140E+05 cm;  DAYUBC =     0

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 263, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.28495     0.25004     0.25251
Head (cm)           = 4.15425E+02 5.21406E+02 4.89159E+02
Water Flow (cm)     =-4.61960E-02 2.79374E-03 3.65580E-03
Plant Sink (cm)     = 8.04812E-03 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 24.2221+ 0.0000+ 0.0000 - 0.0234- 0.0670-  0.0037 = 24.1279  Versus  24.1279

Mass Balance =  0.0000E+00 cm;  Time step attempts =   96 and successes =   96
  Evaporation:  Potential =  0.0938 cm, Actual =  0.0234 cm
```

```
Transpiration:  Potential =  0.2682 cm, Actual =  0.0670 cm
RHMEAN = 84.6 %;  TMEAN = 288.4 K;  HDRY =  2.2909E+05 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day = 264, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12          25
Depth (cm)        =    5.00000    30.70000    91.50000
Water (cm3/cm3)   =    0.33735     0.25198     0.25241
Head (cm)         = 1.94260E+02 4.95823E+02 4.90407E+02
Water Flow (cm)   = 1.23539E+00 8.07807E-03 3.63020E-03
Plant Sink (cm)   = 4.31125E-03 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 24.1279+ 1.6335+ 0.2207 - 0.0126- 0.0359-  0.0036 = 25.7093  Versus  25.7094

Mass Balance = -1.1444E-04 cm;  Time step attempts = 3009 and successes = 3009
  Evaporation:  Potential =  0.0512 cm, Actual =  0.0126 cm
Transpiration:  Potential =  0.1466 cm, Actual =  0.0359 cm
RHMEAN = 82.8 %;  TMEAN = 283.4 K;  HDRY =  2.5842E+05 cm;  DAYUBC =   192
```

```
DAILY SUMMARY:  Day = 265, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12          25
Depth (cm)        =    5.00000    30.70000    91.50000
Water (cm3/cm3)   =    0.31873     0.25274     0.25231
Head (cm)         = 2.59214E+02 4.86286E+02 4.91680E+02
Water Flow (cm)   =-1.74685E-01 1.30683E-02 3.60426E-03
Plant Sink (cm)   = 4.12956E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 25.7094+ 0.0000+ 0.0000 - 0.1203- 0.3440-  0.0036 = 25.2416  Versus  25.2416

Mass Balance = -5.7220E-06 cm;  Time step attempts =   96 and successes =   96
  Evaporation:  Potential =  0.4811 cm, Actual =  0.1203 cm
Transpiration:  Potential =  1.3760 cm, Actual =  0.3440 cm
RHMEAN = 61.2 %;  TMEAN = 282.0 K;  HDRY =  6.7357E+05 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day = 266, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12          25
Depth (cm)        =    5.00000    30.70000    91.50000
Water (cm3/cm3)   =    0.29588     0.25266     0.25222
Head (cm)         = 3.57831E+02 4.87319E+02 4.92891E+02
Water Flow (cm)   =-2.14196E-01 9.65647E-03 3.57944E-03
Plant Sink (cm)   = 5.07500E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 25.2416+ 0.0000+ 0.0000 - 0.1478- 0.4228-  0.0036 = 24.6674  Versus  24.6674

Mass Balance = -1.1444E-05 cm;  Time step attempts =   96 and successes =   96
  Evaporation:  Potential =  0.5912 cm, Actual =  0.1478 cm
Transpiration:  Potential =  1.6911 cm, Actual =  0.4228 cm
RHMEAN = 54.9 %;  TMEAN = 285.4 K;  HDRY =  8.2280E+05 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day = 267, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12           25
Depth (cm)         =     5.00000     30.70000     91.50000
Water (cm3/cm3)    =     0.30864      0.25259      0.25213
Head (cm)          = 2.99678E+02 4.88147E+02 4.93967E+02
Water Flow (cm)    = 1.37149E-01 6.94677E-03 3.55706E-03
Plant Sink (cm)    = 1.00764E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR         STORAGE
 24.6674+ 0.3048+ 0.0000 - 0.0293- 0.0839-  0.0036 = 24.8554  Versus  24.8554

Mass Balance =  1.9073E-05 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.1186 cm, Actual =  0.0293 cm
Transpiration:  Potential =  0.3391 cm, Actual =  0.0839 cm
RHMEAN = 75.8 %;  TMEAN = 285.9 K;  HDRY =  3.7959E+05 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day = 268, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12           25
Depth (cm)         =     5.00000     30.70000     91.50000
Water (cm3/cm3)    =     0.33802      0.25391      0.25206
Head (cm)          = 1.92121E+02 4.71873E+02 4.94871E+02
Water Flow (cm)    = 7.00285E-01 1.08558E-02 3.53773E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR         STORAGE
 24.8554+ 0.9054+ 0.0344 - 0.0000- 0.0000-  0.0035 = 25.7572  Versus  25.7571

Mass Balance =  7.6294E-05 cm;  Time step attempts = 3231 and successes = 3231
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 90.5 %;  TMEAN = 286.2 K;  HDRY =  1.3744E+05 cm;  DAYUBC =   122
```

```
DAILY SUMMARY:  Day = 269, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12           25
Depth (cm)         =     5.00000     30.70000     91.50000
Water (cm3/cm3)    =     0.32207      0.25438      0.25200
Head (cm)          = 2.46741E+02 4.66220E+02 4.95612E+02
Water Flow (cm)    =-1.39530E-01 1.40776E-02 3.52143E-03
Plant Sink (cm)    = 3.74367E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR         STORAGE
 25.7571+ 0.0254+ 0.0000 - 0.1090- 0.3119-  0.0035 = 25.3581  Versus  25.3581

Mass Balance =  3.8147E-06 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.4405 cm, Actual =  0.1090 cm
Transpiration:  Potential =  1.2600 cm, Actual =  0.3119 cm
RHMEAN = 78.2 %;  TMEAN = 288.7 K;  HDRY =  3.3762E+05 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day = 270, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.32070     0.25442     0.25196
Head (cm)          = 2.51812E+02 4.65780E+02 4.96155E+02
Water Flow (cm)    =-7.60061E-03 1.13374E-02 3.50895E-03
Plant Sink (cm)    = 1.59152E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 25.3581+ 0.1016+ 0.0000 - 0.0464- 0.1326-  0.0035 = 25.2773  Versus  25.2772

Mass Balance =  6.1035E-05 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.1873 cm, Actual =  0.0464 cm
Transpiration:  Potential =  0.5357 cm, Actual =  0.1326 cm
RHMEAN = 85.8 %;  TMEAN = 291.8 K;  HDRY =  2.0918E+05 cm;  DAYUBC =     0

-------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 271, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.29323     0.25419     0.25193
Head (cm)          = 3.71091E+02 4.68515E+02 4.96512E+02
Water Flow (cm)    =-2.13235E-01 9.45804E-03 3.50000E-03
Plant Sink (cm)    = 5.52114E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 25.2772+ 0.0000+ 0.0000 - 0.1608- 0.4599-  0.0035 = 24.6530  Versus  24.6530

Mass Balance = -1.9073E-05 cm;  Time step attempts =   96 and successes =   96
  Evaporation:  Potential =  0.6432 cm, Actual =  0.1608 cm
Transpiration:  Potential =  1.8397 cm, Actual =  0.4599 cm
RHMEAN = 76.2 %;  TMEAN = 297.6 K;  HDRY =  3.7208E+05 cm;  DAYUBC =     0

-------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 272, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.24575     0.25361     0.25192
Head (cm)          = 7.15899E+02 4.75496E+02 4.96644E+02
Water Flow (cm)    =-2.65867E-01 5.95764E-03 3.49527E-03
Plant Sink (cm)    = 8.36708E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 24.6530+ 0.0000+ 0.0000 - 0.2437- 0.6970-  0.0035 = 23.7088  Versus  23.7089

Mass Balance = -1.3351E-05 cm;  Time step attempts =  296 and successes =  296
  Evaporation:  Potential =  0.9747 cm, Actual =  0.2437 cm
Transpiration:  Potential =  2.7880 cm, Actual =  0.6970 cm
RHMEAN = 64.5 %;  TMEAN = 299.5 K;  HDRY =  6.0189E+05 cm;  DAYUBC =     0

-------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 273, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
```

EOAK SUBD

```
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.21776     0.25297     0.25193
Head (cm)           = 1.09873E+03 4.83437E+02 4.96555E+02
Water Flow (cm)     =-2.26877E-01 2.93794E-03 3.49488E-03
Plant Sink (cm)     = 5.87339E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 23.7089+ 0.0000+ 0.0000 - 0.1711- 0.4893-  0.0035 = 23.0450  Versus  23.0450

Mass Balance = -7.6294E-06 cm;  Time step attempts =  380 and successes =  380
  Evaporation:  Potential =  0.6842 cm, Actual =  0.1711 cm
Transpiration:  Potential =  1.9571 cm, Actual =  0.4893 cm
RHMEAN = 71.2 %;  TMEAN = 294.0 K;  HDRY =  4.6601E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 274, Simulated Time = 24.0000 hr
-------------
Node Number         =         2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.19605     0.25241     0.25195
Head (cm)           = 1.60557E+03 4.90423E+02 4.96267E+02
Water Flow (cm)     =-1.67541E-01 1.09189E-03 3.49858E-03
Plant Sink (cm)     = 4.49458E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 23.0450+ 0.0000+ 0.0000 - 0.1342- 0.3744-  0.0035 = 22.5329  Versus  22.5329

Mass Balance = -1.9073E-06 cm;  Time step attempts =  630 and successes =  630
  Evaporation:  Potential =  0.5370 cm, Actual =  0.1342 cm
Transpiration:  Potential =  1.4976 cm, Actual =  0.3744 cm
RHMEAN = 59.9 %;  TMEAN = 290.1 K;  HDRY =  7.0312E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 275, Simulated Time = 24.0000 hr
-------------
Node Number         =         2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.31882     0.25281     0.25198
Head (cm)           = 2.58891E+02 4.85346E+02 4.95877E+02
Water Flow (cm)     = 1.64615E+00 2.10462E-03 3.50491E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 22.5329+ 2.5623+ 0.2825 - 0.0000- 0.0000-  0.0035 = 25.0917  Versus  25.0917

Mass Balance = -3.0518E-05 cm;  Time step attempts = 3328 and successes = 3328
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 90.3 %;  TMEAN = 287.6 K;  HDRY =  1.4060E+05 cm;  DAYUBC =   795

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 276, Simulated Time = 24.0000 hr
-------------
Node Number         =         2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.29384     0.25321     0.25202
Head (cm)           = 3.67984E+02 4.80432E+02 4.95392E+02
```

```
Water Flow (cm)     =-1.25403E-01 6.59911E-03 3.51361E-03
Plant Sink (cm)     = 4.31863E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 25.0917+ 0.0254+ 0.0000 - 0.1356- 0.3598-  0.0035 = 24.6183  Versus  24.6183

Mass Balance =  1.7166E-05 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.5478 cm, Actual =  0.1356 cm
Transpiration:  Potential =  1.4536 cm, Actual =  0.3598 cm
RHMEAN = 65.4 %;  TMEAN = 290.1 K;  HDRY =  5.8179E+05 cm;  DAYUBC =     0
---------------------------------------------------------------------------


DAILY SUMMARY:  Day = 277, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.25520     0.25297     0.25206
Head (cm)           = 6.25527E+02 4.83412E+02 4.94873E+02
Water Flow (cm)     =-2.37755E-01 5.10885E-03 3.52364E-03
Plant Sink (cm)     = 6.77599E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 24.6183+ 0.0000+ 0.0000 - 0.2181- 0.5645-  0.0035 = 23.8322  Versus  23.8322

Mass Balance = -1.7166E-05 cm;  Time step attempts =  216 and successes =  216
  Evaporation:  Potential =  0.8723 cm, Actual =  0.2181 cm
Transpiration:  Potential =  2.2578 cm, Actual =  0.5645 cm
RHMEAN = 56.5 %;  TMEAN = 292.3 K;  HDRY =  7.8194E+05 cm;  DAYUBC =     0
---------------------------------------------------------------------------


DAILY SUMMARY:  Day = 278, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.20611     0.25251     0.25210
Head (cm)           = 1.33788E+03 4.89110E+02 4.94384E+02
Water Flow (cm)     =-2.22354E-01 2.74195E-03 3.53351E-03
Plant Sink (cm)     = 7.90823E-02 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 23.8322+ 0.0000+ 0.0000 - 0.2609- 0.6588-  0.0035 = 22.9091  Versus  22.9091

Mass Balance =  7.6294E-06 cm;  Time step attempts =  765 and successes =  765
  Evaporation:  Potential =  1.0434 cm, Actual =  0.2609 cm
Transpiration:  Potential =  2.6351 cm, Actual =  0.6588 cm
RHMEAN = 50.2 %;  TMEAN = 288.7 K;  HDRY =  9.4580E+05 cm;  DAYUBC =     0
---------------------------------------------------------------------------


DAILY SUMMARY:  Day = 279, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.17539     0.25205     0.25213
Head (cm)           = 2.44897E+03 4.95037E+02 4.94000E+02
Water Flow (cm)     =-1.68391E-01 9.68863E-04 3.54217E-03
Plant Sink (cm)     = 5.64890E-02 0.00000E+00 0.00000E+00
```

```
                                   EOAK SUBD
 PRESTOR    INFIL  RUNOFF     EVAPO   TRANS     DRAIN    NEWSTOR              STORAGE
 22.9091+ 0.0000+ 0.0000 - 0.1909- 0.4706-  0.0035 = 22.2440  Versus  22.2439

Mass Balance =  1.0109E-04 cm;  Time step attempts = 4929 and successes = 4929
  Evaporation:  Potential =  0.7638 cm, Actual =  0.1909 cm
Transpiration:  Potential =  1.8823 cm, Actual =  0.4706 cm
RHMEAN = 57.1 %;  TMEAN = 286.8 K;  HDRY =  7.6792E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 280, Simulated Time = 24.0000 hr
-------------
Node Number       =        2          12          25
Depth (cm)        =     5.00000    30.70000    91.50000
Water (cm3/cm3)   =     0.15441     0.25168     0.25215
Head (cm)         = 4.14546E+03 4.99702E+02 4.93696E+02
Water Flow (cm)   =-1.08786E-01-1.01364E-04 3.54862E-03
Plant Sink (cm)   = 4.23634E-02 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO   TRANS     DRAIN    NEWSTOR              STORAGE
 22.2439+ 0.0000+ 0.0000 - 0.1025- 0.3722-  0.0035 = 21.7657  Versus  21.7665

Mass Balance = -7.6675E-04 cm;  Time step attempts =38037 and successes =38037
  Evaporation:  Potential =  0.6567 cm, Actual =  0.1025 cm
Transpiration:  Potential =  1.5794 cm, Actual =  0.3722 cm
RHMEAN = 55.6 %;  TMEAN = 288.2 K;  HDRY =  8.0410E+05 cm;  DAYUBC =  3317

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 281, Simulated Time = 24.0000 hr
-------------
Node Number       =        2          12          25
Depth (cm)        =     5.00000    30.70000    91.50000
Water (cm3/cm3)   =     0.13286     0.25131     0.25218
Head (cm)         = 8.49261E+03 5.04530E+02 4.93340E+02
Water Flow (cm)   =-5.52011E-02-7.67759E-04 3.55507E-03
Plant Sink (cm)   = 3.25016E-02 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO   TRANS     DRAIN    NEWSTOR              STORAGE
 21.7665+ 0.0000+ 0.0000 - 0.0062- 0.4027-  0.0036 = 21.3541  Versus  21.3543

Mass Balance = -2.0027E-04 cm;  Time step attempts = 6800 and successes = 6800
  Evaporation:  Potential =  0.9501 cm, Actual =  0.0062 cm
Transpiration:  Potential =  2.2305 cm, Actual =  0.4027 cm
RHMEAN = 54.1 %;  TMEAN = 292.0 K;  HDRY =  8.4202E+05 cm;  DAYUBC =  5279

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 282, Simulated Time = 24.0000 hr
-------------
Node Number       =        2          12          25
Depth (cm)        =     5.00000    30.70000    91.50000
Water (cm3/cm3)   =     0.13017     0.25097     0.25221
Head (cm)         = 9.47215E+03 5.08928E+02 4.92988E+02
Water Flow (cm)   =-2.84523E-02-1.21690E-03 3.56226E-03
Plant Sink (cm)   = 7.99200E-03 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO   TRANS     DRAIN    NEWSTOR              STORAGE
 21.3543+ 0.0000+ 0.0000 - 0.0000- 0.1613-  0.0036 = 21.1894  Versus  21.1894
```

```
Mass Balance = -1.9073E-06 cm;  Time step attempts =   96 and successes =   96
  Evaporation:  Potential =  0.4757 cm, Actual =  0.0000 cm
Transpiration:  Potential =  1.0900 cm, Actual =  0.1613 cm
RHMEAN = 74.0 %;  TMEAN = 291.8 K;  HDRY =  4.1335E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 283, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12          25
Depth (cm)        =     5.00000    30.70000    91.50000
Water (cm3/cm3)   =     0.12763     0.25067     0.25223
Head (cm)         = 1.05615E+04 5.12876E+02 4.92709E+02
Water Flow (cm)   =-2.22237E-02-1.51736E-03 3.56853E-03
Plant Sink (cm)   = 6.71206E-03 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 21.1894+ 0.0000+ 0.0000 - 0.0022- 0.1643-  0.0036 = 21.0193  Versus  21.0193

Mass Balance = -1.1444E-05 cm;  Time step attempts = 1128 and successes = 1128
  Evaporation:  Potential =  0.5275 cm, Actual =  0.0022 cm
Transpiration:  Potential =  1.1801 cm, Actual =  0.1643 cm
RHMEAN = 73.8 %;  TMEAN = 293.7 K;  HDRY =  4.1614E+05 cm;  DAYUBC =  1084

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 284, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12          25
Depth (cm)        =     5.00000    30.70000    91.50000
Water (cm3/cm3)   =     0.12297     0.25044     0.25224
Head (cm)         = 1.30929E+04 5.16049E+02 4.92556E+02
Water Flow (cm)   =-1.20573E-02-1.71090E-03 3.57248E-03
Plant Sink (cm)   = 6.15153E-03 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 21.0193+ 0.0000+ 0.0000 - 0.0103- 0.2207-  0.0036 = 20.7848  Versus  20.7850

Mass Balance = -2.2507E-04 cm;  Time step attempts =31048 and successes =31048
  Evaporation:  Potential =  0.8819 cm, Actual =  0.0103 cm
Transpiration:  Potential =  1.9262 cm, Actual =  0.2207 cm
RHMEAN = 57.4 %;  TMEAN = 297.3 K;  HDRY =  7.6023E+05 cm;  DAYUBC =  5741

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 285, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12          25
Depth (cm)        =     5.00000    30.70000    91.50000
Water (cm3/cm3)   =     0.12059     0.25019     0.25225
Head (cm)         = 1.47496E+04 5.19300E+02 4.92462E+02
Water Flow (cm)   =-4.55153E-03-1.86281E-03 3.57516E-03
Plant Sink (cm)   = 2.14940E-03 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 20.7850+ 0.0000+ 0.0000 - 0.0065- 0.1935-  0.0036 = 20.5814  Versus  20.5816

Mass Balance = -2.2697E-04 cm;  Time step attempts = 8662 and successes = 8662
  Evaporation:  Potential =  1.1001 cm, Actual =  0.0065 cm
Transpiration:  Potential =  2.3460 cm, Actual =  0.1935 cm
```

```
RHMEAN = 53.4 %;  TMEAN = 297.0 K;  HDRY =  8.6015E+05 cm;  DAYUBC =  5186

---------------------------------------------------------------------------

DAILY SUMMARY:  Day = 286, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.11994     0.24996     0.25225
Head (cm)          = 1.52536E+04 5.22418E+02 4.92452E+02
Water Flow (cm)    =-2.05384E-03-1.98081E-03 3.57635E-03
Plant Sink (cm)    = 4.48306E-05 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 20.5816+ 0.0000+ 0.0000 - 0.0025- 0.1045-  0.0036 = 20.4710  Versus  20.4710

Mass Balance = -1.3351E-05 cm;  Time step attempts =  852 and successes =  852
  Evaporation:  Potential =  0.7930 cm, Actual =  0.0025 cm
Transpiration:  Potential =  1.6512 cm, Actual =  0.1045 cm
RHMEAN = 62.9 %;  TMEAN = 288.2 K;  HDRY =  6.3536E+05 cm;  DAYUBC =   798

---------------------------------------------------------------------------

DAILY SUMMARY:  Day = 287, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.11895     0.24977     0.25224
Head (cm)          = 1.60753E+04 5.25032E+02 4.92540E+02
Water Flow (cm)    =-1.51837E-03-2.06263E-03 3.57566E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 20.4710+ 0.0000+ 0.0000 - 0.0089- 0.0778-  0.0036 = 20.3807  Versus  20.3810

Mass Balance = -3.3760E-04 cm;  Time step attempts =25574 and successes =25574
  Evaporation:  Potential =  0.6704 cm, Actual =  0.0089 cm
Transpiration:  Potential =  1.3631 cm, Actual =  0.0778 cm
RHMEAN = 50.1 %;  TMEAN = 285.1 K;  HDRY =  9.4856E+05 cm;  DAYUBC =  5531

---------------------------------------------------------------------------

DAILY SUMMARY:  Day = 288, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.11755     0.24958     0.25223
Head (cm)          = 1.73486E+04 5.27598E+02 4.92729E+02
Water Flow (cm)    =-1.18863E-03-2.13109E-03 3.57298E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 20.3810+ 0.0000+ 0.0000 - 0.0098- 0.0993-  0.0036 = 20.2684  Versus  20.2688

Mass Balance = -3.5858E-04 cm;  Time step attempts =15927 and successes =15927
  Evaporation:  Potential =  1.0064 cm, Actual =  0.0098 cm
Transpiration:  Potential =  1.9982 cm, Actual =  0.0993 cm
RHMEAN = 36.4 %;  TMEAN = 292.3 K;  HDRY =  1.3835E+06 cm;  DAYUBC =  5741

---------------------------------------------------------------------------
```

```
DAILY SUMMARY:  Day = 289, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.11613     0.24939     0.25220
Head (cm)          = 1.87996E+04 5.30137E+02 4.93033E+02
Water Flow (cm)    =-8.83795E-04-2.18180E-03 3.56805E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 20.2688+ 0.0000+ 0.0000 - 0.0069- 0.0817-  0.0036 = 20.1766  Versus  20.1767

Mass Balance = -1.2207E-04 cm;  Time step attempts = 4006 and successes = 4006
  Evaporation:  Potential =  1.0204 cm, Actual =  0.0069 cm
Transpiration:  Potential =  1.9787 cm, Actual =  0.0817 cm
RHMEAN = 38.7 %;  TMEAN = 293.7 K;  HDRY =  1.3024E+06 cm;  DAYUBC =  4007

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 290, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.11463     0.24922     0.25217
Head (cm)          = 2.05439E+04 5.32508E+02 4.93430E+02
Water Flow (cm)    =-7.00828E-04-2.21967E-03 3.56118E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 20.1767+ 0.0000+ 0.0000 - 0.0078- 0.0973-  0.0036 = 20.0680  Versus  20.0682

Mass Balance = -2.0409E-04 cm;  Time step attempts = 6352 and successes = 6352
  Evaporation:  Potential =  1.5927 cm, Actual =  0.0078 cm
Transpiration:  Potential =  3.0161 cm, Actual =  0.0973 cm
RHMEAN = 36.7 %;  TMEAN = 294.8 K;  HDRY =  1.3755E+06 cm;  DAYUBC =  5542

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 291, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.11332     0.24906     0.25213
Head (cm)          = 2.22538E+04 5.34809E+02 4.93922E+02
Water Flow (cm)    =-6.13391E-04-2.24819E-03 3.55233E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 20.0682+ 0.0000+ 0.0000 - 0.0048- 0.0660-  0.0036 = 19.9939  Versus  19.9940

Mass Balance = -1.3351E-04 cm;  Time step attempts = 3664 and successes = 3664
  Evaporation:  Potential =  1.4484 cm, Actual =  0.0048 cm
Transpiration:  Potential =  2.6789 cm, Actual =  0.0660 cm
RHMEAN = 47.0 %;  TMEAN = 295.4 K;  HDRY =  1.0350E+06 cm;  DAYUBC =  3626

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 292, Simulated Time = 24.0000 hr
```

```
-------------
Node Number        =      2           12           25
Depth (cm)         =    5.00000     30.70000     91.50000
Water (cm3/cm3)    =    0.11223      0.24890      0.25209
Head (cm)          = 2.38586E+04 5.37021E+02 4.94508E+02
Water Flow (cm)    =-6.23712E-04-2.26730E-03 3.54170E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO   TRANS     DRAIN   NEWSTOR            STORAGE
 19.9940+ 0.0000+ 0.0000 - 0.0040- 0.0425-  0.0035 = 19.9439  Versus  19.9440

Mass Balance = -4.9591E-05 cm;  Time step attempts = 1526 and successes = 1526
  Evaporation:  Potential =  1.0830 cm, Actual =  0.0040 cm
Transpiration:  Potential =  1.9562 cm, Actual =  0.0425 cm
RHMEAN = 54.7 %;  TMEAN = 289.3 K;  HDRY =  8.2656E+05 cm;  DAYUBC =  1502

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 293, Simulated Time = 24.0000 hr
-------------
Node Number        =      2           12           25
Depth (cm)         =    5.00000     30.70000     91.50000
Water (cm3/cm3)    =    0.11074      0.24876      0.25204
Head (cm)          = 2.63353E+04 5.38972E+02 4.95107E+02
Water Flow (cm)    =-6.69121E-04-2.28640E-03 3.53063E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO   TRANS     DRAIN   NEWSTOR            STORAGE
 19.9440+ 0.0000+ 0.0000 - 0.0106- 0.0367-  0.0035 = 19.8931  Versus  19.8935

Mass Balance = -3.3951E-04 cm;  Time step attempts =18406 and successes =18406
  Evaporation:  Potential =  0.9953 cm, Actual =  0.0106 cm
Transpiration:  Potential =  1.7559 cm, Actual =  0.0367 cm
RHMEAN = 36.6 %;  TMEAN = 284.5 K;  HDRY =  1.3781E+06 cm;  DAYUBC =  4025

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 294, Simulated Time = 24.0000 hr
-------------
Node Number        =      2           12           25
Depth (cm)         =    5.00000     30.70000     91.50000
Water (cm3/cm3)    =    0.10915      0.24862      0.25199
Head (cm)          = 2.94105E+04 5.40946E+02 4.95802E+02
Water Flow (cm)    =-7.27671E-04-2.29480E-03 3.51780E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO   TRANS     DRAIN   NEWSTOR            STORAGE
 19.8935+ 0.0000+ 0.0000 - 0.0085- 0.0384-  0.0035 = 19.8431  Versus  19.8434

Mass Balance = -3.3569E-04 cm;  Time step attempts = 6253 and successes = 6253
  Evaporation:  Potential =  1.1241 cm, Actual =  0.0085 cm
Transpiration:  Potential =  1.9368 cm, Actual =  0.0384 cm
RHMEAN = 32.6 %;  TMEAN = 288.7 K;  HDRY =  1.5367E+06 cm;  DAYUBC =  3928

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 295, Simulated Time = 24.0000 hr
-------------
Node Number        =      2           12           25
Depth (cm)         =    5.00000     30.70000     91.50000
```

```
Water (cm3/cm3)     =      0.10783      0.24848      0.25193
Head (cm)           = 3.23884E+04 5.42896E+02 4.96580E+02
Water Flow (cm)     =-7.67018E-04-2.30242E-03 3.50325E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR           STORAGE
 19.8434+ 0.0000+ 0.0000 - 0.0048- 0.0562-  0.0035 = 19.7790  Versus  19.7790

Mass Balance = -6.8665E-05 cm;  Time step attempts = 2666 and successes = 2666
   Evaporation:  Potential =  2.0379 cm, Actual =  0.0048 cm
Transpiration:  Potential =  3.4294 cm, Actual =  0.0562 cm
RHMEAN = 45.0 %;  TMEAN = 294.5 K;  HDRY =  1.0958E+06 cm;  DAYUBC =  2635

----------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 296, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =      5.00000    30.70000    91.50000
Water (cm3/cm3)     =      0.10659      0.24834      0.25186
Head (cm)           = 3.56253E+04 5.44780E+02 4.97419E+02
Water Flow (cm)     =-7.96437E-04-2.30803E-03 3.48772E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR           STORAGE
 19.7790+ 0.0000+ 0.0000 - 0.0062- 0.0302-  0.0035 = 19.7391  Versus  19.7392

Mass Balance = -4.3869E-05 cm;  Time step attempts = 2522 and successes = 2522
   Evaporation:  Potential =  1.3229 cm, Actual =  0.0062 cm
Transpiration:  Potential =  2.1743 cm, Actual =  0.0302 cm
RHMEAN = 46.0 %;  TMEAN = 285.7 K;  HDRY =  1.0636E+06 cm;  DAYUBC =  2522

----------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 297, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =      5.00000    30.70000    91.50000
Water (cm3/cm3)     =      0.10521      0.24822      0.25179
Head (cm)           = 3.98161E+04 5.46514E+02 4.98258E+02
Water Flow (cm)     =-8.39250E-04-2.30915E-03 3.47203E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR           STORAGE
 19.7392+ 0.0000+ 0.0000 - 0.0081- 0.0165-  0.0035 = 19.7111  Versus  19.7114

Mass Balance = -3.1281E-04 cm;  Time step attempts =11624 and successes =11624
   Evaporation:  Potential =  0.7218 cm, Actual =  0.0081 cm
Transpiration:  Potential =  1.1585 cm, Actual =  0.0165 cm
RHMEAN = 39.8 %;  TMEAN = 282.6 K;  HDRY =  1.2640E+06 cm;  DAYUBC =  4863

----------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 298, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =      5.00000    30.70000    91.50000
Water (cm3/cm3)     =      0.10397      0.24810      0.25172
Head (cm)           = 4.42175E+04 5.48250E+02 4.99160E+02
Water Flow (cm)     =-8.86198E-04-2.31110E-03 3.45520E-03
```

```
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 19.7114+ 0.0000+ 0.0000 - 0.0055- 0.0258-  0.0035 = 19.6766  Versus  19.6767

Mass Balance = -1.6022E-04 cm;  Time step attempts = 4447 and successes = 4447
  Evaporation:  Potential =  1.1310 cm, Actual =  0.0055 cm
Transpiration:  Potential =  1.7728 cm, Actual =  0.0258 cm
RHMEAN = 45.5 %;  TMEAN = 289.5 K;  HDRY =  1.0806E+06 cm;  DAYUBC =  4439

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 299, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.10289     0.24798     0.25165
Head (cm)           = 4.86698E+04 5.49938E+02 5.00106E+02
Water Flow (cm)     =-9.27293E-04-2.30765E-03 3.43768E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 19.6767+ 0.0000+ 0.0000 - 0.0048- 0.0243-  0.0034 = 19.6442  Versus  19.6444

Mass Balance = -1.6212E-04 cm;  Time step attempts = 3275 and successes = 3275
  Evaporation:  Potential =  1.1347 cm, Actual =  0.0048 cm
Transpiration:  Potential =  1.7369 cm, Actual =  0.0243 cm
RHMEAN = 51.0 %;  TMEAN = 292.3 K;  HDRY =  9.2308E+05 cm;  DAYUBC =  3264

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 300, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.10157     0.24787     0.25158
Head (cm)           = 5.51241E+04 5.51512E+02 5.01040E+02
Water Flow (cm)     =-9.73008E-04-2.30613E-03 3.42050E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 19.6444+ 0.0000+ 0.0000 - 0.0089- 0.0184-  0.0034 = 19.6136  Versus  19.6148

Mass Balance = -1.1711E-03 cm;  Time step attempts =14772 and successes =14772
  Evaporation:  Potential =  0.8930 cm, Actual =  0.0089 cm
Transpiration:  Potential =  1.3349 cm, Actual =  0.0184 cm
RHMEAN = 39.9 %;  TMEAN = 288.4 K;  HDRY =  1.2610E+06 cm;  DAYUBC =  4951

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 301, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.10016     0.24776     0.25150
Head (cm)           = 6.34144E+04 5.53078E+02 5.02020E+02
Water Flow (cm)     =-1.03398E-03-2.30522E-03 3.40249E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
```

```
 19.6148+ 0.0000+ 0.0000 - 0.0079- 0.0151-  0.0034 = 19.5883  Versus  19.5890

Mass Balance = -6.5994E-04 cm;  Time step attempts =10559 and successes =10559
  Evaporation:  Potential =  0.7312 cm, Actual =  0.0079 cm
Transpiration:  Potential =  1.0672 cm, Actual =  0.0151 cm
RHMEAN = 36.0 %;  TMEAN = 283.7 K;  HDRY =  1.3987E+06 cm;  DAYUBC =  6771

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 302, Simulated Time = 24.0000 hr
-------------
Node Number        =       2           12          25
Depth (cm)         =    5.00000    30.70000    91.50000
Water (cm3/cm3)    =    0.09876     0.24766     0.25142
Head (cm)          = 7.37231E+04 5.54635E+02 5.03029E+02
Water Flow (cm)    =-1.10840E-03-2.29544E-03 3.38393E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR          STORAGE
 19.5890+ 0.0000+ 0.0000 - 0.0076- 0.0274-  0.0034 = 19.5506  Versus  19.5509

Mass Balance = -3.3379E-04 cm;  Time step attempts = 8686 and successes = 8686
  Evaporation:  Potential =  1.4304 cm, Actual =  0.0076 cm
Transpiration:  Potential =  2.0384 cm, Actual =  0.0274 cm
RHMEAN = 34.7 %;  TMEAN = 288.4 K;  HDRY =  1.4499E+06 cm;  DAYUBC =  8115

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 303, Simulated Time = 24.0000 hr
-------------
Node Number        =       2           12          25
Depth (cm)         =    5.00000    30.70000    91.50000
Water (cm3/cm3)    =    0.09870     0.24758     0.25137
Head (cm)          = 7.41702E+04 5.55669E+02 5.03704E+02
Water Flow (cm)    =-1.14619E-03-2.29210E-03 3.36932E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR          STORAGE
 19.5509+ 0.0508+ 0.0000 - 0.0428- 0.0059-  0.0034 = 19.5497  Versus  19.5534

Mass Balance = -3.6716E-03 cm;  Time step attempts =57963 and successes =57963
  Evaporation:  Potential =  0.3157 cm, Actual =  0.0428 cm
Transpiration:  Potential =  0.4393 cm, Actual =  0.0059 cm
RHMEAN = 74.1 %;  TMEAN = 287.0 K;  HDRY =  4.1013E+05 cm;  DAYUBC =  4741

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 304, Simulated Time = 24.0000 hr
-------------
Node Number        =       2           12          25
Depth (cm)         =    5.00000    30.70000    91.50000
Water (cm3/cm3)    =    0.09913     0.24748     0.25130
Head (cm)          = 7.07281E+04 5.57111E+02 5.04714E+02
Water Flow (cm)    =-1.14169E-03-2.28972E-03 3.35333E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR          STORAGE
 19.5534+ 0.0762+ 0.0000 - 0.0000- 0.0000-  0.0034 = 19.6262  Versus  19.6267

Mass Balance = -5.3978E-04 cm;  Time step attempts =12904 and successes =12904
```

```
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 93.7 %;  TMEAN = 287.9 K;  HDRY =  8.8625E+04 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day = 305, Simulated Time = 24.0000 hr
-------------
Node Number       =       2           12           25
Depth (cm)        =     5.00000     30.70000     91.50000
Water (cm3/cm3)   =     0.12911      0.24741      0.25124
Head (cm)         = 9.90474E+03 5.58201E+02 5.05481E+02
Water Flow (cm)   = 2.15844E-04-2.28867E-03 3.33849E-03
Plant Sink (cm)   = 2.83812E-03 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR           STORAGE
 19.6267+ 0.5080+ 0.0000 - 0.1975- 0.0304-  0.0033 = 19.9035  Versus  19.9054

Mass Balance = -1.8520E-03 cm;  Time step attempts =27109 and successes =27109
  Evaporation:  Potential =  0.7979 cm, Actual =  0.1975 cm
Transpiration:  Potential =  1.0579 cm, Actual =  0.0304 cm
RHMEAN = 72.8 %;  TMEAN = 289.8 K;  HDRY =  4.3424E+05 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day = 306, Simulated Time = 24.0000 hr
-------------
Node Number       =       2           12           25
Depth (cm)        =     5.00000     30.70000     91.50000
Water (cm3/cm3)   =     0.12876      0.24731      0.25115
Head (cm)         = 1.00577E+04 5.59708E+02 5.06601E+02
Water Flow (cm)   = 1.18106E-03-2.27734E-03 3.31943E-03
Plant Sink (cm)   = 3.21312E-03 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR           STORAGE
 19.9054+ 0.0000+ 0.0000 - 0.1000- 0.0236-  0.0033 = 19.7784  Versus  19.7785

Mass Balance = -1.3351E-05 cm;  Time step attempts = 2071 and successes = 2071
  Evaporation:  Potential =  0.3999 cm, Actual =  0.1000 cm
Transpiration:  Potential =  0.5175 cm, Actual =  0.0236 cm
RHMEAN = 71.3 %;  TMEAN = 276.8 K;  HDRY =  4.6274E+05 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day = 307, Simulated Time = 24.0000 hr
-------------
Node Number       =       2           12           25
Depth (cm)        =     5.00000     30.70000     91.50000
Water (cm3/cm3)   =     0.12764      0.24722      0.25108
Head (cm)         = 1.05556E+04 5.60953E+02 5.07523E+02
Water Flow (cm)   = 8.96699E-04-2.26900E-03 3.30157E-03
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR           STORAGE
 19.7785+ 0.0000+ 0.0000 - 0.1371- 0.0000-  0.0033 = 19.6380  Versus  19.6396

Mass Balance = -1.5945E-03 cm;  Time step attempts =27778 and successes =27778
  Evaporation:  Potential =  1.5533 cm, Actual =  0.1371 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 37.5 %;  TMEAN = 277.3 K;  HDRY =  1.3448E+06 cm;  DAYUBC =  4162
```

```
DAILY SUMMARY:  Day = 308, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.12595     0.24713     0.25100
Head (cm)          = 1.13839E+04 5.62356E+02 5.08621E+02
Water Flow (cm)    = 5.40091E-04-2.26224E-03 3.28343E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 19.6396+ 0.0000+ 0.0000 - 0.0065- 0.0000-  0.0033 = 19.6298  Versus  19.6301

Mass Balance = -2.9182E-04 cm;  Time step attempts = 4781 and successes = 4781
  Evaporation:  Potential =  1.6158 cm, Actual =  0.0065 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 40.9 %;  TMEAN = 278.4 K;  HDRY =  1.2252E+06 cm;  DAYUBC =  4759
```

```
DAILY SUMMARY:  Day = 309, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.12463     0.24703     0.25091
Head (cm)          = 1.20956E+04 5.63777E+02 5.09751E+02
Water Flow (cm)    = 2.04844E-04-2.25414E-03 3.26341E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 19.6301+ 0.0000+ 0.0000 - 0.0028- 0.0000-  0.0033 = 19.6240  Versus  19.6241

Mass Balance = -9.9182E-05 cm;  Time step attempts = 1580 and successes = 1580
  Evaporation:  Potential =  2.3534 cm, Actual =  0.0028 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 56.4 %;  TMEAN = 283.2 K;  HDRY =  7.8613E+05 cm;  DAYUBC =  1525
```

```
DAILY SUMMARY:  Day = 310, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.12431     0.24696     0.25085
Head (cm)          = 1.22824E+04 5.64828E+02 5.10609E+02
Water Flow (cm)    =-2.51721E-05-2.25013E-03 3.24726E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 19.6241+ 0.0762+ 0.0000 - 0.0659- 0.0000-  0.0032 = 19.6312  Versus  19.6336

Mass Balance = -2.4223E-03 cm;  Time step attempts =38202 and successes =38202
  Evaporation:  Potential =  0.9816 cm, Actual =  0.0659 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 84.4 %;  TMEAN = 286.8 K;  HDRY =  2.3223E+05 cm;  DAYUBC =  3291
```

```
DAILY SUMMARY:  Day = 311, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.12319     0.24687     0.25077
Head (cm)          = 1.29518E+04 5.66041E+02 5.11601E+02
Water Flow (cm)    =-2.66676E-04-2.23971E-03 3.23105E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR             STORAGE
 19.6336+ 0.0000+ 0.0000 - 0.0176- 0.0000-  0.0032 = 19.6128  Versus  19.6143

Mass Balance = -1.5144E-03 cm;  Time step attempts =30084 and successes =30084
  Evaporation:  Potential =  2.0189 cm, Actual =  0.0176 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 54.9 %;  TMEAN = 284.0 K;  HDRY =  8.2201E+05 cm;  DAYUBC =  5001
```

```
DAILY SUMMARY:  Day = 312, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.12194     0.24679     0.25069
Head (cm)          = 1.37732E+04 5.67370E+02 5.12712E+02
Water Flow (cm)    =-5.73571E-04-2.23168E-03 3.21207E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR             STORAGE
 19.6143+ 0.0000+ 0.0000 - 0.0075- 0.0000-  0.0032 = 19.6036  Versus  19.6041

Mass Balance = -4.3488E-04 cm;  Time step attempts = 7593 and successes = 7593
  Evaporation:  Potential =  1.5296 cm, Actual =  0.0075 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 48.6 %;  TMEAN = 280.1 K;  HDRY =  9.8922E+05 cm;  DAYUBC =  4091
```

```
DAILY SUMMARY:  Day = 313, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.12101     0.24669     0.25060
Head (cm)          = 1.44338E+04 5.68740E+02 5.13867E+02
Water Flow (cm)    =-8.68308E-04-2.22274E-03 3.19211E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR             STORAGE
 19.6041+ 0.0000+ 0.0000 - 0.0022- 0.0000-  0.0032 = 19.5987  Versus  19.5988

Mass Balance = -1.3542E-04 cm;  Time step attempts = 1484 and successes = 1484
  Evaporation:  Potential =  3.4551 cm, Actual =  0.0022 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 61.7 %;  TMEAN = 287.9 K;  HDRY =  6.6152E+05 cm;  DAYUBC =  1419
```

```
DAILY SUMMARY:  Day = 314, Simulated Time = 24.0000 hr
-------------
```

```
Node Number        =        2          12          25
Depth (cm)         =     5.00000     30.70000    91.50000
Water (cm3/cm3)    =     0.12261     0.24662     0.25053
Head (cm)          = 1.33259E+04 5.69828E+02 5.14798E+02
Water Flow (cm)    =-9.52906E-04-2.21170E-03 3.17501E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 19.5988+ 0.2540+ 0.0000 - 0.2428- 0.0000-  0.0032 = 19.6069  Versus  19.6084

Mass Balance = -1.5163E-03 cm;  Time step attempts =28861 and successes =28861
  Evaporation:  Potential =  2.0295 cm, Actual =  0.2428 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 75.7 %;  TMEAN = 285.4 K;  HDRY =  3.8133E+05 cm;  DAYUBC =  3825
```

```
DAILY SUMMARY:  Day = 315, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000     30.70000    91.50000
Water (cm3/cm3)    =     0.12724     0.24658     0.25049
Head (cm)          = 1.07443E+04 5.70444E+02 5.15335E+02
Water Flow (cm)    =-6.75666E-04-2.20161E-03 3.15992E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 19.6084+ 0.3048+ 0.0000 - 0.2873- 0.0000-  0.0032 = 19.6227  Versus  19.6275

Mass Balance = -4.7779E-03 cm;  Time step attempts =91312 and successes =91312
  Evaporation:  Potential =  1.1609 cm, Actual =  0.2873 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 61.6 %;  TMEAN = 273.2 K;  HDRY =  6.6489E+05 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day = 316, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000     30.70000    91.50000
Water (cm3/cm3)    =     0.12578     0.24649     0.25041
Head (cm)          = 1.14732E+04 5.71720E+02 5.16427E+02
Water Flow (cm)    =-9.03836E-04-2.19955E-03 3.14881E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 19.6275+ 0.0000+ 0.0000 - 0.0151- 0.0000-  0.0031 = 19.6092  Versus  19.6098

Mass Balance = -5.6839E-04 cm;  Time step attempts =12591 and successes =12591
  Evaporation:  Potential =  3.2986 cm, Actual =  0.0151 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 36.0 %;  TMEAN = 285.1 K;  HDRY =  1.3987E+06 cm;  DAYUBC =  3093
```

```
DAILY SUMMARY:  Day = 317, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000     30.70000    91.50000
Water (cm3/cm3)    =     0.12467     0.24640     0.25032
```

```
Head (cm)           = 1.20762E+04 5.73042E+02 5.17593E+02
Water Flow (cm)     =-1.33033E-03-2.19477E-03 3.12929E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR          STORAGE
 19.6098+ 0.0000+ 0.0000 - 0.0040- 0.0000-  0.0031 = 19.6027  Versus  19.6028

Mass Balance = -1.0872E-04 cm;  Time step attempts = 1266 and successes = 1266
  Evaporation:  Potential =  1.5335 cm, Actual =  0.0040 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 49.8 %;  TMEAN = 284.8 K;  HDRY =  9.5597E+05 cm;  DAYUBC =  1223

------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 318, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.12390     0.24632     0.25023
Head (cm)           = 1.25203E+04 5.74379E+02 5.18784E+02
Water Flow (cm)     =-1.67724E-03-2.18423E-03 3.10965E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR          STORAGE
 19.6028+ 0.0000+ 0.0000 - 0.0029- 0.0000-  0.0031 = 19.5968  Versus  19.5968

Mass Balance = -5.7220E-06 cm;  Time step attempts =  442 and successes =  442
  Evaporation:  Potential =  1.3060 cm, Actual =  0.0029 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 60.2 %;  TMEAN = 280.9 K;  HDRY =  6.9558E+05 cm;  DAYUBC =   390

------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 319, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.12342     0.24623     0.25014
Head (cm)           = 1.28117E+04 5.75681E+02 5.19944E+02
Water Flow (cm)     =-1.96589E-03-2.17369E-03 3.09019E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR          STORAGE
 19.5968+ 0.0000+ 0.0000 - 0.0014- 0.0000-  0.0031 = 19.5923  Versus  19.5924

Mass Balance = -1.3542E-04 cm;  Time step attempts = 1761 and successes = 1761
  Evaporation:  Potential =  1.2732 cm, Actual =  0.0014 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 69.3 %;  TMEAN = 281.2 K;  HDRY =  5.0214E+05 cm;  DAYUBC =  1689

------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 320, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.12293     0.24615     0.25006
Head (cm)           = 1.31209E+04 5.76925E+02 5.21065E+02
Water Flow (cm)     =-2.21909E-03-2.16614E-03 3.07215E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00
```

```
 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR              STORAGE
 19.5924+ 0.0000+ 0.0000 - 0.0063- 0.0000-  0.0031 = 19.5830  Versus  19.5836

Mass Balance = -5.5885E-04 cm;  Time step attempts =10092 and successes =10092
  Evaporation:  Potential =  1.5129 cm, Actual =  0.0063 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 63.5 %;  TMEAN = 281.8 K;  HDRY =  6.2328E+05 cm;  DAYUBC =  4992

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 321, Simulated Time = 24.0000 hr
-------------
Node Number       =      2           12          25
Depth (cm)        =     5.00000     30.70000    91.50000
Water (cm3/cm3)   =     0.12213      0.24607     0.24998
Head (cm)         = 1.36433E+04 5.78154E+02 5.22182E+02
Water Flow (cm)   =-2.46455E-03-2.15791E-03 3.05402E-03
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR              STORAGE
 19.5836+ 0.0000+ 0.0000 - 0.0092- 0.0000-  0.0031 = 19.5713  Versus  19.5717

Mass Balance = -4.1771E-04 cm;  Time step attempts =10092 and successes =10092
  Evaporation:  Potential =  1.9849 cm, Actual =  0.0092 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 49.6 %;  TMEAN = 286.8 K;  HDRY =  9.6113E+05 cm;  DAYUBC =  3429

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 322, Simulated Time = 24.0000 hr
-------------
Node Number       =      2           12          25
Depth (cm)        =     5.00000     30.70000    91.50000
Water (cm3/cm3)   =     0.12137      0.24598     0.24989
Head (cm)         = 1.41704E+04 5.79395E+02 5.23334E+02
Water Flow (cm)   =-2.69970E-03-2.14930E-03 3.03551E-03
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR              STORAGE
 19.5717+ 0.0000+ 0.0000 - 0.0061- 0.0000-  0.0030 = 19.5625  Versus  19.5628

Mass Balance = -2.6894E-04 cm;  Time step attempts = 5094 and successes = 5094
  Evaporation:  Potential =  1.4110 cm, Actual =  0.0061 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 49.5 %;  TMEAN = 283.7 K;  HDRY =  9.6488E+05 cm;  DAYUBC =  5019

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 323, Simulated Time = 24.0000 hr
-------------
Node Number       =      2           12          25
Depth (cm)        =     5.00000     30.70000    91.50000
Water (cm3/cm3)   =     0.12076      0.24590     0.24981
Head (cm)         = 1.46224E+04 5.80671E+02 5.24508E+02
Water Flow (cm)   =-2.90377E-03-2.14011E-03 3.01668E-03
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR              STORAGE
 19.5628+ 0.0000+ 0.0000 - 0.0049- 0.0000-  0.0030 = 19.5548  Versus  19.5550
```

```
Mass Balance = -1.0490E-04 cm;  Time step attempts = 1173 and successes = 1173
  Evaporation:  Potential =  2.3133 cm, Actual =  0.0049 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 53.3 %;  TMEAN = 289.3 K;  HDRY =  8.6140E+05 cm;  DAYUBC =  1145

-------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 324, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12          25
Depth (cm)         =     5.00000     30.70000     91.50000
Water (cm3/cm3)    =     0.12002      0.24582      0.24972
Head (cm)          = 1.51923E+04 5.81897E+02 5.25638E+02
Water Flow (cm)    =-3.07990E-03-2.13107E-03 2.99879E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 19.5550+ 0.0000+ 0.0000 - 0.0077- 0.0000-  0.0030 = 19.5443  Versus  19.5446

Mass Balance = -3.2806E-04 cm;  Time step attempts = 7593 and successes = 7593
  Evaporation:  Potential =  1.7271 cm, Actual =  0.0077 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 46.6 %;  TMEAN = 285.9 K;  HDRY =  1.0456E+06 cm;  DAYUBC =  4445

-------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 325, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12          25
Depth (cm)         =     5.00000     30.70000     91.50000
Water (cm3/cm3)    =     0.11911      0.24574      0.24964
Head (cm)          = 1.59395E+04 5.83107E+02 5.26767E+02
Water Flow (cm)    =-3.23935E-03-2.12276E-03 2.98102E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 19.5446+ 0.0000+ 0.0000 - 0.0087- 0.0000-  0.0030 = 19.5329  Versus  19.5332

Mass Balance = -3.4142E-04 cm;  Time step attempts = 7593 and successes = 7593
  Evaporation:  Potential =  1.3167 cm, Actual =  0.0087 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 38.0 %;  TMEAN = 281.5 K;  HDRY =  1.3255E+06 cm;  DAYUBC =  2888

-------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 326, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12          25
Depth (cm)         =     5.00000     30.70000     91.50000
Water (cm3/cm3)    =     0.11843      0.24566      0.24955
Head (cm)          = 1.65274E+04 5.84375E+02 5.27938E+02
Water Flow (cm)    =-3.37754E-03-2.11402E-03 2.96271E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 19.5332+ 0.0000+ 0.0000 - 0.0048- 0.0000-  0.0030 = 19.5254  Versus  19.5255

Mass Balance = -7.4387E-05 cm;  Time step attempts = 1270 and successes = 1270
  Evaporation:  Potential =  2.7310 cm, Actual =  0.0048 cm
```

```
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 47.7 %;  TMEAN = 287.9 K;  HDRY =  1.0135E+06 cm;  DAYUBC =  1228

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 327, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.11798     0.24557     0.24947
Head (cm)          = 1.69432E+04 5.85651E+02 5.29129E+02
Water Flow (cm)    =-3.48844E-03-2.10566E-03 2.94431E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 19.5255+ 0.0000+ 0.0000 - 0.0041- 0.0000-  0.0029 = 19.5185  Versus  19.5185

Mass Balance = -5.7220E-06 cm;  Time step attempts =  208 and successes =  208
  Evaporation:  Potential =  0.9412 cm, Actual =  0.0041 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 55.1 %;  TMEAN = 277.9 K;  HDRY =  8.1642E+05 cm;  DAYUBC =   165

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 328, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.11735     0.24550     0.24939
Head (cm)          = 1.75471E+04 5.86848E+02 5.30254E+02
Water Flow (cm)    =-3.58059E-03-2.09875E-03 2.92694E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 19.5185+ 0.0000+ 0.0000 - 0.0081- 0.0000-  0.0029 = 19.5075  Versus  19.5078

Mass Balance = -3.3188E-04 cm;  Time step attempts = 7593 and successes = 7593
  Evaporation:  Potential =  1.9073 cm, Actual =  0.0081 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 46.6 %;  TMEAN = 280.9 K;  HDRY =  1.0470E+06 cm;  DAYUBC =  3913

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 329, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.11648     0.24542     0.24930
Head (cm)          = 1.84245E+04 5.88061E+02 5.31382E+02
Water Flow (cm)    =-3.66142E-03-2.08875E-03 2.90978E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 19.5078+ 0.0000+ 0.0000 - 0.0092- 0.0000-  0.0029 = 19.4957  Versus  19.4960

Mass Balance = -2.6512E-04 cm;  Time step attempts = 5094 and successes = 5094
  Evaporation:  Potential =  2.8999 cm, Actual =  0.0092 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 36.1 %;  TMEAN = 289.3 K;  HDRY =  1.3980E+06 cm;  DAYUBC =  2651
```

```
DAILY SUMMARY:  Day = 330, Simulated Time = 24.0000 hr
-------------
Node Number        =       2           12           25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.11579     0.24534     0.24922
Head (cm)          = 1.91702E+04 5.89284E+02 5.32535E+02
Water Flow (cm)    =-3.72723E-03-2.08195E-03 2.89222E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 19.4960+ 0.0000+ 0.0000 - 0.0057- 0.0000-  0.0029 = 19.4874  Versus  19.4876

Mass Balance = -1.6594E-04 cm;  Time step attempts = 2494 and successes = 2494
  Evaporation:  Potential =  4.0766 cm, Actual =  0.0057 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 43.4 %;  TMEAN = 290.9 K;  HDRY =  1.1438E+06 cm;  DAYUBC =  2462

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 331, Simulated Time = 24.0000 hr
-------------
Node Number        =       2           12           25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.11517     0.24526     0.24914
Head (cm)          = 1.98823E+04 5.90480E+02 5.33668E+02
Water Flow (cm)    =-3.77826E-03-2.07184E-03 2.87522E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 19.4876+ 0.0000+ 0.0000 - 0.0063- 0.0000-  0.0029 = 19.4784  Versus  19.4787

Mass Balance = -2.4986E-04 cm;  Time step attempts = 4290 and successes = 4290
  Evaporation:  Potential =  2.7729 cm, Actual =  0.0063 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 45.1 %;  TMEAN = 282.0 K;  HDRY =  1.0909E+06 cm;  DAYUBC =  4271

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 332, Simulated Time = 24.0000 hr
-------------
Node Number        =       2           12           25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.11440     0.24518     0.24906
Head (cm)          = 2.08266E+04 5.91667E+02 5.34781E+02
Water Flow (cm)    =-3.81658E-03-2.06298E-03 2.85868E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 19.4787+ 0.0000+ 0.0000 - 0.0084- 0.0000-  0.0029 = 19.4674  Versus  19.4678

Mass Balance = -3.3379E-04 cm;  Time step attempts = 7672 and successes = 7672
  Evaporation:  Potential =  1.1198 cm, Actual =  0.0084 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 38.4 %;  TMEAN = 272.0 K;  HDRY =  1.3123E+06 cm;  DAYUBC =  3326

------------------------------------------------------------------------------
```

```
DAILY SUMMARY:  Day = 333, Simulated Time = 24.0000 hr
-------------
Node Number       =        2           12           25
Depth (cm)        =     5.00000     30.70000     91.50000
Water (cm3/cm3)   =     0.11376      0.24511      0.24898
Head (cm)         = 2.16608E+04 5.92866E+02 5.35914E+02
Water Flow (cm)   =-3.84472E-03-2.05591E-03 2.84181E-03
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 19.4678+ 0.0000+ 0.0000 - 0.0058- 0.0000-  0.0028 = 19.4591  Versus  19.4593

Mass Balance = -2.5368E-04 cm;  Time step attempts = 4211 and successes = 4211
  Evaporation:  Potential =  1.9779 cm, Actual =  0.0058 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 43.9 %;  TMEAN = 279.8 K;  HDRY =  1.1281E+06 cm;  DAYUBC =  4188

-------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 334, Simulated Time = 24.0000 hr
-------------
Node Number       =        2           12           25
Depth (cm)        =     5.00000     30.70000     91.50000
Water (cm3/cm3)   =     0.11303      0.24503      0.24890
Head (cm)         = 2.26711E+04 5.94046E+02 5.37038E+02
Water Flow (cm)   =-3.86329E-03-2.04794E-03 2.82535E-03
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 19.4593+ 0.0000+ 0.0000 - 0.0078- 0.0000-  0.0028 = 19.4487  Versus  19.4490

Mass Balance = -2.8992E-04 cm;  Time step attempts = 5430 and successes = 5430
  Evaporation:  Potential =  3.5085 cm, Actual =  0.0078 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 39.7 %;  TMEAN = 287.0 K;  HDRY =  1.2651E+06 cm;  DAYUBC =  4653

-------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 335, Simulated Time = 24.0000 hr
-------------
Node Number       =        2           12           25
Depth (cm)        =     5.00000     30.70000     91.50000
Water (cm3/cm3)   =     0.11261      0.24495      0.24881
Head (cm)         = 2.32793E+04 5.95263E+02 5.38193E+02
Water Flow (cm)   =-3.87720E-03-2.03994E-03 2.80844E-03
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 19.4490+ 0.0000+ 0.0000 - 0.0029- 0.0000-  0.0028 = 19.4432  Versus  19.4433

Mass Balance = -9.1553E-05 cm;  Time step attempts = 1067 and successes = 1067
  Evaporation:  Potential =  1.9847 cm, Actual =  0.0029 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 55.1 %;  TMEAN = 287.9 K;  HDRY =  8.1598E+05 cm;  DAYUBC =  1010

-------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 336, Simulated Time = 24.0000 hr
-------------
Node Number       =        2           12           25
```

```
Depth (cm)          =      5.00000    30.70000    91.50000
Water (cm3/cm3)     =      0.11242     0.24488     0.24873
Head (cm)           = 2.35720E+04 5.96477E+02 5.39343E+02
Water Flow (cm)     =-3.89576E-03-2.03165E-03 2.79182E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
 19.4433+ 0.0000+ 0.0000 - 0.0034- 0.0000-  0.0028 = 19.4371  Versus  19.4372

Mass Balance = -9.3460E-05 cm;  Time step attempts = 1034 and successes = 1034
  Evaporation:  Potential =  2.1382 cm, Actual =  0.0034 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 61.0 %;  TMEAN = 289.5 K;  HDRY =  6.7695E+05 cm;  DAYUBC =   993

------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 337, Simulated Time = 24.0000 hr
-------------
Node Number         =           2          12          25
Depth (cm)          =      5.00000    30.70000    91.50000
Water (cm3/cm3)     =      0.11197     0.24480     0.24865
Head (cm)           = 2.42645E+04 5.97630E+02 5.40436E+02
Water Flow (cm)     =-3.90724E-03-2.02235E-03 2.77615E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
 19.4372+ 0.0000+ 0.0000 - 0.0082- 0.0000-  0.0028 = 19.4262  Versus  19.4266

Mass Balance = -4.1389E-04 cm;  Time step attempts =10092 and successes =10092
  Evaporation:  Potential =  1.9288 cm, Actual =  0.0082 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 50.5 %;  TMEAN = 285.4 K;  HDRY =  9.3602E+05 cm;  DAYUBC =  5031

------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 338, Simulated Time = 24.0000 hr
-------------
Node Number         =           2          12          25
Depth (cm)          =      5.00000    30.70000    91.50000
Water (cm3/cm3)     =      0.11160     0.24473     0.24857
Head (cm)           = 2.48632E+04 5.98827E+02 5.41567E+02
Water Flow (cm)     =-3.91124E-03-2.01752E-03 2.76002E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
 19.4266+ 0.0000+ 0.0000 - 0.0050- 0.0000-  0.0028 = 19.4189  Versus  19.4191

Mass Balance = -1.6975E-04 cm;  Time step attempts = 1770 and successes = 1770
  Evaporation:  Potential =  1.5311 cm, Actual =  0.0050 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 53.6 %;  TMEAN = 282.9 K;  HDRY =  8.5583E+05 cm;  DAYUBC =  1751

------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 339, Simulated Time = 24.0000 hr
-------------
Node Number         =           2          12          25
Depth (cm)          =      5.00000    30.70000    91.50000
Water (cm3/cm3)     =      0.11092     0.24465     0.24849
Head (cm)           = 2.60207E+04 5.99974E+02 5.42664E+02
```

```
Water Flow (cm)    =-3.90481E-03-2.00771E-03 2.74453E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 19.4191+ 0.0000+ 0.0000 - 0.0092- 0.0000-  0.0027 = 19.4071  Versus  19.4074

Mass Balance = -3.3760E-04 cm;  Time step attempts = 7928 and successes = 7928
  Evaporation:  Potential =  2.2383 cm, Actual =  0.0092 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 41.2 %;  TMEAN = 280.9 K;  HDRY =  1.2159E+06 cm;  DAYUBC =  3746
```

```
DAILY SUMMARY:  Day = 340, Simulated Time = 24.0000 hr
-------------
Node Number        =       2           12           25
Depth (cm)         =    5.00000    30.70000     91.50000
Water (cm3/cm3)    =    0.10994     0.24458      0.24842
Head (cm)          = 2.78199E+04 6.01128E+02 5.43755E+02
Water Flow (cm)    =-3.87854E-03-2.00112E-03 2.72919E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 19.4074+ 0.0000+ 0.0000 - 0.0102- 0.0000-  0.0027 = 19.3946  Versus  19.3949

Mass Balance = -3.4332E-04 cm;  Time step attempts = 8168 and successes = 8168
  Evaporation:  Potential =  1.6638 cm, Actual =  0.0102 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 28.3 %;  TMEAN = 280.4 K;  HDRY =  1.7290E+06 cm;  DAYUBC =  3249
```

```
DAILY SUMMARY:  Day = 341, Simulated Time = 24.0000 hr
-------------
Node Number        =       2           12           25
Depth (cm)         =    5.00000    30.70000     91.50000
Water (cm3/cm3)    =    0.10937     0.24451      0.24834
Head (cm)          = 2.89684E+04 6.02312E+02 5.44884E+02
Water Flow (cm)    =-3.84866E-03-1.99301E-03 2.71326E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 19.3949+ 0.0000+ 0.0000 - 0.0029- 0.0000-  0.0027 = 19.3893  Versus  19.3895

Mass Balance = -1.3351E-04 cm;  Time step attempts = 1464 and successes = 1464
  Evaporation:  Potential =  0.8185 cm, Actual =  0.0029 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 50.8 %;  TMEAN = 274.0 K;  HDRY =  9.2851E+05 cm;  DAYUBC =  1400
```

```
DAILY SUMMARY:  Day = 342, Simulated Time = 24.0000 hr
-------------
Node Number        =       2           12           25
Depth (cm)         =    5.00000    30.70000     91.50000
Water (cm3/cm3)    =    0.12124     0.24444      0.24826
Head (cm)          = 1.42655E+04 6.03439E+02 5.45957E+02
Water Flow (cm)    =-4.03553E-03-1.98765E-03 2.69846E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00
```

```
 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 19.3895+ 0.3302+ 0.0000 - 0.0000- 0.0000-  0.0027 = 19.7170  Versus  19.7175

Mass Balance = -5.3215E-04 cm;  Time step attempts =12391 and successes =12391
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 89.3 %;  TMEAN = 271.5 K;  HDRY =  1.5547E+05 cm;  DAYUBC =     0

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 343, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.12543     0.24439     0.24822
Head (cm)          = 1.16586E+04 6.04176E+02 5.46610E+02
Water Flow (cm)    =-3.81491E-03-1.98332E-03 2.68459E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 19.7175+ 0.0000+ 0.0000 - 0.2324- 0.0000-  0.0027 = 19.4824  Versus  19.4849

Mass Balance = -2.4452E-03 cm;  Time step attempts =26406 and successes =26406
  Evaporation:  Potential =  0.9295 cm, Actual =  0.2324 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 35.1 %;  TMEAN = 265.4 K;  HDRY =  1.4356E+06 cm;  DAYUBC =     0

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 344, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.12491     0.24434     0.24816
Head (cm)          = 1.19377E+04 6.04946E+02 5.47361E+02
Water Flow (cm)    =-3.75329E-03-1.98026E-03 2.67838E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 19.4849+ 0.0000+ 0.0000 - 0.0419- 0.0000-  0.0027 = 19.4403  Versus  19.4424

Mass Balance = -2.1000E-03 cm;  Time step attempts =59421 and successes =59421
  Evaporation:  Potential =  1.4724 cm, Actual =  0.0419 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 35.0 %;  TMEAN = 269.5 K;  HDRY =  1.4387E+06 cm;  DAYUBC =  4471

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 345, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.12432     0.24427     0.24809
Head (cm)          = 1.22723E+04 6.06091E+02 5.48454E+02
Water Flow (cm)    =-3.83699E-03-1.97024E-03 2.66417E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 19.4424+ 0.0000+ 0.0000 - 0.0045- 0.0000-  0.0027 = 19.4353  Versus  19.4355
```

```
Mass Balance = -2.8038E-04 cm;  Time step attempts = 4454 and successes = 4454
  Evaporation:  Potential =  1.8595 cm, Actual =  0.0045 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 47.6 %;  TMEAN = 278.7 K;  HDRY =  1.0174E+06 cm;  DAYUBC =  4419

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 346, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12           25
Depth (cm)         =     5.00000     30.70000     91.50000
Water (cm3/cm3)    =     0.12409      0.24420      0.24801
Head (cm)          = 1.24105E+04 6.07291E+02 5.49595E+02
Water Flow (cm)    =-3.88511E-03-1.96170E-03 2.64898E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 19.4355+ 0.0000+ 0.0000 - 0.0000- 0.0000-  0.0026 = 19.4329  Versus  19.4329

Mass Balance =  0.0000E+00 cm;  Time step attempts =   96 and successes =   96
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 91.1 %;  TMEAN = 281.8 K;  HDRY =  1.2774E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 347, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12           25
Depth (cm)         =     5.00000     30.70000     91.50000
Water (cm3/cm3)    =     0.12344      0.24413      0.24793
Head (cm)          = 1.28007E+04 6.08387E+02 5.50641E+02
Water Flow (cm)    =-3.91938E-03-1.95488E-03 2.63489E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 19.4329+ 0.0000+ 0.0000 - 0.0129- 0.0000-  0.0026 = 19.4173  Versus  19.4179

Mass Balance = -6.3705E-04 cm;  Time step attempts =15090 and successes =15090
  Evaporation:  Potential =  2.3058 cm, Actual =  0.0129 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 41.3 %;  TMEAN = 289.3 K;  HDRY =  1.2110E+06 cm;  DAYUBC =  4227

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 348, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12           25
Depth (cm)         =     5.00000     30.70000     91.50000
Water (cm3/cm3)    =     0.12312      0.24405      0.24785
Head (cm)          = 1.29988E+04 6.09574E+02 5.51778E+02
Water Flow (cm)    =-3.95795E-03-1.94776E-03 2.61978E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 19.4179+ 0.0000+ 0.0000 - 0.0009- 0.0000-  0.0026 = 19.4144  Versus  19.4144

Mass Balance = -1.5259E-05 cm;  Time step attempts =  462 and successes =  462
  Evaporation:  Potential =  0.5792 cm, Actual =  0.0009 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
```

```
RHMEAN = 63.1 %;  TMEAN = 282.0 K;  HDRY =  6.3216E+05 cm;  DAYUBC =    370
------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 349, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.12314     0.24398     0.24778
Head (cm)          = 1.29832E+04 6.10737E+02 5.52886E+02
Water Flow (cm)    =-3.96095E-03-1.93972E-03 2.60482E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR         STORAGE
 19.4144+ 0.0000+ 0.0000 - 0.0006- 0.0000-  0.0026 = 19.4112  Versus  19.4114

Mass Balance = -1.6212E-04 cm;  Time step attempts = 1737 and successes = 1737
  Evaporation:  Potential =  0.4713 cm, Actual =  0.0006 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 72.6 %;  TMEAN = 281.8 K;  HDRY =  4.3861E+05 cm;  DAYUBC =  1639

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 350, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.14625     0.24391     0.24770
Head (cm)          = 5.29323E+03 6.11843E+02 5.53953E+02
Water Flow (cm)    =-1.41486E-03-1.93219E-03 2.59110E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR         STORAGE
 19.4114+ 0.3810+ 0.0000 - 0.0000- 0.0000-  0.0026 = 19.7898  Versus  19.7901

Mass Balance = -3.7384E-04 cm;  Time step attempts = 9530 and successes = 9530
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 96.4 %;  TMEAN = 279.8 K;  HDRY =  4.9744E+04 cm;  DAYUBC =     0

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 351, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.28481     0.24385     0.24763
Head (cm)          = 4.16235E+02 6.12930E+02 5.54983E+02
Water Flow (cm)    = 1.73093E+00-1.92477E-03 2.57759E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR         STORAGE
 19.7901+ 2.5719+ 0.6793 - 0.0000- 0.0000-  0.0026 = 22.3594  Versus  22.3586

Mass Balance =  8.1062E-04 cm;  Time step attempts = 6897 and successes = 6897
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = **** %;  TMEAN = 280.7 K;  HDRY = -2.7776E+00 cm;  DAYUBC =     0

------------------------------------------------------------------------------
```

```
DAILY SUMMARY:  Day = 352, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.30788     0.24399     0.24756
Head (cm)          = 3.02902E+02 6.10613E+02 5.56055E+02
Water Flow (cm)    = 1.50045E+00-1.71413E-03 2.56379E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 22.3586+ 1.6582+ 0.2214 - 0.0000- 0.0000-  0.0026 = 24.0143  Versus  24.0145

Mass Balance = -2.7466E-04 cm;  Time step attempts = 4407 and successes = 4407
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 95.9 %;  TMEAN = 275.1 K;  HDRY =  5.6942E+04 cm;  DAYUBC =   267

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 353, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.29720     0.24482     0.24748
Head (cm)          = 3.51429E+02 5.97321E+02 5.57146E+02
Water Flow (cm)    = 1.37578E-01 1.39692E-03 2.54972E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 24.0145+ 0.0762+ 0.0000 - 0.0156- 0.0000-  0.0025 = 24.0726  Versus  24.0727

Mass Balance = -9.3460E-05 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.0631 cm, Actual =  0.0156 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 92.6 %;  TMEAN = 272.6 K;  HDRY =  1.0598E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 354, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.29728     0.24537     0.24741
Head (cm)          = 3.51033E+02 5.88770E+02 5.58230E+02
Water Flow (cm)    = 5.05374E-02 3.37977E-03 2.53589E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 24.0727+ 0.0508+ 0.0000 - 0.0000- 0.0000-  0.0025 = 24.1209  Versus  24.1210

Mass Balance = -2.4796E-05 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 87.9 %;  TMEAN = 271.8 K;  HDRY =  1.7666E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 355, Simulated Time = 24.0000 hr
```

```
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.29763     0.24576     0.24733
Head (cm)          = 3.49334E+02 5.82761E+02 5.59312E+02
Water Flow (cm)    = 2.30609E-02 4.00325E-03 2.52215E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 24.1210+ 0.0254+ 0.0000 - 0.0000- 0.0000-  0.0025 = 24.1438  Versus  24.1439

Mass Balance = -4.9591E-05 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 90.0 %;  TMEAN = 272.3 K;  HDRY =  1.4365E+05 cm;  DAYUBC =     0

-------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 356, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.29919     0.24608     0.24726
Head (cm)          = 3.41918E+02 5.77872E+02 5.60386E+02
Water Flow (cm)    = 3.99125E-02 4.30564E-03 2.50859E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 24.1439+ 0.0508+ 0.0000 - 0.0000- 0.0000-  0.0025 = 24.1922  Versus  24.1921

Mass Balance =  8.2016E-05 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 87.3 %;  TMEAN = 272.3 K;  HDRY =  1.8657E+05 cm;  DAYUBC =     0

-------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 357, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.29914     0.24643     0.24719
Head (cm)          = 3.42136E+02 5.72684E+02 5.61440E+02
Water Flow (cm)    = 5.42535E-02 4.71582E-03 2.49524E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 24.1921+ 0.1524+ 0.0000 - 0.1003- 0.0000-  0.0025 = 24.2417  Versus  24.2417

Mass Balance =  5.7220E-05 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.4051 cm, Actual =  0.1003 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 77.5 %;  TMEAN = 270.7 K;  HDRY =  3.4848E+05 cm;  DAYUBC =     0

-------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 358, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
```

```
                                EOAK SUBD
Water (cm3/cm3)    =      0.30684     0.24701      0.24712
Head (cm)          = 3.07382E+02 5.64027E+02 5.62449E+02
Water Flow (cm)    = 2.25064E-01 5.85177E-03 2.48245E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 24.2417+ 0.4826+ 0.0000 - 0.2051- 0.0000-  0.0025 = 24.5167  Versus  24.5167

Mass Balance =  3.4332E-05 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.8286 cm, Actual =  0.2051 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 65.7 %;  TMEAN = 275.7 K;  HDRY =  5.7482E+05 cm;  DAYUBC =     0

-----------------------------------------------------------------------------


DAILY SUMMARY:  Day = 359, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12           25
Depth (cm)         =      5.00000    30.70000     91.50000
Water (cm3/cm3)    =      0.30508     0.24732      0.24705
Head (cm)          = 3.15069E+02 5.59453E+02 5.63435E+02
Water Flow (cm)    =-6.30555E-02 6.65886E-03 2.46989E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 24.5167+ 0.0000+ 0.0000 - 0.0738- 0.0000-  0.0025 = 24.4405  Versus  24.4405

Mass Balance = -3.8147E-06 cm;  Time step attempts =   96 and successes =   96
  Evaporation:  Potential =  0.2950 cm, Actual =  0.0738 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 79.7 %;  TMEAN = 272.0 K;  HDRY =  3.1162E+05 cm;  DAYUBC =     0

-----------------------------------------------------------------------------


DAILY SUMMARY:  Day = 360, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12           25
Depth (cm)         =      5.00000    30.70000     91.50000
Water (cm3/cm3)    =      0.29059     0.24747      0.24699
Head (cm)          = 3.84695E+02 5.57387E+02 5.64342E+02
Water Flow (cm)    =-1.80628E-01 6.21511E-03 2.45828E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 24.4405+ 0.0000+ 0.0000 - 0.2880- 0.0000-  0.0025 = 24.1500  Versus  24.1501

Mass Balance = -1.1444E-05 cm;  Time step attempts =   96 and successes =   96
  Evaporation:  Potential =  1.1518 cm, Actual =  0.2880 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 55.7 %;  TMEAN = 279.8 K;  HDRY =  8.0310E+05 cm;  DAYUBC =     0

-----------------------------------------------------------------------------


DAILY SUMMARY:  Day = 361, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12           25
Depth (cm)         =      5.00000    30.70000     91.50000
Water (cm3/cm3)    =      0.28706     0.24741      0.24693
Head (cm)          = 4.03669E+02 5.58258E+02 5.65153E+02
Water Flow (cm)    =-1.38508E-01 5.19326E-03 2.44780E-03
```

```
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 24.1501+ 0.0000+ 0.0000 - 0.1604- 0.0000-  0.0024 = 23.9872  Versus  23.9872

Mass Balance = -3.8147E-06 cm;  Time step attempts =   96 and successes =   96
  Evaporation:  Potential =  0.6415 cm, Actual =  0.1604 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 71.4 %;  TMEAN = 274.3 K;  HDRY =  4.6183E+05 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day = 362, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.28442     0.24731     0.24689
Head (cm)           = 4.18470E+02 5.59642E+02 5.65855E+02
Water Flow (cm)     =-9.48254E-02 4.24401E-03 2.43862E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 23.9872+ 0.0000+ 0.0000 - 0.1120- 0.0000-  0.0024 = 23.8728  Versus  23.8728

Mass Balance = -1.9073E-06 cm;  Time step attempts =   96 and successes =   96
  Evaporation:  Potential =  0.4481 cm, Actual =  0.1120 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 72.4 %;  TMEAN = 272.3 K;  HDRY =  4.4205E+05 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day = 363, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.28569     0.24732     0.24685
Head (cm)           = 4.11267E+02 5.59571E+02 5.66415E+02
Water Flow (cm)     = 5.05164E-02 3.82489E-03 2.43115E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 23.8728+ 0.2794+ 0.0000 - 0.2221- 0.0000-  0.0024 = 23.9276  Versus  23.9276

Mass Balance =  7.6294E-06 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.8975 cm, Actual =  0.2221 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 64.3 %;  TMEAN = 274.8 K;  HDRY =  6.0620E+05 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day = 364, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =     5.00000    30.70000    91.50000
Water (cm3/cm3)     =     0.28524     0.24730     0.24682
Head (cm)           = 4.13794E+02 5.59836E+02 5.66866E+02
Water Flow (cm)     =-5.00368E-02 3.77732E-03 2.42505E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
```

```
 23.9276+ 0.0508+ 0.0000 - 0.1012- 0.0000-  0.0024 = 23.8748  Versus  23.8748

Mass Balance =  2.4796E-05 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.4089 cm, Actual =  0.1012 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 82.5 %;  TMEAN = 278.7 K;  HDRY =  2.6366E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 365, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    30.70000    91.50000
Water (cm3/cm3)    =     0.28855     0.24726     0.24680
Head (cm)          = 3.95568E+02 5.60407E+02 5.67208E+02
Water Flow (cm)    =-5.91847E-04 3.46507E-03 2.42030E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 23.8748+ 0.0254+ 0.0000 - 0.0000- 0.0000-  0.0024 = 23.8977  Versus  23.8977

Mass Balance =  1.7166E-05 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 89.9 %;  TMEAN = 279.0 K;  HDRY =  1.4591E+05 cm;  DAYUBC =     0
1
--------------------------------------------------------------------------------
                         UNSAT-H Version 2.03
                          SIMULATION SUMMARY

Title:
East Oak RDF Prescriptive Subtitle D Final Cover
--------------------------------------------------------------------------------

Transpiration Scheme is:              =    1
Potential Evapotranspiration          =  2.0137E+02     [cm]
Potential Transpiration               =  4.1820E+02     [cm]
Actual Transpiration                  =  4.6452E+01     [cm]
Potential Evaporation                 =  3.8728E+02     [cm]
Actual Evaporation                    =  3.0398E+01     [cm]
Evaporation during Growth             =  1.5099E+01     [cm]
Total Runoff                          =  2.8607E+01     [cm]
Total Infiltration                    =  7.6955E+01     [cm]
Total Drainage at Base of Profile     =  1.4859E+00     [cm]
Total Applied Water                   =  1.0556E+02     [cm]
Actual Rainfall                       =  1.0556E+02     [cm]
Actual Irrigation                     =  0.0000E+00     [cm]
Total Final Moisture Storage          =  2.3898E+01     [cm]
Mass Balance Error                    = -6.2168E-01     [cm]
Total Successful Time Steps           =  13526042
Total Attempted Time Steps            =  13526042
Total Time Step Reductions (DHMAX)    =      8532
Total Changes in Surface Boundary     =   5312639
Total Time Actually Simulated         =  3.6500E+02     [days]


Total water flow (cm) across different depths at the end of 3.6500E+02 days:

    DEPTH        FLOW        DEPTH        FLOW        DEPTH        FLOW
   -------   -----------    -------   -----------    -------   -----------
```

EOAK SUBD

0.000	4.6557E+01	2.500	4.6583E+01	7.000	2.6108E+01
10.500	1.3912E+01	13.500	4.5924E+00	16.500	1.8001E-01
19.500	2.6499E-01	23.000	3.9546E-01	27.500	5.3770E-01
30.250	6.4294E-01	30.550	6.5084E-01	30.650	6.5084E-01
32.850	7.0196E-01	37.500	7.9144E-01	42.500	8.8072E-01
47.500	9.6305E-01	52.500	1.0389E+00	57.500	1.1089E+00
62.500	1.1734E+00	67.500	1.2334E+00	72.500	1.2898E+00
77.500	1.3433E+00	82.500	1.3950E+00	87.500	1.4458E+00
90.750	1.4784E+00	91.500	1.4859E+00		

ET MONOLITHIC SOIL FINAL COVER
UNSAT-H ANALYSIS

```
--------------------------------------------------------------------------------

                          Program DATAINH
                           Version2.03

--------------------------------------------------------------------------------

 Input Filename: C:\Program Files\University of Wisconsin\WinUnsatH\project.i
 Date Processed:  8-MAY-**
 Time Processed:  8:40:29

--------------------------------------------------------------------------------
 Title:
 East Oak RDF Alternative Final Cover
--------------------------------------------------------------------------------

 Options chosen include:

 IPLANT =   1        LOWER  =   1        NGRAV  =   1        ISWDIF =   1
 IHEAT  =   0        UPPERH =   0        LOWERH =   1
 NPRINT =   0        DAYEND = 365        NDAYS  = 365        NYEARS =   5
 IRAIN  =   1        ICONVH =   0
 NSURPE =   1        NFHOUR =   2        ITOPBC =   0        ET_OPT =   1
 ICLOUD =   0
 KOPT   =   4        KEST   =   3        IVAPOR =   1        SH_OPT =   1
 INMAX  =   2        INHMAX =   1
 HIRRI  =   1.00     HDRY   =  1.000E-06 HTOP   =  15.0     DHMAX  =  10.0
 DMAXBA = 1.000E-03  DELMAX = 0.250      DELMIN = 1.000E-04 STOPHR =  24.0
 OUTTIM = 0.250
 TORT   = 0.660      TSOIL  =   291.     VAPDIF = 0.240     QHTOP  =  0.00

 IVAPOR = 1:  This option allows vapor flow
 Saturated vapor density (g/cm3)
  of soil when soil temperature is
  a constant equal to TSOIL        =  1.521E-05
 100*MOLAR*GRAV/GASCON (K/cm)      =  2.123E-04
 VC (cm5/g/h)                      =  5.702E+02
 TGRAD  =   0.00     TSMEAN =   0.00     TSAMP  =   0.00     QHLEAK =   0.00
 WTF    =  0.500     RFACT  =   1.00     RAINIF = 1.000E-03  DHFACT =  0.100
 MATN   =   3        NPT    =  25

--------------------------------------------------------------------------------
 KOPT = 4:  van Genuchten functions for soil hydraulic properties

 THETA vs H, MAT 1,
      AIRINT =   0.0000                            THET =  0.40000
        THTR =  8.00000E-02                       ALPHA =  5.00000E-03
           N =   1.4800                               M =  0.32432
     K vs H, MAT 1,
      AIRINK =   0.0000                              SK =  0.18000
           A =  5.00000E-03                           N =   1.4800
           M =  0.32432                          KMODEL =   2.0000
        EPIT =  0.50000

 THETA vs H, MAT 2,
      AIRINT =   0.0000                            THET =  0.40000
        THTR =  0.15000                           ALPHA =  5.00000E-03
           N =   1.4800                               M =  0.32432
     K vs H, MAT 2,
      AIRINK =   0.0000                              SK =  5.40000E-02
           A =  5.00000E-03                           N =   1.4800
```

M = 0.32432 KMODEL = 2.0000
EPIT = 0.50000

THETA vs H, MAT 3,
AIRINT = 0.0000 THET = 0.40000
THTR = 0.15000 ALPHA = 5.00000E-03
N = 1.4800 M = 0.32432
K vs H, MAT 3,
AIRINK = 0.0000 SK = 5.40000E-02
A = 5.00000E-03 N = 1.4800
M = 0.32432 KMODEL = 2.0000
EPIT = 0.50000

Surface node hydraulic properties

HIRRI = 1.0 , THETA = 0.4000, K = 1.5281E-01, C = -6.0345E-05
HDRY = 1.00E-06, THETA = 0.4000, K = 1.8000E-01, C = -7.9592E-08
NDAY = 0

NODE	Z	MAT	HEAD	CONDUCTIVITY	CAPACITY	THETA	TEMP
1	0.00	1	1.0000E+04	6.8953E-08	-2.3395E-06	0.1289	291.0
2	5.00	1	1.0000E+04	6.8953E-08	-2.3395E-06	0.1289	291.0
3	9.00	1	1.0000E+04	6.8953E-08	-2.3395E-06	0.1289	291.0
4	12.00	1	1.0000E+04	6.8953E-08	-2.3395E-06	0.1289	291.0
5	15.00	1	1.0000E+04	6.8953E-08	-2.3395E-06	0.1289	291.0
6	18.00	2	1.0000E+04	2.0686E-08	-1.8278E-06	0.1882	291.0
7	21.00	2	1.0000E+04	2.0686E-08	-1.8278E-06	0.1882	291.0
8	25.00	2	1.0000E+04	2.0686E-08	-1.8278E-06	0.1882	291.0
9	30.00	2	1.0000E+04	2.0686E-08	-1.8278E-06	0.1882	291.0
10	35.00	2	1.0000E+04	2.0686E-08	-1.8278E-06	0.1882	291.0
11	40.00	2	1.0000E+04	2.0686E-08	-1.8278E-06	0.1882	291.0
12	50.00	2	1.0000E+04	2.0686E-08	-1.8278E-06	0.1882	291.0
13	60.00	2	1.0000E+04	2.0686E-08	-1.8278E-06	0.1882	291.0
14	70.00	2	1.0000E+04	2.0686E-08	-1.8278E-06	0.1882	291.0
15	80.00	2	1.0000E+04	2.0686E-08	-1.8278E-06	0.1882	291.0
16	85.00	2	1.0000E+04	2.0686E-08	-1.8278E-06	0.1882	291.0
17	88.00	2	1.0000E+04	2.0686E-08	-1.8278E-06	0.1882	291.0
18	91.50	2	1.0000E+04	2.0686E-08	-1.8278E-06	0.1882	291.0
19	92.00	3	1.0000E+04	2.0686E-08	-1.8278E-06	0.1882	291.0
20	96.00	3	1.0000E+04	2.0686E-08	-1.8278E-06	0.1882	291.0
21	100.00	3	1.0000E+04	2.0686E-08	-1.8278E-06	0.1882	291.0
22	110.00	3	1.0000E+04	2.0686E-08	-1.8278E-06	0.1882	291.0
23	115.00	3	1.0000E+04	2.0686E-08	-1.8278E-06	0.1882	291.0
24	118.00	3	1.0000E+04	2.0686E-08	-1.8278E-06	0.1882	291.0
25	122.00	3	1.0000E+04	2.0686E-08	-1.8278E-06	0.1882	291.0

Total Initial Storage = 21.9812 cm

IPLANT = 1

LEAF= 1, NFROOT= 1, NUPTAK= 1, NFPET= 1, NSOW= 92, NHRVST=306

Total number of Growth Day - Leaf Area Index (LAI) data pairs = 5

Growth Day	LAI
0	2.000
92	4.500
320	4.500
306	3.500

364 2.000

BARE = 0.050

DAY	LAI	DAY	LAI	DAY	LAI	DAY	LAI	DAY	LAI	DAY	LAI
1	2.027	2	2.054	3	2.082	4	2.109	5	2.136	6	2.163
7	2.190	8	2.217	9	2.245	10	2.272	11	2.299	12	2.326
13	2.353	14	2.380	15	2.408	16	2.435	17	2.462	18	2.489
19	2.516	20	2.543	21	2.571	22	2.598	23	2.625	24	2.652
25	2.679	26	2.707	27	2.734	28	2.761	29	2.788	30	2.815
31	2.842	32	2.870	33	2.897	34	2.924	35	2.951	36	2.978
37	3.005	38	3.033	39	3.060	40	3.087	41	3.114	42	3.141
43	3.168	44	3.196	45	3.223	46	3.250	47	3.277	48	3.304
49	3.332	50	3.359	51	3.386	52	3.413	53	3.440	54	3.467
55	3.495	56	3.522	57	3.549	58	3.576	59	3.603	60	3.630
61	3.658	62	3.685	63	3.712	64	3.739	65	3.766	66	3.793
67	3.821	68	3.848	69	3.875	70	3.902	71	3.929	72	3.957
73	3.984	74	4.011	75	4.038	76	4.065	77	4.092	78	4.120
79	4.147	80	4.174	81	4.201	82	4.228	83	4.255	84	4.283
85	4.310	86	4.337	87	4.364	88	4.391	89	4.418	90	4.446
91	4.473	92	4.500	93	4.500	94	4.500	95	4.500	96	4.500
97	4.500	98	4.500	99	4.500	100	4.500	101	4.500	102	4.500
103	4.500	104	4.500	105	4.500	106	4.500	107	4.500	108	4.500
109	4.500	110	4.500	111	4.500	112	4.500	113	4.500	114	4.500
115	4.500	116	4.500	117	4.500	118	4.500	119	4.500	120	4.500
121	4.500	122	4.500	123	4.500	124	4.500	125	4.500	126	4.500
127	4.500	128	4.500	129	4.500	130	4.500	131	4.500	132	4.500
133	4.500	134	4.500	135	4.500	136	4.500	137	4.500	138	4.500
139	4.500	140	4.500	141	4.500	142	4.500	143	4.500	144	4.500
145	4.500	146	4.500	147	4.500	148	4.500	149	4.500	150	4.500
151	4.500	152	4.500	153	4.500	154	4.500	155	4.500	156	4.500
157	4.500	158	4.500	159	4.500	160	4.500	161	4.500	162	4.500
163	4.500	164	4.500	165	4.500	166	4.500	167	4.500	168	4.500
169	4.500	170	4.500	171	4.500	172	4.500	173	4.500	174	4.500
175	4.500	176	4.500	177	4.500	178	4.500	179	4.500	180	4.500
181	4.500	182	4.500	183	4.500	184	4.500	185	4.500	186	4.500
187	4.500	188	4.500	189	4.500	190	4.500	191	4.500	192	4.500
193	4.500	194	4.500	195	4.500	196	4.500	197	4.500	198	4.500
199	4.500	200	4.500	201	4.500	202	4.500	203	4.500	204	4.500
205	4.500	206	4.500	207	4.500	208	4.500	209	4.500	210	4.500
211	4.500	212	4.500	213	4.500	214	4.500	215	4.500	216	4.500
217	4.500	218	4.500	219	4.500	220	4.500	221	4.500	222	4.500
223	4.500	224	4.500	225	4.500	226	4.500	227	4.500	228	4.500
229	4.500	230	4.500	231	4.500	232	4.500	233	4.500	234	4.500
235	4.500	236	4.500	237	4.500	238	4.500	239	4.500	240	4.500
241	4.500	242	4.500	243	4.500	244	4.500	245	4.500	246	4.500
247	4.500	248	4.500	249	4.500	250	4.500	251	4.500	252	4.500
253	4.500	254	4.500	255	4.500	256	4.500	257	4.500	258	4.500
259	4.500	260	4.500	261	4.500	262	4.500	263	4.500	264	4.500
265	4.500	266	4.500	267	4.500	268	4.500	269	4.500	270	4.500
271	4.500	272	4.500	273	4.500	274	4.500	275	4.500	276	4.500
277	4.500	278	4.500	279	4.500	280	4.500	281	4.500	282	4.500
283	4.500	284	4.500	285	4.500	286	4.500	287	4.500	288	4.500
289	4.500	290	4.500	291	4.500	292	4.500	293	4.500	294	4.500
295	4.500	296	4.500	297	4.500	298	4.500	299	4.500	300	4.500
301	4.500	302	4.500	303	4.500	304	4.500	305	4.500	306	4.500
307	4.500	308	4.500	309	4.500	310	4.500	311	4.500	312	4.500
313	4.500	314	4.500	315	4.500	316	4.500	317	4.500	318	4.500
319	4.500	320	4.500	321	3.112	322	3.086	323	3.060	324	3.034
325	3.009	326	2.983	327	2.957	328	2.931	329	2.905	330	2.879
331	2.853	332	2.828	333	2.802	334	2.776	335	2.750	336	2.724
337	2.698	338	2.672	339	2.647	340	2.621	341	2.595	342	2.569

343	2.543	344	2.517	345	2.491	346	2.466	347	2.440	348	2.414
349	2.388	350	2.362	351	2.336	352	2.310	353	2.284	354	2.259
355	2.233	356	2.207	357	2.181	358	2.155	359	2.129	360	2.103
361	2.078	362	2.052	363	2.026	364	2.000	365	0.000		

NFROOT = 1: Negative exponential representation of root growth

AA (intersection of the curve at z=0 with abscissa) = 1.300
B1 (coefficient defining degree of curvature) = 0.13000
B2 (coefficient that determines the value of asymptote = 0.020

Root depth, density, and weight/node versus depth

DAY	MAX ROOT DEPTH	ROOT DENSITY (cm/cm)	NORMALIZED DENSITY (1/cm)
1	0.00	0.000	0.0000
1	5.00	0.699	0.1126
1	9.00	0.423	0.0682
1	12.00	0.293	0.0472
1	15.00	0.205	0.0330
1	18.00	0.145	0.0234
1	21.00	0.105	0.0169
1	25.00	0.070	0.0113
1	30.00	0.046	0.0075
1	35.00	0.034	0.0054
1	40.00	0.027	0.0044
1	50.00	0.022	0.0035

MXROOT (deepest node to which roots penetrate) = 12
NUPTAK = 1: Feddes et al. 1975 moisture dependent sink term

For Material No. 1

THETAW (wilting point moisture content) = 0.1203
THETAD (lower limit of optimum moisture content) = 0.1667
THETAN (upper limit of optimum moisture content) = 0.3988

For Material No. 2

THETAW (wilting point moisture content) = 0.1815
THETAD (lower limit of optimum moisture content) = 0.2177
THETAN (upper limit of optimum moisture content) = 0.3990

For Material No. 3

THETAW (wilting point moisture content) = 0.1815
THETAD (lower limit of optimum moisture content) = 0.2177
THETAN (upper limit of optimum moisture content) = 0.3990

NFHOUR = 2: User subroutine for hourly PET distribution

0.0100	0.0100	0.0100	0.0100	0.0100	0.0100	0.0150	0.0440
0.0699	0.0911	0.1061	0.1139	0.1139	0.1061	0.0911	0.0699
0.0440	0.0150	0.0100	0.0100	0.0100	0.0100	0.0100	0.0100

ET_OPT = 1 and IHEAT = 0:
PET calculated from meteorological data
using subroutine CALPEN

```
ALBEDO =  2.000E-01
   ALT =  3.730E+02 (m)
    ZU =  5.000E-01 (m)
   PMB =  1.000E+03 (mb)
```

ET_OPT = 1: Meteorological Data

IDAY	Temperature Max F	Min F	Dew F	Solar Rad ly/d	Wind Speed mph	Cloud Cover tenth	Prec. in
1.	35.	21.	17.6	279.	8.3	0.0	0.00
2.	47.	24.	19.7	187.	5.2	0.0	0.00
3.	37.	17.	19.6	124.	7.0	0.0	0.00
4.	30.	12.	10.6	266.	4.2	0.0	0.03
5.	36.	17.	17.3	135.	9.9	0.0	0.01
6.	42.	19.	28.5	69.	13.2	0.0	0.04
7.	42.	15.	14.9	284.	6.6	0.0	0.00
8.	46.	31.	26.4	261.	9.4	0.0	0.00
9.	65.	27.	31.1	282.	6.2	0.0	0.00
10.	60.	42.	41.6	279.	7.2	0.0	0.00
11.	74.	40.	34.3	285.	9.4	0.0	0.00
12.	63.	46.	35.5	189.	6.8	0.0	0.00
13.	55.	41.	36.7	211.	11.4	0.0	0.00
14.	55.	31.	30.0	289.	6.6	0.0	0.00
15.	64.	31.	27.1	297.	10.0	0.0	0.00
16.	62.	50.	40.7	155.	16.2	0.0	0.30
17.	60.	35.	28.2	293.	6.2	0.0	0.00
18.	39.	26.	26.9	53.	6.4	0.0	0.01
19.	51.	25.	24.1	315.	7.9	0.0	0.00
20.	57.	27.	25.8	302.	5.2	0.0	0.00
21.	43.	29.	24.1	245.	5.8	0.0	0.00
22.	33.	22.	27.1	179.	6.2	0.0	0.07
23.	40.	21.	22.0	327.	6.0	0.0	0.19
24.	55.	32.	26.2	300.	8.7	0.0	0.41
25.	60.	40.	31.8	312.	6.9	0.0	0.00
26.	54.	44.	47.2	33.	8.2	0.0	0.39
27.	63.	43.	44.3	307.	13.2	0.0	0.04
28.	43.	33.	34.0	53.	13.2	0.0	0.01
29.	36.	31.	29.5	46.	9.3	0.0	0.07
30.	53.	23.	26.1	344.	6.7	0.0	0.00
31.	62.	34.	26.9	289.	7.6	0.0	0.00
32.	73.	37.	34.3	343.	7.4	0.0	0.00
33.	79.	46.	37.5	348.	6.9	0.0	0.00
34.	56.	38.	34.1	282.	12.6	0.0	0.00
35.	65.	26.	28.2	353.	7.2	0.0	0.00
36.	53.	33.	26.0	361.	7.6	0.0	0.00
37.	58.	39.	27.5	271.	7.5	0.0	0.00
38.	47.	24.	18.1	332.	9.0	0.0	0.00
39.	49.	20.	13.6	378.	4.8	0.0	0.00
40.	60.	39.	23.7	373.	10.5	0.0	0.00
41.	57.	36.	27.7	360.	8.2	0.0	0.00
42.	36.	23.	9.9	210.	10.5	0.0	0.00
43.	26.	19.	6.7	76.	7.3	0.0	0.00
44.	33.	26.	14.7	92.	5.5	0.0	0.00
45.	46.	31.	32.4	55.	9.4	0.0	0.02
46.	56.	28.	33.6	177.	12.2	0.0	0.00
47.	43.	26.	18.7	118.	6.1	0.0	0.01
48.	58.	22.	18.2	423.	4.2	0.0	0.00
49.	62.	37.	25.8	320.	10.3	0.0	0.00
50.	65.	35.	29.9	413.	7.2	0.0	0.00
51.	75.	38.	28.9	420.	7.8	0.0	0.00

52.	72.	40.	24.4	422.	6.3	0.0	0.00
53.	78.	51.	34.1	317.	13.9	0.0	0.00
54.	73.	47.	34.6	430.	9.5	0.0	0.00
55.	66.	37.	20.4	437.	7.4	0.0	0.00
56.	72.	47.	40.8	396.	13.0	0.0	0.00
57.	76.	56.	55.0	261.	12.1	0.0	0.00
58.	63.	40.	49.8	127.	7.8	0.0	0.00
59.	40.	29.	28.9	73.	12.2	0.0	0.00
60.	29.	21.	18.1	79.	10.1	0.0	0.00
61.	24.	21.	19.5	117.	6.7	0.0	0.00
62.	33.	21.	24.1	240.	3.5	0.0	0.25
63.	41.	31.	35.4	67.	6.8	0.0	0.14
64.	43.	39.	38.0	80.	4.3	0.0	0.01
65.	60.	28.	43.6	109.	10.0	0.0	0.61
66.	28.	15.	16.3	469.	14.5	0.0	0.01
67.	44.	14.	12.4	502.	6.0	0.0	0.05
68.	61.	28.	18.3	509.	11.8	0.0	0.00
69.	66.	40.	26.5	501.	14.2	0.0	0.00
70.	67.	49.	44.1	320.	16.6	0.0	0.00
71.	65.	59.	55.9	131.	15.6	0.0	0.41
72.	60.	55.	55.0	72.	4.9	0.0	1.56
73.	64.	54.	54.0	212.	8.1	0.0	0.27
74.	72.	55.	50.6	291.	7.1	0.0	0.06
75.	77.	46.	43.0	493.	4.4	0.0	0.00
76.	79.	47.	42.4	479.	3.6	0.0	0.00
77.	80.	50.	44.2	498.	8.4	0.0	0.00
78.	86.	60.	46.7	484.	14.6	0.0	0.00
79.	72.	52.	40.4	503.	7.1	0.0	0.00
80.	85.	53.	45.6	524.	14.1	0.0	0.00
81.	91.	63.	43.6	503.	12.6	0.0	0.00
82.	76.	50.	36.1	542.	6.6	0.0	0.00
83.	79.	52.	45.2	492.	10.6	0.0	0.00
84.	71.	60.	54.3	148.	10.8	0.0	0.15
85.	69.	43.	42.5	435.	10.8	0.0	0.02
86.	61.	36.	30.3	559.	7.6	0.0	0.00
87.	49.	38.	32.1	185.	7.5	0.0	0.00
88.	52.	41.	35.5	287.	6.2	0.0	0.00
89.	53.	34.	27.5	295.	6.1	0.0	0.00
90.	60.	40.	36.0	512.	5.0	0.0	0.00
91.	72.	45.	34.3	585.	8.0	0.0	0.00
92.	77.	51.	33.4	590.	11.5	0.0	0.00
93.	61.	49.	50.7	109.	6.5	0.0	0.16
94.	69.	46.	44.5	452.	5.5	0.0	0.01
95.	72.	46.	45.0	461.	8.1	0.0	0.00
96.	74.	53.	51.2	499.	7.3	0.0	0.00
97.	81.	56.	56.0	481.	12.3	0.0	0.00
98.	89.	63.	56.7	605.	14.7	0.0	0.00
99.	72.	52.	53.5	508.	9.8	0.0	0.00
100.	63.	39.	43.3	27.	9.8	0.0	1.14
101.	57.	30.	25.8	602.	11.1	0.0	0.00
102.	70.	35.	29.4	631.	6.9	0.0	0.00
103.	78.	39.	34.6	616.	6.7	0.0	0.00
104.	84.	58.	45.8	558.	16.6	0.0	0.00
105.	77.	60.	56.1	450.	8.1	0.0	0.00
106.	81.	59.	65.2	335.	10.6	0.0	0.00
107.	69.	54.	58.9	37.	6.8	0.0	1.12
108.	67.	48.	39.9	656.	9.3	0.0	0.00
109.	65.	42.	45.0	358.	7.2	0.0	0.28
110.	71.	50.	47.7	646.	7.9	0.0	0.00
111.	69.	46.	44.1	635.	8.8	0.0	0.01
112.	48.	42.	41.8	40.	10.4	0.0	1.91
113.	60.	41.	40.4	349.	8.6	0.0	0.05
114.	67.	40.	40.4	428.	6.9	0.0	0.01

EOAK AFC INPUT

115.	72.	46.	43.0	616.	11.6	0.0	0.00
116.	72.	44.	46.8	402.	17.2	0.0	0.00
117.	64.	38.	34.5	620.	6.0	0.0	0.00
118.	72.	45.	47.1	334.	8.3	0.0	0.00
119.	74.	56.	56.3	428.	7.5	0.0	0.13
120.	63.	54.	54.6	187.	6.0	0.0	0.32
121.	63.	53.	53.8	290.	9.3	0.0	0.00
122.	63.	53.	53.8	364.	5.3	0.0	0.01
123.	62.	52.	53.0	91.	7.1	0.0	0.07
124.	70.	50.	48.6	656.	7.0	0.0	0.01
125.	67.	46.	49.8	374.	6.5	0.0	0.52
126.	72.	56.	58.6	244.	8.4	0.0	1.20
127.	69.	59.	60.5	65.	9.2	0.0	1.89
128.	74.	58.	48.6	592.	14.0	0.0	0.00
129.	77.	53.	48.2	650.	9.0	0.0	0.00
130.	66.	49.	44.2	574.	8.3	0.0	0.00
131.	73.	47.	48.9	580.	3.9	0.0	0.00
132.	74.	56.	58.7	316.	12.1	0.0	0.00
133.	90.	72.	57.0	691.	8.8	0.0	0.00
134.	75.	63.	58.3	646.	7.5	0.0	0.00
135.	85.	60.	63.5	526.	6.5	0.0	0.00
136.	79.	73.	67.8	227.	11.3	0.0	0.00
137.	87.	60.	57.5	412.	11.9	0.0	0.00
138.	68.	48.	45.8	387.	9.9	0.0	0.00
139.	76.	41.	43.9	700.	3.1	0.0	0.00
140.	79.	55.	50.2	661.	6.1	0.0	0.00
141.	82.	61.	56.0	555.	4.5	0.0	0.02
142.	84.	62.	57.6	633.	9.6	0.0	0.00
143.	75.	61.	63.6	149.	12.4	0.0	0.32
144.	60.	54.	54.8	83.	6.3	0.0	0.50
145.	58.	54.	54.4	116.	5.8	0.0	0.21
146.	75.	58.	62.9	356.	7.0	0.0	2.23
147.	80.	62.	60.0	558.	10.6	0.0	0.14
148.	76.	58.	50.9	671.	6.8	0.0	0.00
149.	68.	54.	52.3	389.	5.5	0.0	0.00
150.	70.	61.	60.0	183.	4.3	0.0	0.00
151.	80.	60.	60.1	600.	4.3	0.0	1.05
152.	81.	58.	61.1	619.	4.0	0.0	0.03
153.	87.	63.	61.7	450.	7.1	0.0	0.15
154.	78.	64.	65.3	403.	7.2	0.0	0.57
155.	79.	61.	62.4	355.	7.4	0.0	1.72
156.	80.	58.	62.2	528.	6.8	0.0	0.07
157.	85.	65.	68.3	557.	8.6	0.0	0.29
158.	90.	74.	72.6	636.	11.2	0.0	0.00
159.	86.	70.	71.1	322.	8.2	0.0	0.00
160.	81.	63.	66.5	123.	9.2	0.0	3.93
161.	72.	60.	62.1	129.	6.3	0.0	0.48
162.	72.	54.	52.3	679.	6.9	0.0	0.13
163.	79.	51.	50.8	683.	4.8	0.0	0.00
164.	82.	60.	54.6	701.	7.3	0.0	0.00
165.	87.	65.	60.5	701.	10.6	0.0	0.00
166.	86.	68.	60.1	704.	10.9	0.0	0.00
167.	84.	68.	62.0	697.	9.0	0.0	0.00
168.	84.	66.	61.3	657.	6.3	0.0	0.00
169.	84.	64.	59.0	671.	5.8	0.0	0.00
170.	86.	65.	60.8	630.	5.8	0.0	0.00
171.	87.	67.	60.9	614.	5.8	0.0	0.00
172.	88.	68.	61.5	662.	5.2	0.0	0.00
173.	89.	68.	62.9	607.	5.1	0.0	0.00
174.	90.	62.	63.1	533.	5.7	0.0	0.00
175.	84.	62.	61.5	567.	7.6	0.0	0.00
176.	83.	61.	56.2	695.	8.6	0.0	0.00
177.	86.	57.	54.0	714.	5.4	0.0	0.00

					EOAK	AFC	INPUT
178.	87.	63.	59.9	572.	4.8	0.0	0.00
179.	91.	67.	64.1	678.	6.0	0.0	0.00
180.	80.	65.	65.4	332.	6.8	0.0	0.26
181.	75.	62.	59.6	342.	6.0	0.0	0.12
182.	78.	57.	53.4	701.	5.0	0.0	0.00
183.	81.	61.	62.5	385.	6.6	0.0	0.13
184.	91.	68.	66.0	638.	11.8	0.0	0.00
185.	92.	70.	61.8	689.	12.6	0.0	0.00
186.	92.	62.	57.2	708.	4.8	0.0	0.00
187.	96.	68.	64.4	703.	6.1	0.0	0.00
188.	96.	72.	63.5	717.	9.4	0.0	0.00
189.	97.	73.	63.0	703.	9.3	0.0	0.00
190.	96.	75.	65.5	692.	5.6	0.0	0.00
191.	98.	68.	67.2	696.	4.7	0.0	0.00
192.	102.	76.	64.7	697.	7.1	0.0	0.00
193.	100.	76.	65.5	688.	7.1	0.0	0.00
194.	96.	76.	68.8	656.	6.4	0.0	0.00
195.	93.	73.	69.3	651.	6.8	0.0	0.00
196.	94.	72.	66.3	620.	6.0	0.0	0.00
197.	94.	70.	66.6	622.	4.9	0.0	0.00
198.	88.	70.	68.0	402.	4.3	0.0	0.00
199.	93.	69.	65.8	660.	5.0	0.0	0.00
200.	90.	70.	67.8	546.	7.0	0.0	0.00
201.	88.	71.	70.0	386.	5.0	0.0	0.01
202.	95.	70.	70.2	632.	6.2	0.0	0.00
203.	95.	69.	68.9	561.	7.2	0.0	0.16
204.	91.	67.	65.0	536.	8.1	0.0	1.06
205.	89.	64.	66.4	637.	5.5	0.0	0.59
206.	93.	70.	69.0	664.	7.3	0.0	0.00
207.	93.	69.	68.1	666.	9.7	0.0	0.00
208.	98.	76.	69.3	683.	9.3	0.0	0.00
209.	95.	76.	69.0	678.	6.3	0.0	0.00
210.	91.	74.	70.7	631.	6.8	0.0	0.00
211.	90.	71.	68.7	549.	5.5	0.0	0.00
212.	83.	71.	69.4	352.	5.5	0.0	0.04
213.	81.	72.	71.0	269.	5.6	0.0	3.49
214.	84.	72.	71.6	363.	5.8	0.0	0.07
215.	85.	72.	71.4	321.	4.4	0.0	0.03
216.	87.	72.	71.3	419.	3.6	0.0	0.00
217.	89.	70.	70.3	534.	2.8	0.0	0.00
218.	93.	70.	70.7	609.	7.7	0.0	0.51
219.	92.	76.	70.1	647.	9.8	0.0	0.00
220.	91.	75.	72.2	568.	8.0	0.0	0.00
221.	91.	73.	64.8	611.	8.8	0.0	0.00
222.	91.	68.	64.1	652.	7.3	0.0	0.00
223.	92.	74.	67.8	623.	7.1	0.0	0.00
224.	91.	76.	68.8	609.	8.0	0.0	0.00
225.	91.	76.	69.2	630.	9.0	0.0	0.00
226.	93.	76.	70.7	586.	8.0	0.0	0.00
227.	88.	73.	70.5	484.	7.7	0.0	0.01
228.	93.	76.	68.8	471.	8.5	0.0	0.00
229.	94.	75.	66.6	618.	8.2	0.0	0.00
230.	94.	74.	67.3	623.	7.3	0.0	0.00
231.	96.	70.	67.6	596.	3.7	0.0	0.00
232.	96.	70.	70.6	593.	3.3	0.0	0.00
233.	95.	69.	65.8	625.	4.2	0.0	0.00
234.	93.	69.	67.2	555.	4.1	0.0	0.00
235.	93.	69.	65.8	567.	4.6	0.0	0.00
236.	95.	66.	55.7	626.	5.0	0.0	0.00
237.	94.	71.	60.7	522.	5.7	0.0	0.00
238.	96.	72.	66.7	524.	3.9	0.0	0.00
239.	98.	71.	66.4	531.	3.7	0.0	0.00
240.	99.	68.	64.3	556.	3.0	0.0	0.00

241.	98.	72.	64.5	529.	5.3	0.0	0.00
242.	98.	75.	64.7	549.	7.0	0.0	0.00
243.	97.	71.	62.4	561.	5.5	0.0	0.00
244.	98.	69.	63.0	562.	4.5	0.0	0.00
245.	99.	73.	62.8	557.	6.6	0.0	0.00
246.	101.	78.	60.1	418.	10.4	0.0	0.00
247.	101.	75.	61.7	545.	6.8	0.0	0.00
248.	93.	67.	64.3	562.	7.5	0.0	0.00
249.	96.	74.	65.9	496.	10.6	0.0	0.00
250.	82.	60.	63.3	309.	8.3	0.0	0.17
251.	69.	57.	53.3	285.	5.5	0.0	0.00
252.	75.	59.	54.7	396.	4.7	0.0	0.00
253.	79.	62.	56.9	344.	3.1	0.0	0.00
254.	73.	65.	61.2	196.	5.6	0.0	0.09
255.	82.	63.	65.0	439.	5.7	0.0	1.21
256.	88.	65.	63.6	535.	4.6	0.0	0.00
257.	86.	65.	65.8	382.	3.6	0.0	0.00
258.	73.	68.	68.2	78.	3.6	0.0	1.04
259.	83.	68.	71.1	261.	4.3	0.0	0.28
260.	82.	68.	68.9	364.	4.9	0.0	0.00
261.	80.	68.	68.2	208.	5.7	0.0	0.73
262.	78.	60.	64.5	285.	7.6	0.0	0.07
263.	63.	56.	54.6	150.	5.2	0.0	0.00
264.	58.	43.	45.2	42.	9.1	0.0	0.73
265.	59.	37.	34.6	538.	5.3	0.0	0.00
266.	68.	40.	37.3	537.	5.9	0.0	0.00
267.	63.	47.	47.1	172.	3.8	0.0	0.12
268.	61.	50.	52.6	117.	2.4	0.0	0.37
269.	72.	48.	52.8	493.	5.2	0.0	0.01
270.	77.	54.	60.9	229.	5.7	0.0	0.04
271.	86.	66.	67.5	427.	9.8	0.0	0.00
272.	87.	72.	65.7	424.	13.0	0.0	0.00
273.	82.	57.	59.2	407.	11.6	0.0	0.00
274.	79.	46.	47.6	504.	3.9	0.0	0.00
275.	62.	54.	55.0	74.	4.9	0.0	1.12
276.	74.	51.	50.1	488.	4.8	0.0	0.01
277.	80.	53.	49.7	482.	9.3	0.0	0.00
278.	71.	49.	40.4	478.	12.5	0.0	0.00
279.	67.	46.	40.7	480.	9.2	0.0	0.00
280.	74.	44.	42.3	479.	5.8	0.0	0.00
281.	80.	52.	48.0	454.	9.7	0.0	0.00
282.	81.	50.	56.5	422.	4.0	0.0	0.00
283.	84.	54.	59.8	438.	3.9	0.0	0.00
284.	87.	64.	58.5	438.	6.8	0.0	0.00
285.	85.	65.	55.9	436.	9.2	0.0	0.00
286.	75.	43.	45.7	395.	10.6	0.0	0.00
287.	70.	37.	34.4	451.	5.5	0.0	0.00
288.	86.	47.	37.6	447.	6.3	0.0	0.00
289.	86.	52.	41.4	435.	6.3	0.0	0.00
290.	82.	60.	41.7	422.	11.7	0.0	0.00
291.	83.	61.	49.5	409.	11.9	0.0	0.00
292.	75.	47.	43.7	308.	13.2	0.0	0.00
293.	67.	38.	25.4	434.	8.0	0.0	0.00
294.	78.	42.	29.0	416.	7.6	0.0	0.00
295.	82.	59.	46.9	401.	17.4	0.0	0.00
296.	71.	38.	33.1	408.	13.4	0.0	0.00
297.	68.	30.	24.4	415.	5.0	0.0	0.00
298.	73.	50.	39.1	384.	8.9	0.0	0.00
299.	84.	49.	46.8	379.	8.8	0.0	0.00
300.	72.	47.	33.8	341.	6.1	0.0	0.00
301.	68.	34.	23.7	392.	4.3	0.0	0.00
302.	73.	46.	30.2	330.	10.8	0.0	0.00
303.	60.	54.	48.4	88.	9.3	0.0	0.02

					EOAK	AFC	INPUT
304.	62.	55.	56.6	74.	7.5	0.0	0.03
305.	79.	45.	52.7	332.	10.2	0.0	0.20
306.	45.	32.	29.6	198.	10.6	0.0	0.00
307.	49.	30.	14.5	377.	5.3	0.0	0.00
308.	57.	26.	18.4	313.	6.7	0.0	0.00
309.	60.	40.	34.3	355.	11.6	0.0	0.00
310.	66.	47.	51.6	204.	13.5	0.0	0.03
311.	64.	39.	35.0	351.	8.6	0.0	0.00
312.	60.	29.	25.4	348.	5.9	0.0	0.00
313.	70.	47.	44.7	337.	18.8	0.0	0.00
314.	82.	26.	46.1	301.	17.6	0.0	0.10
315.	43.	21.	19.7	348.	8.2	0.0	0.12
316.	69.	38.	25.9	333.	11.7	0.0	0.00
317.	64.	42.	33.8	242.	6.5	0.0	0.00
318.	63.	29.	32.3	311.	6.5	0.0	0.00
319.	58.	35.	36.5	312.	8.2	0.0	0.00
320.	64.	31.	35.1	317.	8.5	0.0	0.00
321.	69.	44.	36.9	309.	7.2	0.0	0.00
322.	69.	33.	31.8	326.	4.5	0.0	0.00
323.	74.	48.	43.0	313.	8.7	0.0	0.00
324.	67.	43.	33.9	301.	5.8	0.0	0.00
325.	63.	31.	21.5	291.	4.1	0.0	0.00
326.	71.	46.	37.7	246.	11.5	0.0	0.00
327.	50.	31.	24.9	212.	5.9	0.0	0.00
328.	65.	27.	25.7	300.	8.6	0.0	0.00
329.	77.	45.	32.5	294.	8.9	0.0	0.00
330.	76.	52.	40.1	257.	15.2	0.0	0.00
331.	67.	29.	26.7	256.	13.8	0.0	0.00
332.	39.	21.	6.6	289.	5.8	0.0	0.00
333.	61.	27.	22.4	287.	9.3	0.0	0.00
334.	72.	42.	31.5	299.	13.0	0.0	0.00
335.	72.	45.	41.6	287.	8.2	0.0	0.00
336.	74.	49.	47.2	277.	10.1	0.0	0.00
337.	66.	42.	35.1	288.	7.9	0.0	0.00
338.	65.	34.	32.5	209.	8.4	0.0	0.00
339.	56.	36.	22.6	273.	10.1	0.0	0.00
340.	59.	31.	12.6	238.	6.1	0.0	0.00
341.	46.	21.	16.4	244.	4.8	0.0	0.00
342.	44.	14.	26.1	60.	9.1	0.0	0.13
343.	26.	10.	-6.1	281.	6.9	0.0	0.00
344.	41.	10.	0.5	292.	9.5	0.0	0.00
345.	55.	29.	22.6	279.	9.9	0.0	0.00
346.	54.	41.	44.9	68.	6.2	0.0	0.00
347.	75.	47.	36.1	170.	9.0	0.0	0.00
348.	61.	35.	35.4	193.	3.3	0.0	0.00
349.	57.	38.	38.7	126.	5.9	0.0	0.00
350.	49.	39.	43.0	41.	5.0	0.0	0.15
351.	49.	42.	45.5	35.	6.5	0.0	1.28
352.	42.	29.	34.4	14.	11.9	0.0	0.74
353.	33.	29.	29.0	112.	11.9	0.0	0.03
354.	31.	28.	26.2	66.	4.1	0.0	0.02
355.	33.	28.	27.8	48.	2.9	0.0	0.01
356.	33.	28.	27.0	59.	6.3	0.0	0.02
357.	37.	18.	21.1	276.	3.6	0.0	0.06
358.	48.	25.	25.6	278.	5.8	0.0	0.19
359.	39.	21.	24.2	191.	5.1	0.0	0.00
360.	60.	28.	28.4	270.	5.8	0.0	0.00
361.	44.	24.	25.3	251.	6.0	0.0	0.00
362.	42.	19.	22.3	259.	3.5	0.0	0.00
363.	44.	26.	23.6	206.	8.7	0.0	0.11
364.	50.	34.	36.8	164.	7.8	0.0	0.02
365.	46.	39.	39.6	86.	3.9	0.0	0.01

NFPET = 1:

EOAK AFC INPUT

PET is partitioned into PT and PE according to the relationship developed by Ritchie (1972)

DAY	PET	PTRANS	PEVAPO	DAY	PET	PTRANS	PEVAPO
1	0.2095	0.0000	0.2095	2	0.1809	0.0000	0.1809
3	0.0741	0.0000	0.0741	4	0.1148	0.0000	0.1148
5	0.1410	0.0000	0.1410	6	0.0000	0.0000	0.0000
7	0.2175	0.0000	0.2175	8	0.3026	0.0000	0.3026
9	0.3119	0.0000	0.3119	10	0.2829	0.0000	0.2829
11	0.6299	0.0000	0.6299	12	0.3601	0.0000	0.3601
13	0.3600	0.0000	0.3600	14	0.2888	0.0000	0.2888
15	0.5449	0.0000	0.5449	16	0.6443	0.0000	0.6443
17	0.3762	0.0000	0.3762	18	0.0128	0.0000	0.0128
19	0.3222	0.0000	0.3222	20	0.2861	0.0000	0.2861
21	0.1961	0.0000	0.1961	22	0.0044	0.0000	0.0044
23	0.1873	0.0000	0.1873	24	0.4203	0.0000	0.4203
25	0.4225	0.0000	0.4225	26	0.0000	0.0000	0.0000
27	0.4384	0.0000	0.4384	28	0.0502	0.0000	0.0502
29	0.0099	0.0000	0.0099	30	0.2859	0.0000	0.2859
31	0.4530	0.0000	0.4530	32	0.5357	0.0000	0.5357
33	0.6259	0.0000	0.6259	34	0.4758	0.0000	0.4758
35	0.4207	0.0000	0.4207	36	0.4173	0.0000	0.4173
37	0.4382	0.0000	0.4382	38	0.3891	0.0000	0.3891
39	0.3112	0.0000	0.3112	40	0.7196	0.0000	0.7196
41	0.4886	0.0000	0.4886	42	0.3417	0.0000	0.3417
43	0.1280	0.0000	0.1280	44	0.1094	0.0000	0.1094
45	0.0635	0.0000	0.0635	46	0.2498	0.0000	0.2498
47	0.1616	0.0000	0.1616	48	0.3594	0.0000	0.3594
49	0.6423	0.0000	0.6423	50	0.5337	0.0000	0.5337
51	0.7117	0.0000	0.7117	52	0.6551	0.0000	0.6551
53	1.1371	0.0000	1.1371	54	0.8273	0.0000	0.8273
55	0.6822	0.0000	0.6822	56	0.8457	0.0000	0.8457
57	0.5349	0.0000	0.5349	58	0.0141	0.0000	0.0141
59	0.0899	0.0000	0.0899	60	0.0774	0.0000	0.0774
61	0.0108	0.0000	0.0108	62	0.0541	0.0000	0.0541
63	0.0000	0.0000	0.0000	64	0.0000	0.0000	0.0000
65	0.0000	0.0000	0.0000	66	0.2462	0.0000	0.2462
67	0.3437	0.0000	0.3437	68	0.8194	0.0000	0.8194
69	1.0659	0.0000	1.0659	70	0.7689	0.0000	0.7689
71	0.2947	0.0000	0.2947	72	0.0000	0.0000	0.0000
73	0.1867	0.0000	0.1867	74	0.4208	0.0000	0.4208
75	0.5476	0.0000	0.5476	76	0.5242	0.0000	0.5242
77	0.8101	0.0000	0.8101	78	1.3783	0.0000	1.3783
79	0.7291	0.0000	0.7291	80	1.2565	0.0000	1.2565
81	1.4506	0.0000	1.4506	82	0.8043	0.0000	0.8043
83	0.9164	0.0000	0.9164	84	0.3925	0.0000	0.3925
85	0.6296	0.0000	0.6296	86	0.6211	0.0000	0.6211
87	0.2216	0.0000	0.2216	88	0.2684	0.0000	0.2684
89	0.3157	0.0000	0.3157	90	0.4573	0.0000	0.4573
91	0.8435	0.0000	0.8435	92	1.2187	1.1578	0.0609
93	0.0528	0.0501	0.0026	94	0.4669	0.4435	0.0233
95	0.5929	0.5632	0.0296	96	0.6026	0.5725	0.0301
97	0.8153	0.7745	0.0408	98	1.3517	1.2842	0.0676
99	0.5859	0.5566	0.0293	100	0.1104	0.1049	0.0055
101	0.7143	0.6785	0.0357	102	0.7449	0.7077	0.0372
103	0.7966	0.7568	0.0398	104	1.5218	1.4457	0.0761
105	0.6279	0.5965	0.0314	106	0.3836	0.3644	0.0192
107	0.0000	0.0000	0.0000	108	0.8554	0.8126	0.0428
109	0.3408	0.3238	0.0170	110	0.7350	0.6983	0.0368
111	0.7392	0.7022	0.0370	112	0.0012	0.0011	0.0001
113	0.3806	0.3616	0.0190	114	0.4669	0.4436	0.0233

115	0.9017	0.8566	0.0451	116	0.7553	0.7175	0.0378
117	0.6103	0.5798	0.0305	118	0.4382	0.4163	0.0219
119	0.4831	0.4590	0.0242	120	0.1109	0.1053	0.0055
121	0.2352	0.2235	0.0118	122	0.2498	0.2374	0.0125
123	0.0422	0.0401	0.0021	124	0.6838	0.6496	0.0342
125	0.3216	0.3055	0.0161	126	0.2505	0.2380	0.0125
127	0.0459	0.0436	0.0023	128	1.1109	1.0554	0.0555
129	0.9069	0.8616	0.0453	130	0.6690	0.6356	0.0335
131	0.5184	0.4924	0.0259	132	0.4177	0.3968	0.0209
133	1.2502	1.1877	0.0625	134	0.7601	0.7221	0.0380
135	0.6081	0.5777	0.0304	136	0.4528	0.4302	0.0226
137	0.8862	0.8419	0.0443	138	0.5470	0.5196	0.0273
139	0.6143	0.5836	0.0307	140	0.8053	0.7651	0.0403
141	0.6538	0.6211	0.0327	142	0.9748	0.9261	0.0487
143	0.2106	0.2001	0.0105	144	0.0000	0.0000	0.0000
145	0.0000	0.0000	0.0000	146	0.2973	0.2824	0.0149
147	0.8058	0.7655	0.0403	148	0.8354	0.7936	0.0418
149	0.3717	0.3531	0.0186	150	0.1324	0.1258	0.0066
151	0.6085	0.5781	0.0304	152	0.5939	0.5642	0.0297
153	0.6585	0.6256	0.0329	154	0.4217	0.4006	0.0211
155	0.4197	0.3987	0.0210	156	0.5446	0.5173	0.0272
157	0.6572	0.6243	0.0329	158	0.9610	0.9129	0.0480
159	0.4398	0.4178	0.0220	160	0.1893	0.1798	0.0095
161	0.0848	0.0806	0.0042	162	0.7160	0.6802	0.0358
163	0.7168	0.6810	0.0358	164	0.9326	0.8860	0.0466
165	1.1245	1.0683	0.0562	166	1.1900	1.1305	0.0595
167	1.0100	0.9595	0.0505	168	0.8377	0.7958	0.0419
169	0.8408	0.7988	0.0420	170	0.8094	0.7689	0.0405
171	0.8282	0.7868	0.0414	172	0.8612	0.8182	0.0431
173	0.7928	0.7532	0.0396	174	0.6846	0.6504	0.0342
175	0.7404	0.7034	0.0370	176	0.9867	0.9374	0.0493
177	0.8743	0.8306	0.0437	178	0.7071	0.6718	0.0354
179	0.9029	0.8578	0.0451	180	0.3873	0.3679	0.0194
181	0.3890	0.3696	0.0195	182	0.7626	0.7244	0.0381
183	0.4533	0.4306	0.0227	184	1.0973	1.0425	0.0549
185	1.3804	1.3114	0.0690	186	0.9152	0.8695	0.0458
187	1.0040	0.9538	0.0502	188	1.2858	1.2215	0.0643
189	1.3068	1.2415	0.0653	190	1.0311	0.9795	0.0516
191	0.9085	0.8631	0.0454	192	1.2320	1.1704	0.0616
193	1.1847	1.1255	0.0592	194	1.0053	0.9551	0.0503
195	0.9296	0.8831	0.0465	196	0.9082	0.8628	0.0454
197	0.8271	0.7858	0.0414	198	0.4922	0.4676	0.0246
199	0.8596	0.8166	0.0430	200	0.7723	0.7337	0.0386
201	0.4812	0.4571	0.0241	202	0.8529	0.8102	0.0426
203	0.8318	0.7902	0.0416	204	0.8372	0.7953	0.0419
205	0.7395	0.7025	0.0370	206	0.9267	0.8804	0.0463
207	1.0338	0.9821	0.0517	208	1.2176	1.1568	0.0609
209	1.0064	0.9561	0.0503	210	0.8670	0.8236	0.0433
211	0.7124	0.6768	0.0356	212	0.4123	0.3917	0.0206
213	0.2873	0.2730	0.0144	214	0.4131	0.3924	0.0207
215	0.3530	0.3354	0.0177	216	0.4535	0.4309	0.0227
217	0.5590	0.5311	0.0280	218	0.8477	0.8053	0.0424
219	1.0772	1.0233	0.0539	220	0.8290	0.7876	0.0415
221	1.0484	0.9959	0.0524	222	0.9518	0.9042	0.0476
223	0.9426	0.8955	0.0471	224	0.9668	0.9185	0.0483
225	1.0267	0.9754	0.0513	226	0.9325	0.8859	0.0466
227	0.6897	0.6553	0.0345	228	0.8769	0.8331	0.0438
229	1.0626	1.0095	0.0531	230	0.9900	0.9405	0.0495
231	0.7484	0.7110	0.0374	232	0.6970	0.6621	0.0348
233	0.8038	0.7636	0.0402	234	0.6913	0.6567	0.0346
235	0.7437	0.7065	0.0372	236	0.9274	0.8810	0.0464
237	0.8516	0.8090	0.0426	238	0.7105	0.6750	0.0355
239	0.7175	0.6816	0.0359	240	0.7040	0.6688	0.0352

241	0.8408	0.7988	0.0420	242	1.0032	0.9530	0.0502
243	0.8911	0.8466	0.0446	244	0.8127	0.7721	0.0406
245	0.9988	0.9489	0.0499	246	1.2708	1.2073	0.0635
247	1.0605	1.0075	0.0530	248	0.8798	0.8358	0.0440
249	1.1049	1.0497	0.0552	250	0.4071	0.3868	0.0204
251	0.3069	0.2915	0.0153	252	0.4413	0.4193	0.0221
253	0.3653	0.3471	0.0183	254	0.2231	0.2119	0.0112
255	0.4721	0.4485	0.0236	256	0.6456	0.6133	0.0323
257	0.4089	0.3884	0.0204	258	0.0000	0.0000	0.0000
259	0.2307	0.2192	0.0115	260	0.3703	0.3518	0.0185
261	0.2213	0.2103	0.0111	262	0.2745	0.2607	0.0137
263	0.0905	0.0860	0.0045	264	0.0495	0.0470	0.0025
265	0.4643	0.4411	0.0232	266	0.5706	0.5420	0.0285
267	0.1144	0.1087	0.0057	268	0.0000	0.0000	0.0000
269	0.4251	0.4039	0.0213	270	0.1807	0.1717	0.0090
271	0.6207	0.5897	0.0310	272	0.9407	0.8937	0.0470
273	0.6603	0.6273	0.0330	274	0.5087	0.4832	0.0254
275	0.0000	0.0000	0.0000	276	0.5003	0.4753	0.0250
277	0.7825	0.7434	0.0391	278	0.9196	0.8736	0.0460
279	0.6615	0.6284	0.0331	280	0.5590	0.5311	0.0280
281	0.7951	0.7554	0.0398	282	0.3914	0.3719	0.0196
283	0.4269	0.4056	0.0213	284	0.7020	0.6669	0.0351
285	0.8615	0.8185	0.0431	286	0.6111	0.5805	0.0306
287	0.5084	0.4830	0.0254	288	0.7511	0.7136	0.0376
289	0.7498	0.7123	0.0375	290	1.1522	1.0946	0.0576
291	1.0318	0.9802	0.0516	292	0.7598	0.7218	0.0380
293	0.6878	0.6534	0.0344	294	0.7652	0.7270	0.0383
295	1.3668	1.2985	0.0683	296	0.8743	0.8306	0.0437
297	0.4701	0.4466	0.0235	298	0.7259	0.6897	0.0363
299	0.7179	0.6820	0.0359	300	0.5570	0.5291	0.0278
301	0.4496	0.4271	0.0225	302	0.8672	0.8238	0.0434
303	0.1888	0.1793	0.0094	304	0.0000	0.0000	0.0000
305	0.4639	0.4407	0.0232	306	0.2293	0.2179	0.0115
307	0.3883	0.0000	0.3883	308	0.4039	0.0000	0.4039
309	0.5884	0.0000	0.5884	310	0.2454	0.0000	0.2454
311	0.5047	0.0000	0.5047	312	0.3824	0.0000	0.3824
313	0.8638	0.0000	0.8638	314	0.5074	0.0000	0.5074
315	0.2902	0.0000	0.2902	316	0.8246	0.0000	0.8246
317	0.3834	0.0000	0.3834	318	0.3265	0.0000	0.3265
319	0.3183	0.0000	0.3183	320	0.3782	0.0000	0.3782
321	0.4962	0.0000	0.4962	322	0.3527	0.0000	0.3527
323	0.5783	0.0000	0.5783	324	0.4318	0.0000	0.4318
325	0.3292	0.0000	0.3292	326	0.6827	0.0000	0.6827
327	0.2353	0.0000	0.2353	328	0.4768	0.0000	0.4768
329	0.7250	0.0000	0.7250	330	1.0192	0.0000	1.0192
331	0.6932	0.0000	0.6932	332	0.2800	0.0000	0.2800
333	0.4945	0.0000	0.4945	334	0.8771	0.0000	0.8771
335	0.4962	0.0000	0.4962	336	0.5346	0.0000	0.5346
337	0.4822	0.0000	0.4822	338	0.3828	0.0000	0.3828
339	0.5596	0.0000	0.5596	340	0.4160	0.0000	0.4160
341	0.2046	0.0000	0.2046	342	0.0000	0.0000	0.0000
343	0.2324	0.0000	0.2324	344	0.3681	0.0000	0.3681
345	0.4649	0.0000	0.4649	346	0.0000	0.0000	0.0000
347	0.5764	0.0000	0.5764	348	0.1448	0.0000	0.1448
349	0.1178	0.0000	0.1178	350	0.0000	0.0000	0.0000
351	0.0000	0.0000	0.0000	352	0.0000	0.0000	0.0000
353	0.0158	0.0000	0.0158	354	0.0000	0.0000	0.0000
355	0.0000	0.0000	0.0000	356	0.0000	0.0000	0.0000
357	0.1013	0.0000	0.1013	358	0.2071	0.0000	0.2071
359	0.0738	0.0000	0.0738	360	0.2880	0.0000	0.2880
361	0.1604	0.0000	0.1604	362	0.1120	0.0000	0.1120
363	0.2244	0.0000	0.2244	364	0.1022	0.0000	0.1022
365	0.0000	0.0000	0.0000				

Totals: PET = 157.0664
PTRANS = 136.3586
PEVAPO = 65.0130

IRAIN = 1

Rainfall/Irrigation Details

Day	Time (hr)	Amount (cm)	Application Type	Efficiency	Changes In Rate/Head
4	0.000	0.0762	1	1.000	2
	1.000	0.0000			
5	0.000	0.0254	1	1.000	2
	1.000	0.0000			
6	0.000	0.1016	1	1.000	2
	1.000	0.0000			
16	0.000	0.7620	1	1.000	2
	1.000	0.0000			
18	0.000	0.0254	1	1.000	2
	1.000	0.0000			
22	0.000	0.1778	1	1.000	2
	1.000	0.0000			
23	0.000	0.4826	1	1.000	2
	1.000	0.0000			
24	0.000	1.0000	1	1.000	3
	1.000	0.0414			
	2.000	0.0000			
26	0.000	0.9906	1	1.000	2
	1.000	0.0000			
27	0.000	0.1016	1	1.000	2
	1.000	0.0000			
28	0.000	0.0254	1	1.000	2
	1.000	0.0000			
29	0.000	0.1778	1	1.000	2
	1.000	0.0000			
45	0.000	0.0508	1	1.000	2
	1.000	0.0000			
47	0.000	0.0254	1	1.000	2
	1.000	0.0000			
62	0.000	0.6350	1	1.000	2
	1.000	0.0000			
63	0.000	0.3556	1	1.000	2
	1.000	0.0000			
64	0.000	0.0254	1	1.000	2
	1.000	0.0000			
65	0.000	1.0000	1	1.000	3
	1.000	0.5494			
	2.000	0.0000			
66	0.000	0.0254	1	1.000	2
	1.000	0.0000			
67	0.000	0.1270	1	1.000	2
	1.000	0.0000			
71	0.000	1.0000	1	1.000	3
	1.000	0.0414			
	2.000	0.0000			
72	0.000	3.0000	1	1.000	3
	3.000	0.9624			
	4.000	0.0000			
73	0.000	0.6858	1	1.000	2
	1.000	0.0000			
74	0.000	0.1524	1	1.000	2

	1.000	0.0000			
84	0.000	0.3810	1	1.000	2
	1.000	0.0000			
85	0.000	0.0508	1	1.000	2
	1.000	0.0000			
93	0.000	0.4064	1	1.000	2
	1.000	0.0000			
94	0.000	0.0254	1	1.000	2
	1.000	0.0000			
100	0.000	2.0000	1	1.000	3
	2.000	0.8956			
	3.000	0.0000			
107	0.000	2.0000	1	1.000	3
	2.000	0.8448			
	3.000	0.0000			
109	0.000	0.7112	1	1.000	2
	1.000	0.0000			
111	0.000	0.0254	1	1.000	2
	1.000	0.0000			
112	0.000	4.0000	1	1.000	3
	4.000	0.8514			
	5.000	0.0000			
113	0.000	0.1270	1	1.000	2
	1.000	0.0000			
114	0.000	0.0254	1	1.000	2
	1.000	0.0000			
119	0.000	0.3302	1	1.000	2
	1.000	0.0000			
120	0.000	0.8128	1	1.000	2
	1.000	0.0000			
122	0.000	0.0254	1	1.000	2
	1.000	0.0000			
123	0.000	0.1778	1	1.000	2
	1.000	0.0000			
124	0.000	0.0254	1	1.000	2
	1.000	0.0000			
125	0.000	1.0000	1	1.000	3
	1.000	0.3208			
	2.000	0.0000			
126	0.000	3.0000	1	1.000	3
	3.000	0.0480			
	4.000	0.0000			
127	0.000	4.0000	1	1.000	3
	4.000	0.8006			
	5.000	0.0000			
141	0.000	0.0508	1	1.000	2
	1.000	0.0000			
143	0.000	0.8128	1	1.000	2
	1.000	0.0000			
144	0.000	1.0000	1	1.000	3
	1.000	0.2700			
	2.000	0.0000			
145	0.000	0.5334	1	1.000	2
	1.000	0.0000			
146	0.000	5.0000	1	1.000	3
	5.000	0.6642			
	6.000	0.0000			
147	0.000	0.3556	1	1.000	2
	1.000	0.0000			
151	0.000	2.0000	1	1.000	3
	2.000	0.6670			
	3.000	0.0000			
152	0.000	0.0762	1	1.000	2

	1.000	0.0000			
153	0.000	0.3810	1	1.000	2
	1.000	0.0000			
154	0.000	1.0000	1	1.000	3
	1.000	0.4478			
	2.000	0.0000			
155	0.000	4.0000	1	1.000	3
	4.000	0.3688			
	5.000	0.0000			
156	0.000	0.1778	1	1.000	2
	1.000	0.0000			
157	0.000	0.7366	1	1.000	2
	1.000	0.0000			
160	0.000	9.0000	1	1.000	3
	9.000	0.9822			
	10.000	0.0000			
161	0.000	1.0000	1	1.000	3
	1.000	0.2192			
	2.000	0.0000			
162	0.000	0.3302	1	1.000	2
	1.000	0.0000			
180	0.000	0.6604	1	1.000	2
	1.000	0.0000			
181	0.000	0.3048	1	1.000	2
	1.000	0.0000			
183	0.000	0.3302	1	1.000	2
	1.000	0.0000			
201	0.000	0.0254	1	1.000	2
	1.000	0.0000			
203	0.000	0.4064	1	1.000	2
	1.000	0.0000			
204	0.000	2.0000	1	1.000	3
	2.000	0.6924			
	3.000	0.0000			
205	0.000	1.0000	1	1.000	3
	1.000	0.4986			
	2.000	0.0000			
212	0.000	0.1016	1	1.000	2
	1.000	0.0000			
213	0.000	8.0000	1	1.000	3
	8.000	0.8646			
	9.000	0.0000			
214	0.000	0.1778	1	1.000	2
	1.000	0.0000			
215	0.000	0.0762	1	1.000	2
	1.000	0.0000			
218	0.000	1.0000	1	1.000	3
	1.000	0.2954			
	2.000	0.0000			
227	0.000	0.0254	1	1.000	2
	1.000	0.0000			
250	0.000	0.4318	1	1.000	2
	1.000	0.0000			
254	0.000	0.2286	1	1.000	2
	1.000	0.0000			
255	0.000	3.0000	1	1.000	3
	3.000	0.0734			
	4.000	0.0000			
258	0.000	2.0000	1	1.000	3
	2.000	0.6416			
	3.000	0.0000			
259	0.000	0.7112	1	1.000	2
	1.000	0.0000			

261	0.000	1.0000	1	1.000	3
	1.000	0.8542			
	2.000	0.0000			
262	0.000	0.1778	1	1.000	2
	1.000	0.0000			
264	0.000	1.0000	1	1.000	3
	1.000	0.8542			
	2.000	0.0000			
267	0.000	0.3048	1	1.000	2
	1.000	0.0000			
268	0.000	0.9398	1	1.000	2
	1.000	0.0000			
269	0.000	0.0254	1	1.000	2
	1.000	0.0000			
270	0.000	0.1016	1	1.000	2
	1.000	0.0000			
275	0.000	2.0000	1	1.000	3
	2.000	0.8448			
	3.000	0.0000			
276	0.000	0.0254	1	1.000	2
	1.000	0.0000			
303	0.000	0.0508	1	1.000	2
	1.000	0.0000			
304	0.000	0.0762	1	1.000	2
	1.000	0.0000			
305	0.000	0.5080	1	1.000	2
	1.000	0.0000			
310	0.000	0.0762	1	1.000	2
	1.000	0.0000			
314	0.000	0.2540	1	1.000	2
	1.000	0.0000			
315	0.000	0.3048	1	1.000	2
	1.000	0.0000			
342	0.000	0.3302	1	1.000	2
	1.000	0.0000			
350	0.000	0.3810	1	1.000	2
	1.000	0.0000			
351	0.000	3.0000	1	1.000	3
	3.000	0.2512			
	4.000	0.0000			
352	0.000	1.0000	1	1.000	3
	1.000	0.8796			
	2.000	0.0000			
353	0.000	0.0762	1	1.000	2
	1.000	0.0000			
354	0.000	0.0508	1	1.000	2
	1.000	0.0000			
355	0.000	0.0254	1	1.000	2
	1.000	0.0000			
356	0.000	0.0508	1	1.000	2
	1.000	0.0000			
357	0.000	0.1524	1	1.000	2
	1.000	0.0000			
358	0.000	0.4826	1	1.000	2
	1.000	0.0000			
363	0.000	0.2794	1	1.000	2
	1.000	0.0000			
364	0.000	0.0508	1	1.000	2
	1.000	0.0000			
365	0.000	0.0254	1	1.000	2
	1.000	0.0000			

NWATER (number of days of rain/irrigation) =105

Total Water Applied = 105.5624 cm

UNSAT-H Version 2.03
INITIAL CONDITIONS

```
Input Filename:   C:\Program Files\University of Wisconsin\WinUnsatH\project.in
Results Filename: C:\Program Files\University of Wisconsin\WinUnsatH\project.re
Date of Run:       7-MAY-**
Time of Run:      16:28:48
Title:
East Oak RDF Alternative Final Cover
```

NODE	DEPTH (cm)	Initial Conditions HEAD (cm)	THETA (vol.)	TEMP (K)	NODE	DEPTH (cm)	Initial Conditions HEAD (cm)	THETA (vol.)	TEMP (K)
1	0.000E+00	6.821E+02	0.2491	0.00	2	5.000E+00	6.766E+02	0.2497	0.00
3	9.000E+00	6.717E+02	0.2502	0.00	4	1.200E+01	6.683E+02	0.2505	0.00
5	1.500E+01	6.654E+02	0.2508	0.00	6	1.800E+01	6.641E+02	0.2836	0.00
7	2.100E+01	6.680E+02	0.2833	0.00	8	2.500E+01	6.824E+02	0.2821	0.00
9	3.000E+01	7.201E+02	0.2792	0.00	10	3.500E+01	7.846E+02	0.2746	0.00
11	4.000E+01	8.824E+02	0.2685	0.00	12	5.000E+01	1.226E+03	0.2525	0.00
13	6.000E+01	1.319E+03	0.2491	0.00	14	7.000E+01	1.226E+03	0.2525	0.00
15	8.000E+01	1.135E+03	0.2561	0.00	16	8.500E+01	1.101E+03	0.2575	0.00
17	8.800E+01	1.083E+03	0.2583	0.00	18	9.150E+01	1.065E+03	0.2591	0.00
19	9.200E+01	1.063E+03	0.2592	0.00	20	9.600E+01	1.045E+03	0.2600	0.00
21	1.000E+02	1.031E+03	0.2607	0.00	22	1.100E+02	1.007E+03	0.2619	0.00
23	1.150E+02	1.000E+03	0.2622	0.00	24	1.180E+02	9.981E+02	0.2623	0.00
25	1.220E+02	9.970E+02	0.2623	0.00					

Initial Water Storage = 31.7733 cm

NOTE: There are no temperature data when plants are modelled.

```
DAILY SUMMARY:  Day =    1, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12           25
Depth (cm)         =      5.00000    50.00000    122.00000
Water (cm3/cm3)    =      0.23373     0.25418      0.26225
Head (cm)          = 8.55055E+02 1.18197E+03 9.98949E+02
Water Flow (cm)    =-5.85167E-02 4.04852E-03 6.96978E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR          STORAGE
 31.7733+ 0.0000+ 0.0000 - 0.2095- 0.0000-  0.0007 = 31.5631  Versus  31.5631

Mass Balance = -1.9073E-06 cm;  Time step attempts =  396 and successes =  396
  Evaporation:  Potential =  0.8382 cm, Actual =  0.2095 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 66.0 %;  TMEAN = 270.9 K;  HDRY =  5.7041E+05 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day =    2, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12           25
Depth (cm)         =      5.00000    50.00000    122.00000
Water (cm3/cm3)    =      0.22376     0.25565      0.26216
```

```
Head (cm)          = 9.97723E+02 1.14538E+03 1.00088E+03
Water Flow (cm)    =-9.03575E-02 5.13281E-03 6.92918E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 31.5631+ 0.0000+ 0.0000 - 0.1809- 0.0000-  0.0007 = 31.3815  Versus  31.3815

Mass Balance = -1.9073E-06 cm;  Time step attempts =  577 and successes =  577
  Evaporation:  Potential =  0.7235 cm, Actual =  0.1809 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 53.9 %;  TMEAN = 275.1 K;  HDRY =  8.4711E+05 cm;  DAYUBC =     0

-----------------------------------------------------------------------------


DAILY SUMMARY:  Day =   3, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.22022     0.25690     0.26206
Head (cm)          = 1.05569E+03 1.11555E+03 1.00281E+03
Water Flow (cm)    =-7.95105E-02 5.99563E-03 6.88900E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 31.3815+ 0.0000+ 0.0000 - 0.0741- 0.0000-  0.0007 = 31.3068  Versus  31.3068

Mass Balance = -1.9073E-06 cm;  Time step attempts =  160 and successes =  160
  Evaporation:  Potential =  0.2963 cm, Actual =  0.0741 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 74.4 %;  TMEAN = 270.4 K;  HDRY =  4.0487E+05 cm;  DAYUBC =     0

-----------------------------------------------------------------------------


DAILY SUMMARY:  Day =   4, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.22056     0.25794     0.26197
Head (cm)          = 1.05005E+03 1.09152E+03 1.00468E+03
Water Flow (cm)    =-3.99023E-02 6.63686E-03 6.85036E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 31.3068+ 0.0762+ 0.0000 - 0.1137- 0.0000-  0.0007 = 31.2686  Versus  31.2688

Mass Balance = -1.6785E-04 cm;  Time step attempts = 2256 and successes = 2256
  Evaporation:  Potential =  0.4593 cm, Actual =  0.1137 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 65.0 %;  TMEAN = 267.0 K;  HDRY =  5.8999E+05 cm;  DAYUBC =     0

-----------------------------------------------------------------------------


DAILY SUMMARY:  Day =   5, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.21485     0.25878     0.26188
Head (cm)          = 1.15278E+03 1.07256E+03 1.00655E+03
Water Flow (cm)    =-5.07723E-02 7.06197E-03 6.81211E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00
```

```
 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR             STORAGE
 31.2688+ 0.0254+ 0.0000 - 0.1396- 0.0000-  0.0007 = 31.1539  Versus  31.1540

Mass Balance = -1.3733E-04 cm;  Time step attempts = 2506 and successes = 2506
  Evaporation:  Potential =  0.5640 cm, Actual =  0.1396 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 69.1 %;  TMEAN = 270.1 K;  HDRY =  5.0676E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day =    6, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.22410     0.25945     0.26179
Head (cm)          = 9.92396E+02 1.05785E+03 1.00841E+03
Water Flow (cm)    =-1.66131E-02 7.28865E-03 6.77427E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR             STORAGE
 31.1540+ 0.1016+ 0.0000 - 0.0000- 0.0000-  0.0007 = 31.2550  Versus  31.2550

Mass Balance = -7.4387E-05 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 92.5 %;  TMEAN = 272.3 K;  HDRY =  1.0623E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day =    7, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.21255     0.25996     0.26169
Head (cm)          = 1.19798E+03 1.04671E+03 1.01031E+03
Water Flow (cm)    =-3.49214E-02 7.34324E-03 6.73564E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR             STORAGE
 31.2550+ 0.0000+ 0.0000 - 0.2175- 0.0000-  0.0007 = 31.0369  Versus  31.0369

Mass Balance =  0.0000E+00 cm;  Time step attempts = 1102 and successes = 1102
  Evaporation:  Potential =  0.8700 cm, Actual =  0.2175 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 57.9 %;  TMEAN = 271.2 K;  HDRY =  7.4994E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day =    8, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.21154     0.26030     0.26163
Head (cm)          = 1.21855E+03 1.03958E+03 1.01174E+03
Water Flow (cm)    =-5.69699E-02 7.25630E-03 6.70154E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR             STORAGE
 31.0369+ 0.0000+ 0.0000 - 0.2729- 0.0000-  0.0007 = 30.7633  Versus  30.7648
```

```
Mass Balance = -1.5240E-03 cm;  Time step attempts =35311 and successes =35311
  Evaporation:  Potential =  1.2102 cm, Actual =  0.2729 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 63.0 %;  TMEAN = 276.8 K;  HDRY =  6.3392E+05 cm;  DAYUBC =  2978

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =   9, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.21457     0.26059     0.26154
Head (cm)          = 1.15802E+03 1.03342E+03 1.01351E+03
Water Flow (cm)    =-2.51303E-02 7.07921E-03 6.67149E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL   RUNOFF    EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
 30.7648+ 0.0000+ 0.0000 - 0.0128- 0.0000-   0.0007 = 30.7514  Versus  30.7518

Mass Balance = -4.4632E-04 cm;  Time step attempts =10092 and successes =10092
  Evaporation:  Potential =  1.2475 cm, Actual =  0.0128 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 57.5 %;  TMEAN = 280.9 K;  HDRY =  7.5866E+05 cm;  DAYUBC =  4892

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  10, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.21539     0.26081     0.26145
Head (cm)          = 1.14250E+03 1.02876E+03 1.01536E+03
Water Flow (cm)    =-1.63205E-02 6.84189E-03 6.63459E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL   RUNOFF    EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
 30.7518+ 0.0000+ 0.0000 - 0.0085- 0.0000-   0.0007 = 30.7426  Versus  30.7426

Mass Balance = -3.2425E-05 cm;  Time step attempts =  967 and successes =  967
  Evaporation:  Potential =  1.1317 cm, Actual =  0.0085 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 71.4 %;  TMEAN = 283.7 K;  HDRY =  4.6164E+05 cm;  DAYUBC =   912

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  11, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.21579     0.26095     0.26137
Head (cm)          = 1.13484E+03 1.02577E+03 1.01707E+03
Water Flow (cm)    =-1.34841E-02 6.56420E-03 6.60086E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL   RUNOFF    EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
 30.7426+ 0.0000+ 0.0000 - 0.0182- 0.0000-   0.0007 = 30.7238  Versus  30.7244

Mass Balance = -6.2561E-04 cm;  Time step attempts =15090 and successes =15090
  Evaporation:  Potential =  2.5196 cm, Actual =  0.0182 cm
```

```
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 44.2 %;  TMEAN = 287.0 K;  HDRY =  1.1187E+06 cm;  DAYUBC =  3485

----------------------------------------------------------------------------


DAILY SUMMARY:  Day =  12, Simulated Time = 24.0000 hr
-------------
Node Number       =        2          12          25
Depth (cm)        =     5.00000    50.00000   122.00000
Water (cm3/cm3)   =     0.21588     0.26105     0.26128
Head (cm)         = 1.13331E+03 1.02374E+03 1.01886E+03
Water Flow (cm)   =-1.19615E-02 6.24510E-03 6.56591E-04
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 30.7244+ 0.0000+ 0.0000 - 0.0105- 0.0000-  0.0007 = 30.7133  Versus  30.7134

Mass Balance = -7.0572E-05 cm;  Time step attempts = 3651 and successes = 3651
  Evaporation:  Potential =  1.4404 cm, Actual =  0.0105 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 50.4 %;  TMEAN = 285.7 K;  HDRY =  9.3903E+05 cm;  DAYUBC =  3623

----------------------------------------------------------------------------


DAILY SUMMARY:  Day =  13, Simulated Time = 24.0000 hr
-------------
Node Number       =        2          12          25
Depth (cm)        =     5.00000    50.00000   122.00000
Water (cm3/cm3)   =     0.21570     0.26110     0.26119
Head (cm)         = 1.13664E+03 1.02257E+03 1.02068E+03
Water Flow (cm)   =-1.14587E-02 5.90487E-03 6.53046E-04
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 30.7134+ 0.0000+ 0.0000 - 0.0084- 0.0000-  0.0007 = 30.7043  Versus  30.7043

Mass Balance = -2.4796E-05 cm;  Time step attempts =  747 and successes =  747
  Evaporation:  Potential =  1.4399 cm, Actual =  0.0084 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 66.2 %;  TMEAN = 282.0 K;  HDRY =  5.6521E+05 cm;  DAYUBC =   700

----------------------------------------------------------------------------


DAILY SUMMARY:  Day =  14, Simulated Time = 24.0000 hr
-------------
Node Number       =        2          12          25
Depth (cm)        =     5.00000    50.00000   122.00000
Water (cm3/cm3)   =     0.21552     0.26112     0.26111
Head (cm)         = 1.14004E+03 1.02217E+03 1.02238E+03
Water Flow (cm)   =-1.11445E-02 5.57249E-03 6.49751E-04
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 30.7043+ 0.0000+ 0.0000 - 0.0134- 0.0000-  0.0006 = 30.6903  Versus  30.6908

Mass Balance = -5.2261E-04 cm;  Time step attempts =10092 and successes =10092
  Evaporation:  Potential =  1.1554 cm, Actual =  0.0134 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 61.4 %;  TMEAN = 279.3 K;  HDRY =  6.6825E+05 cm;  DAYUBC =  4367
```

```
DAILY SUMMARY:  Day =  15, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.21534     0.26112     0.26103
Head (cm)          = 1.14336E+03 1.02227E+03 1.02406E+03
Water Flow (cm)    =-1.06167E-02 5.24410E-03 6.46510E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN  NEWSTOR          STORAGE
 30.6908+ 0.0000+ 0.0000 - 0.0146- 0.0000-  0.0006 = 30.6756  Versus  30.6761

Mass Balance = -5.1880E-04 cm;  Time step attempts =10092 and successes =10092
  Evaporation:  Potential =  2.1795 cm, Actual =  0.0146 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 46.7 %;  TMEAN = 281.8 K;  HDRY =  1.0450E+06 cm;  DAYUBC =  3756
```

```
DAILY SUMMARY:  Day =  16, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.23304     0.26110     0.26097
Head (cm)          = 8.64106E+02 1.02264E+03 1.02543E+03
Water Flow (cm)    = 1.39756E-01 4.93572E-03 6.43523E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN  NEWSTOR          STORAGE
 30.6761+ 0.7620+ 0.0000 - 0.5403- 0.0000-  0.0006 = 30.8971  Versus  30.8981

Mass Balance = -9.3651E-04 cm;  Time step attempts =28266 and successes =28266
  Evaporation:  Potential =  2.5770 cm, Actual =  0.5403 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 58.1 %;  TMEAN = 286.5 K;  HDRY =  7.4446E+05 cm;  DAYUBC =  3421
```

```
DAILY SUMMARY:  Day =  17, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.22937     0.26106     0.26089
Head (cm)          = 9.13970E+02 1.02340E+03 1.02707E+03
Water Flow (cm)    = 2.40941E-03 4.65285E-03 6.40777E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN  NEWSTOR          STORAGE
 30.8981+ 0.0000+ 0.0000 - 0.0161- 0.0000-  0.0006 = 30.8813  Versus  30.8814

Mass Balance = -8.9645E-05 cm;  Time step attempts =10092 and successes =10092
  Evaporation:  Potential =  1.5049 cm, Actual =  0.0161 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 48.7 %;  TMEAN = 281.8 K;  HDRY =  9.8610E+05 cm;  DAYUBC =  3871
```

```
DAILY SUMMARY:  Day =  18, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.22314     0.26105     0.26086
Head (cm)          = 1.00752E+03 1.02375E+03 1.02770E+03
Water Flow (cm)    =-1.75786E-02 4.41766E-03 6.38679E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 30.8814+ 0.0254+ 0.0000 - 0.0127- 0.0000-  0.0006 = 30.8935  Versus  30.8935

Mass Balance = -5.5313E-05 cm;  Time step attempts =35451 and successes =35451
  Evaporation:  Potential =  0.0512 cm, Actual =  0.0127 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 80.5 %;  TMEAN = 273.4 K;  HDRY =  2.9718E+05 cm;  DAYUBC =     0

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  19, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.22220     0.26100     0.26079
Head (cm)          = 1.02280E+03 1.02465E+03 1.02904E+03
Water Flow (cm)    =-2.39792E-02 4.19113E-03 6.36811E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 30.8935+ 0.0000+ 0.0000 - 0.0843- 0.0000-  0.0006 = 30.8086  Versus  30.8084

Mass Balance =  1.9264E-04 cm;  Time step attempts =29610 and successes =29610
  Evaporation:  Potential =  1.2887 cm, Actual =  0.0843 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 58.6 %;  TMEAN = 276.5 K;  HDRY =  7.3310E+05 cm;  DAYUBC =  4737

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  20, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.22199     0.26096     0.26072
Head (cm)          = 1.02619E+03 1.02563E+03 1.03062E+03
Water Flow (cm)    =-1.19405E-02 3.94389E-03 6.34053E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 30.8084+ 0.0000+ 0.0000 - 0.0138- 0.0000-  0.0006 = 30.7939  Versus  30.7942

Mass Balance = -2.4796E-04 cm;  Time step attempts = 7593 and successes = 7593
  Evaporation:  Potential =  1.1442 cm, Actual =  0.0138 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 54.1 %;  TMEAN = 278.7 K;  HDRY =  8.4307E+05 cm;  DAYUBC =  3239

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  21, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12          25
```

```
Depth (cm)            =     5.00000     50.00000   122.00000
Water (cm3/cm3)       =     0.22131      0.26092     0.26064
Head (cm)             = 1.03745E+03 1.02645E+03 1.03227E+03
Water Flow (cm)       =-1.02783E-02 3.70157E-03 6.30971E-04
Plant Sink (cm)       = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 30.7942+ 0.0000+ 0.0000 - 0.0112- 0.0000-  0.0006 = 30.7824  Versus  30.7824

Mass Balance = -3.8147E-06 cm;  Time step attempts =  265 and successes =  265
  Evaporation:  Potential =  0.7843 cm, Actual =  0.0112 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 63.1 %;  TMEAN = 275.4 K;  HDRY =  6.3055E+05 cm;  DAYUBC =   228
```

```
DAILY SUMMARY:  Day =  22, Simulated Time = 24.0000 hr
-------------
Node Number           =         2          12          25
Depth (cm)            =     5.00000     50.00000   122.00000
Water (cm3/cm3)       =     0.20943      0.26089     0.26057
Head (cm)             = 1.26301E+03 1.02702E+03 1.03378E+03
Water Flow (cm)       =-4.54826E-02 3.50657E-03 6.28156E-04
Plant Sink (cm)       = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 30.7824+ 0.1778+ 0.0000 - 0.0043- 0.0000-  0.0006 = 30.9552  Versus  30.9556

Mass Balance = -3.4142E-04 cm;  Time step attempts = 8115 and successes = 8115
  Evaporation:  Potential =  0.0176 cm, Actual =  0.0043 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 98.4 %;  TMEAN = 270.7 K;  HDRY =  2.1467E+04 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day =  23, Simulated Time = 24.0000 hr
-------------
Node Number           =         2          12          25
Depth (cm)            =     5.00000     50.00000   122.00000
Water (cm3/cm3)       =     0.23061      0.26087     0.26050
Head (cm)             = 8.96711E+02 1.02747E+03 1.03528E+03
Water Flow (cm)       = 1.37179E-01 3.33028E-03 6.25363E-04
Plant Sink (cm)       = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 30.9556+ 0.4826+ 0.0000 - 0.1854- 0.0000-  0.0006 = 31.2521  Versus  31.2522

Mass Balance = -7.8201E-05 cm;  Time step attempts = 2402 and successes = 2402
  Evaporation:  Potential =  0.7492 cm, Actual =  0.1854 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 71.6 %;  TMEAN = 272.3 K;  HDRY =  4.5856E+05 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day =  24, Simulated Time = 24.0000 hr
-------------
Node Number           =         2          12          25
Depth (cm)            =     5.00000     50.00000   122.00000
Water (cm3/cm3)       =     0.25515      0.26085     0.26043
Head (cm)             = 6.26009E+02 1.02784E+03 1.03675E+03
```

```
Water Flow (cm)     = 4.64075E-01 3.17434E-03 6.22654E-04
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 31.2522+ 1.0410+ 0.0004 - 0.4119- 0.0000-  0.0006 = 31.8807  Versus  31.8808

Mass Balance = -7.0572E-05 cm;  Time step attempts = 2547 and successes = 2547
  Evaporation:  Potential =  1.6811 cm, Actual =  0.4119 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 52.0 %;  TMEAN = 279.5 K;  HDRY =  8.9634E+05 cm;  DAYUBC =    26

---------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  25, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.23451     0.26085     0.26036
Head (cm)           = 8.45104E+02 1.02795E+03 1.03818E+03
Water Flow (cm)     =-1.15883E-01 3.03573E-03 6.19975E-04
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 31.8808+ 0.0000+ 0.0000 - 0.4225- 0.0000-  0.0006 = 31.4577  Versus  31.4577

Mass Balance = -4.3869E-05 cm;  Time step attempts = 2533 and successes = 2533
  Evaporation:  Potential =  1.6900 cm, Actual =  0.4225 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 51.2 %;  TMEAN = 283.2 K;  HDRY =  9.1671E+05 cm;  DAYUBC =     0

---------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  26, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.28251     0.26089     0.26030
Head (cm)           = 4.29462E+02 1.02704E+03 1.03955E+03
Water Flow (cm)     = 4.63177E-01 2.94796E-03 6.17520E-04
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 31.4577+ 0.9906+ 0.0000 - 0.0000- 0.0000-  0.0006 = 32.4477  Versus  32.4475

Mass Balance =  2.2888E-04 cm;  Time step attempts = 5148 and successes = 5148
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 93.8 %;  TMEAN = 282.6 K;  HDRY =  8.7661E+04 cm;  DAYUBC =     0

---------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  27, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.25171     0.26104     0.26024
Head (cm)           = 6.57271E+02 1.02398E+03 1.04088E+03
Water Flow (cm)     =-6.73744E-02 2.95917E-03 6.15089E-04
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00
```

```
 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS     DRAIN   NEWSTOR            STORAGE
 32.4475+ 0.1016+ 0.0000 - 0.4340- 0.0000-  0.0006 = 32.1144  Versus  32.1144

Mass Balance =  6.4850E-05 cm;  Time step attempts = 2591 and successes = 2591
  Evaporation:  Potential =  1.7536 cm, Actual =  0.4340 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 73.5 %;  TMEAN = 284.8 K;  HDRY =  4.2266E+05 cm;  DAYUBC =     0

---------------------------------------------------------------------------


DAILY SUMMARY:  Day =  28, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12           25
Depth (cm)         =     5.00000    50.00000    122.00000
Water (cm3/cm3)    =     0.25333     0.26136      0.26018
Head (cm)          = 6.42328E+02 1.01719E+03 1.04217E+03
Water Flow (cm)    =-7.90657E-02 3.14763E-03 6.12744E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS     DRAIN   NEWSTOR            STORAGE
 32.1144+ 0.0254+ 0.0000 - 0.0497- 0.0000-  0.0006 = 32.0894  Versus  32.0893

Mass Balance =  1.4496E-04 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.2010 cm, Actual =  0.0497 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 86.0 %;  TMEAN = 276.5 K;  HDRY =  2.0606E+05 cm;  DAYUBC =     0

---------------------------------------------------------------------------


DAILY SUMMARY:  Day =  29, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12           25
Depth (cm)         =     5.00000    50.00000    122.00000
Water (cm3/cm3)    =     0.26382     0.26190      0.26012
Head (cm)          = 5.54677E+02 1.00608E+03 1.04341E+03
Water Flow (cm)    = 8.93200E-02 3.58779E-03 6.10497E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS     DRAIN   NEWSTOR            STORAGE
 32.0893+ 0.1778+ 0.0000 - 0.0098- 0.0000-  0.0006 = 32.2567  Versus  32.2565

Mass Balance =  1.2970E-04 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.0397 cm, Actual =  0.0098 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 85.8 %;  TMEAN = 274.0 K;  HDRY =  2.1047E+05 cm;  DAYUBC =     0

---------------------------------------------------------------------------


DAILY SUMMARY:  Day =  30, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12           25
Depth (cm)         =     5.00000    50.00000    122.00000
Water (cm3/cm3)    =     0.24082     0.26259      0.26006
Head (cm)          = 7.69245E+02 9.92173E+02 1.04465E+03
Water Flow (cm)    =-7.97296E-02 4.23534E-03 6.08265E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS     DRAIN   NEWSTOR            STORAGE
 32.2565+ 0.0000+ 0.0000 - 0.2859- 0.0000-  0.0006 = 31.9700  Versus  31.9700
```

```
Mass Balance = -1.9073E-06 cm;  Time step attempts =  500 and successes =  500
  Evaporation:  Potential =  1.1438 cm, Actual =  0.2859 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 63.4 %;  TMEAN = 276.5 K;  HDRY =  6.2462E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  31, Simulated Time = 24.0000 hr
-------------
Node Number        =         2           12           25
Depth (cm)         =     5.00000     50.00000    122.00000
Water (cm3/cm3)    =     0.23678      0.26323      0.26003
Head (cm)          = 8.16723E+02 9.79372E+02 1.04524E+03
Water Flow (cm)    =-1.04958E-01 4.97898E-03 6.06400E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 31.9700+ 0.0000+ 0.0000 - 0.4530- 0.0000-  0.0006 = 31.5163  Versus  31.5132

Mass Balance =  3.0861E-03 cm;  Time step attempts =59984 and successes =59984
  Evaporation:  Potential =  1.8121 cm, Actual =  0.4530 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 45.5 %;  TMEAN = 282.0 K;  HDRY =  1.0802E+06 cm;  DAYUBC =     0

------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  32, Simulated Time = 24.0000 hr
-------------
Node Number        =         2           12           25
Depth (cm)         =     5.00000     50.00000    122.00000
Water (cm3/cm3)    =     0.23991      0.26389      0.25999
Head (cm)          = 7.79719E+02 9.66511E+02 1.04622E+03
Water Flow (cm)    =-3.05054E-02 5.60856E-03 6.05430E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 31.5132+ 0.0000+ 0.0000 - 0.0294- 0.0000-  0.0006 = 31.4832  Versus  31.4814

Mass Balance =  1.8635E-03 cm;  Time step attempts =32583 and successes =32583
  Evaporation:  Potential =  2.1429 cm, Actual =  0.0294 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 47.3 %;  TMEAN = 285.9 K;  HDRY =  1.0248E+06 cm;  DAYUBC =  3606

------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  33, Simulated Time = 24.0000 hr
-------------
Node Number        =         2           12           25
Depth (cm)         =     5.00000     50.00000    122.00000
Water (cm3/cm3)    =     0.23987      0.26458      0.25994
Head (cm)          = 7.80124E+02 9.53209E+02 1.04728E+03
Water Flow (cm)    =-1.53491E-02 6.26304E-03 6.03557E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 31.4814+ 0.0000+ 0.0000 - 0.0164- 0.0000-  0.0006 = 31.4643  Versus  31.4642

Mass Balance =  1.4877E-04 cm;  Time step attempts = 5094 and successes = 5094
  Evaporation:  Potential =  2.5037 cm, Actual =  0.0164 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
```

```
RHMEAN = 41.4 %;  TMEAN = 290.1 K;  HDRY =  1.2078E+06 cm;  DAYUBC =  3302
---------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  34, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.23900     0.26517     0.25989
Head (cm)          = 7.90293E+02 9.41968E+02 1.04830E+03
Water Flow (cm)    =-1.36481E-02 6.78317E-03 6.01708E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR           STORAGE
 31.4642+ 0.0000+ 0.0000 - 0.0134- 0.0000-  0.0006 = 31.4502  Versus  31.4502

Mass Balance =  1.9073E-06 cm;  Time step attempts = 2700 and successes = 2700
  Evaporation:  Potential =  1.9031 cm, Actual =  0.0134 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 62.2 %;  TMEAN = 281.5 K;  HDRY =  6.5069E+05 cm;  DAYUBC =  2655
---------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  35, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.23825     0.26564     0.25985
Head (cm)          = 7.99078E+02 9.33252E+02 1.04925E+03
Water Flow (cm)    =-1.27588E-02 7.11458E-03 6.00049E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR           STORAGE
 31.4502+ 0.0000+ 0.0000 - 0.0185- 0.0000-  0.0006 = 31.4311  Versus  31.4317

Mass Balance = -5.7983E-04 cm;  Time step attempts =10092 and successes =10092
  Evaporation:  Potential =  1.6827 cm, Actual =  0.0185 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 52.3 %;  TMEAN = 280.7 K;  HDRY =  8.8797E+05 cm;  DAYUBC =  3554
---------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  36, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.23738     0.26602     0.25980
Head (cm)          = 8.09531E+02 9.26250E+02 1.05017E+03
Water Flow (cm)    =-1.20947E-02 7.29146E-03 5.98416E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR           STORAGE
 31.4317+ 0.0000+ 0.0000 - 0.0160- 0.0000-  0.0006 = 31.4151  Versus  31.4152

Mass Balance = -6.8665E-05 cm;  Time step attempts = 3803 and successes = 3803
  Evaporation:  Potential =  1.6692 cm, Actual =  0.0160 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 52.5 %;  TMEAN = 279.3 K;  HDRY =  8.8224E+05 cm;  DAYUBC =  3791
---------------------------------------------------------------------------------
```

```
DAILY SUMMARY:  Day =  37, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12           25
Depth (cm)         =     5.00000     50.00000    122.00000
Water (cm3/cm3)    =     0.23659      0.26631      0.25976
Head (cm)          = 8.19125E+02 9.20916E+02 1.05104E+03
Water Flow (cm)    =-1.15147E-02 7.34871E-03 5.96877E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR              STORAGE
 31.4152+ 0.0000+ 0.0000 - 0.0164- 0.0000-  0.0006 = 31.3981  Versus  31.3986

Mass Balance = -4.9019E-04 cm;  Time step attempts = 7593 and successes = 7593
  Evaporation:  Potential =  1.7530 cm, Actual =  0.0164 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 45.7 %;  TMEAN = 282.3 K;  HDRY =  1.0723E+06 cm;  DAYUBC =  4182

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  38, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12           25
Depth (cm)         =     5.00000     50.00000    122.00000
Water (cm3/cm3)    =     0.23570      0.26654      0.25973
Head (cm)          = 8.30072E+02 9.16794E+02 1.05188E+03
Water Flow (cm)    =-1.13989E-02 7.30822E-03 5.95399E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR              STORAGE
 31.3986+ 0.0000+ 0.0000 - 0.0145- 0.0000-  0.0006 = 31.3835  Versus  31.3835

Mass Balance = -5.7220E-06 cm;  Time step attempts = 2791 and successes = 2791
  Evaporation:  Potential =  1.5565 cm, Actual =  0.0145 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 50.5 %;  TMEAN = 275.1 K;  HDRY =  9.3651E+05 cm;  DAYUBC =  2766

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  39, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12           25
Depth (cm)         =     5.00000     50.00000    122.00000
Water (cm3/cm3)    =     0.23494      0.26671      0.25969
Head (cm)          = 8.39646E+02 9.13793E+02 1.05264E+03
Water Flow (cm)    =-1.10851E-02 7.19980E-03 5.94056E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR              STORAGE
 31.3835+ 0.0000+ 0.0000 - 0.0159- 0.0000-  0.0006 = 31.3670  Versus  31.3675

Mass Balance = -5.6648E-04 cm;  Time step attempts =10092 and successes =10092
  Evaporation:  Potential =  1.2447 cm, Actual =  0.0159 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 43.5 %;  TMEAN = 274.5 K;  HDRY =  1.1399E+06 cm;  DAYUBC =  5078

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  40, Simulated Time = 24.0000 hr
```

```
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.23419     0.26683     0.25966
Head (cm)          = 8.49123E+02 9.11504E+02 1.05338E+03
Water Flow (cm)    =-1.07390E-02 7.04916E-03 5.92761E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 31.3675+ 0.0000+ 0.0000 - 0.0150- 0.0000-  0.0006 = 31.3519  Versus  31.3522

Mass Balance = -2.6512E-04 cm;  Time step attempts = 5094 and successes = 5094
  Evaporation:  Potential =  2.8784 cm, Actual =  0.0150 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 38.0 %;  TMEAN = 282.9 K;  HDRY =  1.3264E+06 cm;  DAYUBC =  3756

------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  41, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.23334     0.26693     0.25962
Head (cm)          = 8.60124E+02 9.09814E+02 1.05410E+03
Water Flow (cm)    =-1.09130E-02 6.86194E-03 5.91488E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 31.3522+ 0.0000+ 0.0000 - 0.0128- 0.0000-  0.0006 = 31.3388  Versus  31.3388

Mass Balance = -2.2888E-05 cm;  Time step attempts =  765 and successes =  765
  Evaporation:  Potential =  1.9546 cm, Actual =  0.0128 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 49.5 %;  TMEAN = 281.2 K;  HDRY =  9.6390E+05 cm;  DAYUBC =   733

------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  42, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.23261     0.26699     0.25959
Head (cm)          = 8.69819E+02 9.08717E+02 1.05474E+03
Water Flow (cm)    =-1.08804E-02 6.66218E-03 5.90361E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 31.3388+ 0.0000+ 0.0000 - 0.0151- 0.0000-  0.0006 = 31.3231  Versus  31.3235

Mass Balance = -4.2343E-04 cm;  Time step attempts = 7593 and successes = 7593
  Evaporation:  Potential =  1.3669 cm, Actual =  0.0151 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 45.1 %;  TMEAN = 271.8 K;  HDRY =  1.0915E+06 cm;  DAYUBC =  4779

------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  43, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
```

```
Water (cm3/cm3)    =     0.23181     0.26703     0.25957
Head (cm)          = 8.80462E+02 9.08015E+02 1.05535E+03
Water Flow (cm)    =-1.09814E-02 6.45021E-03 5.89287E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR          STORAGE
 31.3235+ 0.0000+ 0.0000 - 0.0134- 0.0000-  0.0006 = 31.3095  Versus  31.3097

Mass Balance = -1.6975E-04 cm;  Time step attempts = 4194 and successes = 4194
  Evaporation:  Potential =  0.5118 cm, Actual =  0.0134 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 51.8 %;  TMEAN = 267.9 K;  HDRY =  9.0174E+05 cm;  DAYUBC =  4168

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  44, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12           25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.23101     0.26705     0.25954
Head (cm)          = 8.91312E+02 9.07656E+02 1.05592E+03
Water Flow (cm)    =-1.11849E-02 6.23230E-03 5.88289E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR          STORAGE
 31.3097+ 0.0000+ 0.0000 - 0.0141- 0.0000-  0.0006 = 31.2950  Versus  31.2950

Mass Balance =  1.7166E-05 cm;  Time step attempts = 2167 and successes = 2167
  Evaporation:  Potential =  0.4374 cm, Actual =  0.0141 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 55.2 %;  TMEAN = 271.8 K;  HDRY =  8.1459E+05 cm;  DAYUBC =  2146

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  45, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12           25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.22467     0.26705     0.25954
Head (cm)          = 9.83469E+02 9.07654E+02 1.05595E+03
Water Flow (cm)    =-3.27174E-02 6.04635E-03 5.87760E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR          STORAGE
 31.2950+ 0.0508+ 0.0000 - 0.0629- 0.0000-  0.0006 = 31.2823  Versus  31.2818

Mass Balance =  5.1117E-04 cm;  Time step attempts =35420 and successes =35420
  Evaporation:  Potential =  0.2540 cm, Actual =  0.0629 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 79.5 %;  TMEAN = 276.8 K;  HDRY =  3.1506E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  46, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12           25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.22470     0.26704     0.25952
Head (cm)          = 9.83035E+02 9.07752E+02 1.05637E+03
Water Flow (cm)    =-2.90897E-02 5.88173E-03 5.87436E-04
```

```
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR              STORAGE
 31.2818+ 0.0000+ 0.0000 - 0.0728- 0.0000-  0.0006 = 31.2084  Versus  31.2093

Mass Balance = -9.4795E-04 cm;  Time step attempts =27529 and successes =27529
  Evaporation:  Potential =  0.9993 cm, Actual =  0.0728 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 73.1 %;  TMEAN = 278.7 K;  HDRY =  4.2912E+05 cm;  DAYUBC =  2913

-------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  47, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.22446     0.26703     0.25950
Head (cm)           = 9.86802E+02 9.07995E+02 1.05672E+03
Water Flow (cm)     =-2.01296E-02 5.71172E-03 5.86811E-04
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR              STORAGE
 31.2093+ 0.0254+ 0.0000 - 0.0524- 0.0000-  0.0006 = 31.1817  Versus  31.1854

Mass Balance = -3.6469E-03 cm;  Time step attempts =44557 and successes =44557
  Evaporation:  Potential =  0.6463 cm, Actual =  0.0524 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 53.7 %;  TMEAN = 274.5 K;  HDRY =  8.5115E+05 cm;  DAYUBC =  4387

-------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  48, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.22456     0.26700     0.25948
Head (cm)           = 9.85118E+02 9.08554E+02 1.05715E+03
Water Flow (cm)     =-1.33164E-02 5.51568E-03 5.86114E-04
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR              STORAGE
 31.1854+ 0.0000+ 0.0000 - 0.0147- 0.0000-  0.0006 = 31.1701  Versus  31.1705

Mass Balance = -4.2152E-04 cm;  Time step attempts =10092 and successes =10092
  Evaporation:  Potential =  1.4377 cm, Actual =  0.0147 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 42.9 %;  TMEAN = 277.6 K;  HDRY =  1.1608E+06 cm;  DAYUBC =  3526

-------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  49, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.22433     0.26695     0.25947
Head (cm)           = 9.88734E+02 9.09384E+02 1.05755E+03
Water Flow (cm)     =-1.15877E-02 5.29929E-03 5.85413E-04
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR              STORAGE
```

```
 31.1705+ 0.0000+ 0.0000 - 0.0129- 0.0000-  0.0006 = 31.1570  Versus  31.1573

Mass Balance = -3.1281E-04 cm;  Time step attempts = 5094 and successes = 5094
  Evaporation:  Potential =  2.5694 cm, Actual =  0.0129 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 41.3 %;  TMEAN = 282.9 K;  HDRY =  1.2123E+06 cm;  DAYUBC =  4659

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  50, Simulated Time = 24.0000 hr
-------------
Node Number         =     2          12          25
Depth (cm)          =   5.00000    50.00000   122.00000
Water (cm3/cm3)     =   0.22396     0.26689     0.25945
Head (cm)           = 9.94617E+02 9.10477E+02 1.05790E+03
Water Flow (cm)     =-1.10922E-02 5.07960E-03 5.84781E-04
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 31.1573+ 0.0000+ 0.0000 - 0.0118- 0.0000-  0.0006 = 31.1449  Versus  31.1452

Mass Balance = -2.3460E-04 cm;  Time step attempts = 4588 and successes = 4588
  Evaporation:  Potential =  2.1349 cm, Actual =  0.0118 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 47.6 %;  TMEAN = 283.2 K;  HDRY =  1.0170E+06 cm;  DAYUBC =  4573

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  51, Simulated Time = 24.0000 hr
-------------
Node Number         =     2          12          25
Depth (cm)          =   5.00000    50.00000   122.00000
Water (cm3/cm3)     =   0.22359     0.26682     0.25944
Head (cm)           = 1.00042E+03 9.11786E+02 1.05820E+03
Water Flow (cm)     =-1.07259E-02 4.86369E-03 5.84240E-04
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 31.1452+ 0.0000+ 0.0000 - 0.0142- 0.0000-  0.0006 = 31.1303  Versus  31.1308

Mass Balance = -4.3869E-04 cm;  Time step attempts = 7593 and successes = 7593
  Evaporation:  Potential =  2.8467 cm, Actual =  0.0142 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 36.6 %;  TMEAN = 286.8 K;  HDRY =  1.3793E+06 cm;  DAYUBC =  4846

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  52, Simulated Time = 24.0000 hr
-------------
Node Number         =     2          12          25
Depth (cm)          =   5.00000    50.00000   122.00000
Water (cm3/cm3)     =   0.22319     0.26673     0.25942
Head (cm)           = 1.00675E+03 9.13299E+02 1.05845E+03
Water Flow (cm)     =-1.04425E-02 4.64554E-03 5.83771E-04
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 31.1308+ 0.0000+ 0.0000 - 0.0130- 0.0000-  0.0006 = 31.1172  Versus  31.1174

Mass Balance = -2.6131E-04 cm;  Time step attempts = 5094 and successes = 5094
```

```
  Evaporation:  Potential =  2.6205 cm, Actual =  0.0130 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 31.2 %;  TMEAN = 286.5 K;  HDRY =  1.5982E+06 cm;  DAYUBC =  3796

------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  53, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12          25
Depth (cm)        =    5.00000    50.00000   122.00000
Water (cm3/cm3)   =    0.22276     0.26664     0.25941
Head (cm)         = 1.01370E+03 9.14991E+02 1.05866E+03
Water Flow (cm)   =-1.02893E-02 4.42742E-03 5.83381E-04
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN  NEWSTOR           STORAGE
 31.1174+ 0.0000+ 0.0000 - 0.0118- 0.0000-  0.0006 = 31.1050  Versus  31.1051

Mass Balance = -1.4877E-04 cm;  Time step attempts = 3527 and successes = 3527
  Evaporation:  Potential =  4.5482 cm, Actual =  0.0118 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 34.1 %;  TMEAN = 291.2 K;  HDRY =  1.4740E+06 cm;  DAYUBC =  3509

------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  54, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12          25
Depth (cm)        =    5.00000    50.00000   122.00000
Water (cm3/cm3)   =    0.22230     0.26654     0.25941
Head (cm)         = 1.02115E+03 9.16808E+02 1.05882E+03
Water Flow (cm)   =-1.02690E-02 4.21545E-03 5.83073E-04
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN  NEWSTOR           STORAGE
 31.1051+ 0.0000+ 0.0000 - 0.0114- 0.0000-  0.0006 = 31.0932  Versus  31.0933

Mass Balance = -9.1553E-05 cm;  Time step attempts = 3011 and successes = 3011
  Evaporation:  Potential =  3.3091 cm, Actual =  0.0114 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 40.4 %;  TMEAN = 288.7 K;  HDRY =  1.2425E+06 cm;  DAYUBC =  2994

------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  55, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12          25
Depth (cm)        =    5.00000    50.00000   122.00000
Water (cm3/cm3)   =    0.22187     0.26644     0.25940
Head (cm)         = 1.02811E+03 9.18697E+02 1.05893E+03
Water Flow (cm)   =-1.01557E-02 4.01393E-03 5.82852E-04
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN  NEWSTOR           STORAGE
 31.0933+ 0.0000+ 0.0000 - 0.0135- 0.0000-  0.0006 = 31.0792  Versus  31.0795

Mass Balance = -2.9755E-04 cm;  Time step attempts = 5094 and successes = 5094
  Evaporation:  Potential =  2.7289 cm, Actual =  0.0135 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 31.0 %;  TMEAN = 284.0 K;  HDRY =  1.6044E+06 cm;  DAYUBC =  2884
```

```
DAILY SUMMARY:  Day =  56, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =    5.00000    50.00000   122.00000
Water (cm3/cm3)    =    0.22137     0.26633     0.25940
Head (cm)          = 1.03644E+03 9.20698E+02 1.05899E+03
Water Flow (cm)    =-1.02267E-02 3.81429E-03 5.82705E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 31.0795+ 0.0000+ 0.0000 - 0.0091- 0.0000-  0.0006 = 31.0698  Versus  31.0699

Mass Balance = -8.3923E-05 cm;  Time step attempts = 2487 and successes = 2487
  Evaporation:  Potential =  3.3829 cm, Actual =  0.0091 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 51.8 %;  TMEAN = 288.4 K;  HDRY =  9.0254E+05 cm;  DAYUBC =  2443
```

```
DAILY SUMMARY:  Day =  57, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =    5.00000    50.00000   122.00000
Water (cm3/cm3)    =    0.22071     0.26621     0.25940
Head (cm)          = 1.04749E+03 9.22792E+02 1.05900E+03
Water Flow (cm)    =-1.07610E-02 3.62219E-03 5.82642E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 31.0699+ 0.0000+ 0.0000 - 0.0092- 0.0000-  0.0006 = 31.0601  Versus  31.0601

Mass Balance = -1.1444E-05 cm;  Time step attempts =  633 and successes =  633
  Evaporation:  Potential =  2.1397 cm, Actual =  0.0092 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 69.1 %;  TMEAN = 292.0 K;  HDRY =  5.0637E+05 cm;  DAYUBC =   581
```

```
DAILY SUMMARY:  Day =  58, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =    5.00000    50.00000   122.00000
Water (cm3/cm3)    =    0.21931     0.26609     0.25940
Head (cm)          = 1.07137E+03 9.24924E+02 1.05896E+03
Water Flow (cm)    =-1.26723E-02 3.43862E-03 5.82666E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 31.0601+ 0.0000+ 0.0000 - 0.0000- 0.0000-  0.0006 = 31.0595  Versus  31.0595

Mass Balance =  0.0000E+00 cm;  Time step attempts =   96 and successes =   96
  Evaporation:  Potential =  0.0564 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 94.2 %;  TMEAN = 284.0 K;  HDRY =  8.1829E+04 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day =  59, Simulated Time = 24.0000 hr
-------------
Node Number       =      2           12          25
Depth (cm)        =    5.00000     50.00000   122.00000
Water (cm3/cm3)   =    0.21849      0.26600     0.25940
Head (cm)         = 1.08583E+03 9.26659E+02 1.05892E+03
Water Flow (cm)   =-1.58840E-02 3.28328E-03 5.82724E-04
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 31.0595+ 0.0000+ 0.0000 - 0.0333- 0.0000-  0.0006 = 31.0256  Versus  31.0275

Mass Balance = -1.9550E-03 cm;  Time step attempts =31660 and successes =31660
  Evaporation:  Potential =  0.3598 cm, Actual =  0.0333 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 80.7 %;  TMEAN = 274.5 K;  HDRY =  2.9438E+05 cm;  DAYUBC =  4336

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  60, Simulated Time = 24.0000 hr
-------------
Node Number       =      2           12          25
Depth (cm)        =    5.00000     50.00000   122.00000
Water (cm3/cm3)   =    0.21815      0.26590     0.25941
Head (cm)         = 1.09179E+03 9.28419E+02 1.05885E+03
Water Flow (cm)   =-1.32907E-02 3.14998E-03 5.82810E-04
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 31.0275+ 0.0000+ 0.0000 - 0.0178- 0.0000-  0.0006 = 31.0091  Versus  31.0103

Mass Balance = -1.1559E-03 cm;  Time step attempts =21701 and successes =21701
  Evaporation:  Potential =  0.3097 cm, Actual =  0.0178 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 75.7 %;  TMEAN = 269.3 K;  HDRY =  3.8069E+05 cm;  DAYUBC =  4099

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  61, Simulated Time = 24.0000 hr
-------------
Node Number       =      2           12          25
Depth (cm)        =    5.00000     50.00000   122.00000
Water (cm3/cm3)   =    0.21691      0.26582     0.25941
Head (cm)         = 1.11416E+03 9.30032E+02 1.05876E+03
Water Flow (cm)   =-1.37926E-02 3.00269E-03 5.82996E-04
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 31.0103+ 0.0000+ 0.0000 - 0.0025- 0.0000-  0.0006 = 31.0072  Versus  31.0084

Mass Balance = -1.2283E-03 cm;  Time step attempts =21435 and successes =21435
  Evaporation:  Potential =  0.0433 cm, Actual =  0.0025 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 88.6 %;  TMEAN = 267.9 K;  HDRY =  1.6595E+05 cm;  DAYUBC =   491

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  62, Simulated Time = 24.0000 hr
-------------
```

```
Node Number         =        2          12          25
Depth (cm)          =      5.00000    50.00000   122.00000
Water (cm3/cm3)     =      0.23744     0.26570     0.25942
Head (cm)           = 8.08738E+02 9.32237E+02 1.05858E+03
Water Flow (cm)     = 1.34635E-01 2.88627E-03 5.83175E-04
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
 31.0084+ 0.6350+ 0.0000 - 0.0535- 0.0000-  0.0006 = 31.5893  Versus  31.5896

Mass Balance = -3.1662E-04 cm;  Time step attempts = 5126 and successes = 5126
  Evaporation:  Potential =  0.2163 cm, Actual =  0.0535 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 89.2 %;  TMEAN = 270.4 K;  HDRY =  1.5696E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  63, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =      5.00000    50.00000   122.00000
Water (cm3/cm3)     =      0.25581     0.26557     0.25943
Head (cm)           = 6.20195E+02 9.34500E+02 1.05835E+03
Water Flow (cm)     = 2.23587E-01 2.73727E-03 5.83512E-04
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
 31.5896+ 0.3556+ 0.0000 - 0.0000- 0.0000-  0.0006 = 31.9446  Versus  31.9446

Mass Balance =  1.5259E-05 cm;  Time step attempts = 2124 and successes = 2124
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 97.8 %;  TMEAN = 275.4 K;  HDRY =  3.0950E+04 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  64, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =      5.00000    50.00000   122.00000
Water (cm3/cm3)     =      0.25244     0.26546     0.25944
Head (cm)           = 6.50492E+02 9.36692E+02 1.05808E+03
Water Flow (cm)     = 5.10749E-02 2.59733E-03 5.83926E-04
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
 31.9446+ 0.0254+ 0.0000 - 0.0000- 0.0000-  0.0006 = 31.9694  Versus  31.9694

Mass Balance =  2.6703E-05 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 89.5 %;  TMEAN = 278.2 K;  HDRY =  1.5203E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  65, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =      5.00000    50.00000   122.00000
Water (cm3/cm3)     =      0.31380     0.26536     0.25945
```

```
Head (cm)           = 2.78466E+02 9.38446E+02 1.05778E+03
Water Flow (cm)     = 1.12178E+00 2.48016E-03 5.84400E-04
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
 31.9694+ 1.5494+ 0.0000 - 0.0000- 0.0000-  0.0006 = 33.5182  Versus  33.5182

Mass Balance = -4.1962E-05 cm;  Time step attempts = 2397 and successes = 2397
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 98.6 %;  TMEAN = 279.8 K;  HDRY =  1.9871E+04 cm;  DAYUBC =     0

------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  66, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.29069     0.26549     0.25947
Head (cm)           = 3.84171E+02 9.36148E+02 1.05742E+03
Water Flow (cm)     =-5.13897E-02 2.50110E-03 5.84953E-04
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
 33.5182+ 0.0254+ 0.0000 - 0.2437- 0.0000-  0.0006 = 33.2993  Versus  33.2993

Mass Balance =  4.9591E-05 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.9847 cm, Actual =  0.2437 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 80.9 %;  TMEAN = 267.3 K;  HDRY =  2.9057E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  67, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.27287     0.26636     0.25949
Head (cm)           = 4.89735E+02 9.20109E+02 1.05703E+03
Water Flow (cm)     =-7.97216E-02 3.23869E-03 5.85572E-04
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
 33.2993+ 0.1270+ 0.0000 - 0.3403- 0.0000-  0.0006 = 33.0854  Versus  33.0853

Mass Balance =  7.2479E-05 cm;  Time step attempts = 2192 and successes = 2192
  Evaporation:  Potential =  1.3749 cm, Actual =  0.3403 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 51.1 %;  TMEAN = 271.5 K;  HDRY =  9.1989E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  68, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.26535     0.26802     0.25950
Head (cm)           = 5.43035E+02 8.90443E+02 1.05670E+03
Water Flow (cm)     =-1.29734E-01 5.20745E-03 5.86205E-04
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00
```

```
 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 33.0853+ 0.0000+ 0.0000 - 0.6190- 0.0000-  0.0006 = 32.4658  Versus  32.4648

Mass Balance =  9.9182E-04 cm;  Time step attempts =21076 and successes =21076
  Evaporation:  Potential =  3.2775 cm, Actual =  0.6190 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 36.5 %;  TMEAN = 280.1 K;  HDRY =  1.3804E+06 cm;  DAYUBC =  4759

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  69, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.26548     0.26997     0.25953
Head (cm)          = 5.42037E+02 8.57337E+02 1.05624E+03
Water Flow (cm)    =-2.18330E-02 7.94033E-03 5.86853E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 32.4648+ 0.0000+ 0.0000 - 0.0210- 0.0000-  0.0006 = 32.4432  Versus  32.4431

Mass Balance =  1.2970E-04 cm;  Time step attempts = 1603 and successes = 1603
  Evaporation:  Potential =  4.2635 cm, Actual =  0.0210 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 37.5 %;  TMEAN = 284.8 K;  HDRY =  1.3426E+06 cm;  DAYUBC =  1588

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  70, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.26333     0.27171     0.25955
Head (cm)          = 5.58394E+02 8.28944E+02 1.05575E+03
Water Flow (cm)    =-1.67117E-02 1.05453E-02 5.87653E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 32.4431+ 0.0000+ 0.0000 - 0.0217- 0.0000-  0.0006 = 32.4207  Versus  32.4206

Mass Balance =  8.3923E-05 cm;  Time step attempts = 2361 and successes = 2361
  Evaporation:  Potential =  3.0758 cm, Actual =  0.0217 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 61.4 %;  TMEAN = 287.6 K;  HDRY =  6.6799E+05 cm;  DAYUBC =  2329

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  71, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.27403     0.27310     0.25957
Head (cm)          = 4.82094E+02 8.07262E+02 1.05524E+03
Water Flow (cm)    = 2.46966E-01 1.24977E-02 5.88477E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 32.4206+ 1.0414+ 0.0000 - 0.2888- 0.0000-  0.0006 = 33.1727  Versus  33.1727
```

```
Mass Balance =  1.5259E-05 cm;  Time step attempts = 5063 and successes = 5063
  Evaporation:  Potential =  1.1787 cm, Actual =  0.2888 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 81.4 %;  TMEAN = 289.8 K;  HDRY =  2.8275E+05 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day =  72, Simulated Time = 24.0000 hr
-------------
Node Number          =        2          12          25
Depth (cm)           =     5.00000    50.00000   122.00000
Water (cm3/cm3)      =     0.35288     0.27546     0.25959
Head (cm)            = 1.47035E+02 7.71969E+02 1.05473E+03
Water Flow (cm)      = 1.94907E+00 1.42577E-02 5.89320E-04
Plant Sink (cm)      = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL   RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 33.1727+ 2.5087+ 1.4537 - 0.0000- 0.0000-  0.0006 = 35.6808  Versus  35.6807

Mass Balance =  1.0300E-04 cm;  Time step attempts = 2890 and successes = 2890
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 91.8 %;  TMEAN = 287.3 K;  HDRY =  1.1730E+05 cm;  DAYUBC =   455
```

```
DAILY SUMMARY:  Day =  73, Simulated Time = 24.0000 hr
-------------
Node Number          =        2          12          25
Depth (cm)           =     5.00000    50.00000   122.00000
Water (cm3/cm3)      =     0.34763     0.29073     0.25962
Head (cm)            = 1.62448E+02 5.83765E+02 1.05417E+03
Water Flow (cm)      = 4.96120E-01 3.10451E-02 5.90245E-04
Plant Sink (cm)      = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL   RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 35.6807+ 0.6431+ 0.0427 - 0.1848- 0.0000-  0.0006 = 36.1384  Versus  36.1385

Mass Balance = -7.2479E-05 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.7468 cm, Actual =  0.1848 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 84.3 %;  TMEAN = 288.2 K;  HDRY =  2.3434E+05 cm;  DAYUBC =   204
```

```
DAILY SUMMARY:  Day =  74, Simulated Time = 24.0000 hr
-------------
Node Number          =        2          12          25
Depth (cm)           =     5.00000    50.00000   122.00000
Water (cm3/cm3)      =     0.32532     0.30794     0.25965
Head (cm)            = 2.34966E+02 4.31533E+02 1.05359E+03
Water Flow (cm)      =-1.05866E-01 8.73500E-02 5.91216E-04
Plant Sink (cm)      = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL   RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 36.1385+ 0.1524+ 0.0000 - 0.4166- 0.0000-  0.0006 = 35.8736  Versus  35.8735

Mass Balance =  1.2207E-04 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  1.6834 cm, Actual =  0.4166 cm
```

```
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 64.4 %;  TMEAN = 290.7 K;  HDRY =  6.0320E+05 cm;  DAYUBC =     0

-----------------------------------------------------------------------------


DAILY SUMMARY:  Day =  75, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.29466     0.31364     0.25968
Head (cm)          = 3.63857E+02 3.90685E+02 1.05295E+03
Water Flow (cm)    =-3.25094E-01 1.27585E-01 5.92278E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 35.8735+ 0.0000+ 0.0000 - 0.5476- 0.0000-  0.0006 = 35.3253  Versus  35.3254

Mass Balance = -1.9073E-05 cm;  Time step attempts =  208 and successes =  208
  Evaporation:  Potential =  2.1903 cm, Actual =  0.5476 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 52.5 %;  TMEAN = 289.5 K;  HDRY =  8.8434E+05 cm;  DAYUBC =     0

-----------------------------------------------------------------------------


DAILY SUMMARY:  Day =  76, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.26738     0.31348     0.25971
Head (cm)          = 5.28077E+02 3.91765E+02 1.05229E+03
Water Flow (cm)    =-3.07735E-01 1.20408E-01 5.93384E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 35.3254+ 0.0000+ 0.0000 - 0.5242- 0.0000-  0.0006 = 34.8006  Versus  34.8006

Mass Balance = -7.6294E-06 cm;  Time step attempts =  548 and successes =  548
  Evaporation:  Potential =  2.0967 cm, Actual =  0.5242 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 48.8 %;  TMEAN = 290.4 K;  HDRY =  9.8280E+05 cm;  DAYUBC =     0

-----------------------------------------------------------------------------


DAILY SUMMARY:  Day =  77, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.26976     0.31166     0.25973
Head (cm)          = 5.11063E+02 4.04407E+02 1.05176E+03
Water Flow (cm)    =-1.99441E-01 9.62812E-02 5.94399E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 34.8006+ 0.0000+ 0.0000 - 0.6038- 0.0000-  0.0006 = 34.1962  Versus  34.1958

Mass Balance =  3.9291E-04 cm;  Time step attempts =18943 and successes =18943
  Evaporation:  Potential =  3.2406 cm, Actual =  0.6038 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 48.8 %;  TMEAN = 291.5 K;  HDRY =  9.8379E+05 cm;  DAYUBC =  3590
```

```
DAILY SUMMARY:  Day =  78, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.27406     0.30945     0.25976
Head (cm)          = 4.81896E+02 4.20284E+02 1.05109E+03
Water Flow (cm)    =-4.34739E-02 7.48060E-02 5.95388E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 34.1958+ 0.0000+ 0.0000 - 0.0254- 0.0000-  0.0006 = 34.1698  Versus  34.1697

Mass Balance =  4.1962E-05 cm;  Time step attempts = 5094 and successes = 5094
  Evaporation:  Potential =  5.5130 cm, Actual =  0.0254 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 41.2 %;  TMEAN = 295.9 K;  HDRY =  1.2150E+06 cm;  DAYUBC =  4076
```

```
DAILY SUMMARY:  Day =  79, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.27476     0.30737     0.25979
Head (cm)          = 4.77256E+02 4.35766E+02 1.05039E+03
Water Flow (cm)    =-2.95682E-02 5.91838E-02 5.96575E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 34.1697+ 0.0000+ 0.0000 - 0.0254- 0.0000-  0.0006 = 34.1438  Versus  34.1437

Mass Balance =  6.1035E-05 cm;  Time step attempts = 1960 and successes = 1960
  Evaporation:  Potential =  2.9163 cm, Actual =  0.0254 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 46.9 %;  TMEAN = 289.8 K;  HDRY =  1.0376E+06 cm;  DAYUBC =  1944
```

```
DAILY SUMMARY:  Day =  80, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.27458     0.30561     0.25983
Head (cm)          = 4.78457E+02 4.49352E+02 1.04965E+03
Water Flow (cm)    =-2.51333E-02 4.85069E-02 5.97798E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 34.1437+ 0.0000+ 0.0000 - 0.0262- 0.0000-  0.0006 = 34.1168  Versus  34.1167

Mass Balance =  1.4114E-04 cm;  Time step attempts = 5094 and successes = 5094
  Evaporation:  Potential =  5.0258 cm, Actual =  0.0262 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 45.0 %;  TMEAN = 293.7 K;  HDRY =  1.0934E+06 cm;  DAYUBC =  4810
```

```
DAILY SUMMARY:  Day =  81, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.27419     0.30415     0.25987
Head (cm)          = 4.80996E+02 4.60944E+02 1.04884E+03
Water Flow (cm)    =-2.10139E-02 4.11888E-02 5.99128E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 34.1167+ 0.0000+ 0.0000 - 0.0247- 0.0000-  0.0006 = 34.0914  Versus  34.0914

Mass Balance = -1.1444E-05 cm;  Time step attempts = 5094 and successes = 5094
  Evaporation:  Potential =  5.8025 cm, Actual =  0.0247 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 32.5 %;  TMEAN = 298.2 K;  HDRY =  1.5407E+06 cm;  DAYUBC =  3650

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  82, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.27334     0.30292     0.25991
Head (cm)          = 4.86638E+02 4.70929E+02 1.04786E+03
Water Flow (cm)    =-2.00477E-02 3.60184E-02 6.00687E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 34.0914+ 0.0000+ 0.0000 - 0.0230- 0.0000-  0.0006 = 34.0679  Versus  34.0679

Mass Balance = -5.3406E-05 cm;  Time step attempts = 1305 and successes = 1305
  Evaporation:  Potential =  3.2170 cm, Actual =  0.0230 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 38.7 %;  TMEAN = 290.4 K;  HDRY =  1.3025E+06 cm;  DAYUBC =  1281

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  83, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.27215     0.30188     0.25996
Head (cm)          = 4.94587E+02 4.79586E+02 1.04671E+03
Water Flow (cm)    =-2.10230E-02 3.21625E-02 6.02498E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 34.0679+ 0.0000+ 0.0000 - 0.0245- 0.0000-  0.0006 = 34.0428  Versus  34.0430

Mass Balance = -1.8692E-04 cm;  Time step attempts = 4233 and successes = 4233
  Evaporation:  Potential =  3.6655 cm, Actual =  0.0245 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 49.8 %;  TMEAN = 291.8 K;  HDRY =  9.5685E+05 cm;  DAYUBC =  4206

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  84, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
```

```
Depth (cm)          =      5.00000     50.00000    122.00000
Water (cm3/cm3)     =      0.24259      0.30098      0.26003
Head (cm)           = 7.49553E+02 4.87185E+02 1.04529E+03
Water Flow (cm)     =-1.75207E-01 2.92574E-02 6.04698E-04
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 34.0430+ 0.3810+ 0.0000 - 0.3886- 0.0000-  0.0006 = 34.0347  Versus  34.0352

Mass Balance = -4.3106E-04 cm;  Time step attempts = 8418 and successes = 8418
  Evaporation:  Potential =  1.5701 cm, Actual =  0.3886 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 68.6 %;  TMEAN = 291.8 K;  HDRY =  5.1698E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  85, Simulated Time = 24.0000 hr
-------------
Node Number         =        2           12           25
Depth (cm)          =      5.00000     50.00000    122.00000
Water (cm3/cm3)     =      0.24664      0.30019      0.26010
Head (cm)           = 7.06723E+02 4.93994E+02 1.04383E+03
Water Flow (cm)     =-1.31728E-01 2.68759E-02 6.07240E-04
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 34.0352+ 0.0508+ 0.0000 - 0.4622- 0.0000-  0.0006 = 33.6232  Versus  33.6230

Mass Balance =  1.6022E-04 cm;  Time step attempts =26599 and successes =26599
  Evaporation:  Potential =  2.5186 cm, Actual =  0.4622 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 62.0 %;  TMEAN = 286.5 K;  HDRY =  6.5413E+05 cm;  DAYUBC =  3791

------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  86, Simulated Time = 24.0000 hr
-------------
Node Number         =        2           12           25
Depth (cm)          =      5.00000     50.00000    122.00000
Water (cm3/cm3)     =      0.25069      0.29925      0.26020
Head (cm)           = 6.66858E+02 5.02144E+02 1.04162E+03
Water Flow (cm)     =-3.69970E-02 2.45296E-02 6.10407E-04
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 33.6230+ 0.0000+ 0.0000 - 0.0213- 0.0000-  0.0006 = 33.6011  Versus  33.6009

Mass Balance =  1.8692E-04 cm;  Time step attempts = 7593 and successes = 7593
  Evaporation:  Potential =  2.4844 cm, Actual =  0.0213 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 51.0 %;  TMEAN = 282.3 K;  HDRY =  9.2314E+05 cm;  DAYUBC =  2962

------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  87, Simulated Time = 24.0000 hr
-------------
Node Number         =        2           12           25
Depth (cm)          =      5.00000     50.00000    122.00000
Water (cm3/cm3)     =      0.25152      0.29822      0.26034
Head (cm)           = 6.58969E+02 5.11313E+02 1.03871E+03
```

```
Water Flow (cm)     =-2.63859E-02 2.18495E-02 6.15028E-04
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 33.6009+ 0.0000+ 0.0000 - 0.0192- 0.0000-  0.0006 = 33.5811  Versus  33.5811

Mass Balance =  3.4332E-05 cm;  Time step attempts =  962 and successes =  962
  Evaporation:  Potential =  0.8864 cm, Actual =  0.0192 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 65.4 %;  TMEAN = 279.5 K;  HDRY =  5.8242E+05 cm;  DAYUBC =   932

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  88, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12           25
Depth (cm)          =    5.00000    50.00000   122.00000
Water (cm3/cm3)     =    0.25169     0.29720     0.26050
Head (cm)           = 6.57379E+02 5.20619E+02 1.03517E+03
Water Flow (cm)     =-2.43607E-02 1.93082E-02 6.20792E-04
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 33.5811+ 0.0000+ 0.0000 - 0.0232- 0.0000-  0.0006 = 33.5573  Versus  33.5573

Mass Balance = -2.6703E-05 cm;  Time step attempts = 1318 and successes = 1318
  Evaporation:  Potential =  1.0736 cm, Actual =  0.0232 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 66.8 %;  TMEAN = 281.2 K;  HDRY =  5.5366E+05 cm;  DAYUBC =  1299

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  89, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12           25
Depth (cm)          =    5.00000    50.00000   122.00000
Water (cm3/cm3)     =    0.25190     0.29628     0.26069
Head (cm)           = 6.55413E+02 5.29085E+02 1.03127E+03
Water Flow (cm)     =-2.15038E-02 1.72209E-02 6.27325E-04
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 33.5573+ 0.0000+ 0.0000 - 0.0235- 0.0000-  0.0006 = 33.5332  Versus  33.5344

Mass Balance = -1.2856E-03 cm;  Time step attempts =17589 and successes =17589
  Evaporation:  Potential =  1.2627 cm, Actual =  0.0235 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 54.7 %;  TMEAN = 279.5 K;  HDRY =  8.2642E+05 cm;  DAYUBC =  3699

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  90, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12           25
Depth (cm)          =    5.00000    50.00000   122.00000
Water (cm3/cm3)     =    0.25167     0.29538     0.26092
Head (cm)           = 6.57583E+02 5.37596E+02 1.02638E+03
Water Flow (cm)     =-2.04544E-02 1.54156E-02 6.35691E-04
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00
```

```
 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN  NEWSTOR            STORAGE
 33.5344+ 0.0000+ 0.0000 - 0.0203- 0.0000-  0.0006 = 33.5135  Versus  33.5136

Mass Balance = -1.1444E-04 cm;  Time step attempts = 1753 and successes = 1753
  Evaporation:  Potential =  1.8291 cm, Actual =  0.0203 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 60.1 %;  TMEAN = 283.2 K;  HDRY =  6.9820E+05 cm;  DAYUBC =  1725

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  91, Simulated Time = 24.0000 hr
-------------
Node Number       =       2           12          25
Depth (cm)        =    5.00000    50.00000   122.00000
Water (cm3/cm3)   =    0.25168     0.29456     0.26118
Head (cm)         = 6.57501E+02 5.45382E+02 1.02097E+03
Water Flow (cm)   =-1.82620E-02 1.39620E-02 6.45251E-04
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN  NEWSTOR            STORAGE
 33.5136+ 0.0000+ 0.0000 - 0.0218- 0.0000-  0.0006 = 33.4912  Versus  33.4917

Mass Balance = -4.8065E-04 cm;  Time step attempts = 7593 and successes = 7593
  Evaporation:  Potential =  3.3740 cm, Actual =  0.0218 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 42.0 %;  TMEAN = 287.9 K;  HDRY =  1.1886E+06 cm;  DAYUBC =  2874

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  92, Simulated Time = 24.0000 hr
-------------
Node Number       =       2           12          25
Depth (cm)        =    5.00000    50.00000   122.00000
Water (cm3/cm3)   =    0.25166     0.29422     0.26130
Head (cm)         = 6.57686E+02 5.48693E+02 1.01847E+03
Water Flow (cm)   =-1.69887E-02 1.30512E-02 6.52909E-04
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN  NEWSTOR            STORAGE
 33.4917+ 0.0000+ 0.0000 - 0.0182- 0.0000-  0.0007 = 33.4728  Versus  33.4835

Mass Balance = -1.0647E-02 cm;  Time step attempts =***** and successes =*****
  Evaporation:  Potential =  0.2437 cm, Actual =  0.0182 cm
Transpiration:  Potential =  4.6311 cm, Actual =  0.0000 cm
RHMEAN = 33.8 %;  TMEAN = 290.9 K;  HDRY =  1.4878E+06 cm;  DAYUBC =  4513

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day =  93, Simulated Time = 24.0000 hr
-------------
Node Number       =       2           12          25
Depth (cm)        =    5.00000    50.00000   122.00000
Water (cm3/cm3)   =    0.24976     0.29343     0.26161
Head (cm)         = 6.75759E+02 5.56435E+02 1.01210E+03
Water Flow (cm)   =-1.81316E-02 1.21720E-02 6.61505E-04
Plant Sink (cm)   = 4.36090E-03 6.85178E-05 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN  NEWSTOR            STORAGE
 33.4835+ 0.4064+ 0.0000 - 0.0026- 0.0496-  0.0007 = 33.8370  Versus  33.8376
```

```
Mass Balance = -6.5994E-04 cm;  Time step attempts = 7593 and successes = 7593
  Evaporation:  Potential =  0.0106 cm, Actual =  0.0026 cm
Transpiration:  Potential =  0.2006 cm, Actual =  0.0496 cm
RHMEAN = 86.1 %;  TMEAN = 285.9 K;  HDRY =  2.0491E+05 cm;  DAYUBC =     0

-----------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  94, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.22826     0.29207     0.26195
Head (cm)          = 9.29849E+02 5.70055E+02 1.00503E+03
Water Flow (cm)    =-2.49829E-02 1.00271E-02 6.75016E-04
Plant Sink (cm)    = 3.85716E-02 6.06032E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 33.8376+ 0.0254+ 0.0000 - 0.0231- 0.4391-  0.0007 = 33.4001  Versus  33.4001

Mass Balance =  5.7220E-05 cm;  Time step attempts = 2112 and successes = 2112
  Evaporation:  Potential =  0.0934 cm, Actual =  0.0231 cm
Transpiration:  Potential =  1.7742 cm, Actual =  0.4391 cm
RHMEAN = 63.4 %;  TMEAN = 287.3 K;  HDRY =  6.2486E+05 cm;  DAYUBC =     0

-----------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  95, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.19640     0.29046     0.26233
Head (cm)          = 1.59480E+03 5.86617E+02 9.97375E+02
Water Flow (cm)    =-4.49424E-02 6.93383E-03 6.90175E-04
Plant Sink (cm)    = 4.94750E-02 7.77345E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 33.4001+ 0.0000+ 0.0000 - 0.0296- 0.5632-  0.0007 = 32.8065  Versus  32.8065

Mass Balance = -3.8147E-06 cm;  Time step attempts =  360 and successes =  360
  Evaporation:  Potential =  0.1186 cm, Actual =  0.0296 cm
Transpiration:  Potential =  2.2529 cm, Actual =  0.5632 cm
RHMEAN = 61.3 %;  TMEAN = 288.2 K;  HDRY =  6.6988E+05 cm;  DAYUBC =     0

-----------------------------------------------------------------------------------


DAILY SUMMARY:  Day =  96, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.16129     0.28876     0.26273
Head (cm)          = 3.43973E+03 6.04755E+02 9.89291E+02
Water Flow (cm)    =-3.63639E-02 3.87520E-03 7.06796E-04
Plant Sink (cm)    = 4.92447E-02 7.90152E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 32.8065+ 0.0000+ 0.0000 - 0.0301- 0.5678-  0.0007 = 32.2079  Versus  32.2079

Mass Balance =  7.6294E-06 cm;  Time step attempts =  840 and successes =  840
  Evaporation:  Potential =  0.1205 cm, Actual =  0.0301 cm
Transpiration:  Potential =  2.2900 cm, Actual =  0.5678 cm
```

```
 RHMEAN = 65.8 %;  TMEAN = 290.7 K;  HDRY =  5.7436E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------


 DAILY SUMMARY:  Day =  97, Simulated Time = 24.0000 hr
 -------------
 Node Number       =       2          12          25
 Depth (cm)        =     5.00000    50.00000   122.00000
 Water (cm3/cm3)   =     0.13291     0.28671     0.26315
 Head (cm)         = 8.47779E+03 6.27424E+02 9.80869E+02
 Water Flow (cm)   =-1.65238E-02 6.77563E-04 7.24784E-04
 Plant Sink (cm)   = 3.57015E-02 1.06897E-03 0.00000E+00

  PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
  32.2079+ 0.0000+ 0.0000 - 0.0408- 0.6090-  0.0007 = 31.5574  Versus  31.5574

 Mass Balance = -9.5367E-06 cm;  Time step attempts = 2033 and successes = 2033
   Evaporation:  Potential =  0.1631 cm, Actual =  0.0408 cm
 Transpiration:  Potential =  3.0981 cm, Actual =  0.6090 cm
 RHMEAN = 65.9 %;  TMEAN = 293.4 K;  HDRY =  5.7093E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------


 DAILY SUMMARY:  Day =  98, Simulated Time = 24.0000 hr
 -------------
 Node Number       =       2          12          25
 Depth (cm)        =     5.00000    50.00000   122.00000
 Water (cm3/cm3)   =     0.12172     0.28392     0.26360
 Head (cm)         = 1.39260E+04 6.59931E+02 9.72204E+02
 Water Flow (cm)   =-2.96826E-03-3.44312E-03 7.44041E-04
 Plant Sink (cm)   = 1.28460E-02 1.77233E-03 0.00000E+00

  PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
  31.5574+ 0.0000+ 0.0000 - 0.0676- 0.6146-  0.0007 = 30.8745  Versus  30.8745

 Mass Balance = -1.3351E-05 cm;  Time step attempts = 3183 and successes = 3183
   Evaporation:  Potential =  0.2703 cm, Actual =  0.0676 cm
 Transpiration:  Potential =  5.1366 cm, Actual =  0.6146 cm
 RHMEAN = 53.2 %;  TMEAN = 297.6 K;  HDRY =  8.6567E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------


 DAILY SUMMARY:  Day =  99, Simulated Time = 24.0000 hr
 -------------
 Node Number       =       2          12          25
 Depth (cm)        =     5.00000    50.00000   122.00000
 Water (cm3/cm3)   =     0.12086     0.28215     0.26405
 Head (cm)         = 1.45473E+04 6.81654E+02 9.63385E+02
 Water Flow (cm)   =-5.99327E-04-6.29542E-03 7.64438E-04
 Plant Sink (cm)   = 1.04804E-03 7.68222E-04 0.00000E+00

  PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
  30.8745+ 0.0000+ 0.0000 - 0.0293- 0.1875-  0.0008 = 30.6570  Versus  30.6570

 Mass Balance =  5.7220E-06 cm;  Time step attempts = 2959 and successes = 2959
   Evaporation:  Potential =  0.1172 cm, Actual =  0.0293 cm
 Transpiration:  Potential =  2.2265 cm, Actual =  0.1875 cm
 RHMEAN = 74.9 %;  TMEAN = 289.8 K;  HDRY =  3.9616E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------
```

```
DAILY SUMMARY:  Day = 100, Simulated Time = 24.0000 hr
-------------
Node Number       =        2           12          25
Depth (cm)        =     5.00000    50.00000   122.00000
Water (cm3/cm3)   =     0.25917     0.28109     0.26448
Head (cm)         = 5.91649E+02 6.95127E+02 9.55074E+02
Water Flow (cm)   = 1.04977E+00-6.74688E-03 7.84484E-04
Plant Sink (cm)   = 8.93511E-03 1.40387E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 30.6570+ 2.0813+ 0.8143 - 0.0054- 0.0995-  0.0008 = 32.6326  Versus  32.6334

Mass Balance = -7.7820E-04 cm;  Time step attempts =18631 and successes =18631
  Evaporation:  Potential =  0.0221 cm, Actual =  0.0054 cm
Transpiration:  Potential =  0.4195 cm, Actual =  0.0995 cm
RHMEAN = 76.0 %;  TMEAN = 283.7 K;  HDRY =  3.7666E+05 cm;  DAYUBC =  6938

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 101, Simulated Time = 24.0000 hr
-------------
Node Number       =        2           12          25
Depth (cm)        =     5.00000    50.00000   122.00000
Water (cm3/cm3)   =     0.20671     0.27925     0.26495
Head (cm)         = 1.32390E+03 7.19128E+02 9.46180E+02
Water Flow (cm)   = 5.15743E-02-7.56528E-03 8.06661E-04
Plant Sink (cm)   = 5.96046E-02 9.36498E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 32.6334+ 0.0000+ 0.0000 - 0.0357- 0.6785-  0.0008 = 31.9183  Versus  31.9183

Mass Balance = -9.5367E-06 cm;  Time step attempts =   574 and successes =   574
  Evaporation:  Potential =  0.1429 cm, Actual =  0.0357 cm
Transpiration:  Potential =  2.7142 cm, Actual =  0.6785 cm
RHMEAN = 51.2 %;  TMEAN = 279.5 K;  HDRY =  9.1795E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 102, Simulated Time = 24.0000 hr
-------------
Node Number       =        2           12          25
Depth (cm)        =     5.00000    50.00000   122.00000
Water (cm3/cm3)   =     0.15773     0.27743     0.26542
Head (cm)         = 3.78130E+03 7.43823E+02 9.37372E+02
Water Flow (cm)   =-9.62847E-03-9.14045E-03 8.29616E-04
Plant Sink (cm)   = 6.01044E-02 9.76714E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 31.9183+ 0.0000+ 0.0000 - 0.0372- 0.6984-  0.0008 = 31.1818  Versus  31.1818

Mass Balance = -5.7220E-06 cm;  Time step attempts =   997 and successes =   997
  Evaporation:  Potential =  0.1490 cm, Actual =  0.0372 cm
Transpiration:  Potential =  2.8307 cm, Actual =  0.6984 cm
RHMEAN = 42.8 %;  TMEAN = 284.5 K;  HDRY =  1.1635E+06 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 103, Simulated Time = 24.0000 hr
```

```
-------------
Node Number        =       2           12          25
Depth (cm)         =     5.00000     50.00000   122.00000
Water (cm3/cm3)    =     0.13196      0.27562     0.26589
Head (cm)          = 8.80578E+03 7.69602E+02 9.28720E+02
Water Flow (cm)    =-7.31463E-03-1.04846E-02 8.53096E-04
Plant Sink (cm)    = 3.18654E-02 1.04444E-03 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR          STORAGE
 31.1818+ 0.0000+ 0.0000 - 0.0398- 0.5491-  0.0009 = 30.5920  Versus  30.5920

Mass Balance =  0.0000E+00 cm;  Time step attempts = 2033 and successes = 2033
  Evaporation:  Potential =  0.1593 cm, Actual =  0.0398 cm
Transpiration:  Potential =  3.0270 cm, Actual =  0.5491 cm
RHMEAN = 42.5 %;  TMEAN = 287.9 K;  HDRY =  1.1731E+06 cm;  DAYUBC =     0

------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 104, Simulated Time = 24.0000 hr
-------------
Node Number        =       2           12          25
Depth (cm)         =     5.00000     50.00000   122.00000
Water (cm3/cm3)    =     0.12125      0.27295     0.26635
Head (cm)          = 1.42584E+04 8.09599E+02 9.20270E+02
Water Flow (cm)    =-1.40226E-03-1.25259E-02 8.76938E-04
Plant Sink (cm)    = 1.20962E-02 1.99525E-03 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR          STORAGE
 30.5920+ 0.0000+ 0.0000 - 0.0761- 0.5400-  0.0009 = 29.9751  Versus  29.9751

Mass Balance =  0.0000E+00 cm;  Time step attempts = 3325 and successes = 3325
  Evaporation:  Potential =  0.3044 cm, Actual =  0.0761 cm
Transpiration:  Potential =  5.7827 cm, Actual =  0.5400 cm
RHMEAN = 42.5 %;  TMEAN = 294.8 K;  HDRY =  1.1718E+06 cm;  DAYUBC =     0

------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 105, Simulated Time = 24.0000 hr
-------------
Node Number        =       2           12          25
Depth (cm)         =     5.00000     50.00000   122.00000
Water (cm3/cm3)    =     0.12061      0.27152     0.26680
Head (cm)          = 1.47342E+04 8.32062E+02 9.12085E+02
Water Flow (cm)    =-2.93825E-04-1.37530E-02 9.00972E-04
Plant Sink (cm)    = 7.28928E-04 8.23210E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR          STORAGE
 29.9751+ 0.0000+ 0.0000 - 0.0314- 0.1437-  0.0009 = 29.7990  Versus  29.7991

Mass Balance = -2.6703E-05 cm;  Time step attempts = 3873 and successes = 3873
  Evaporation:  Potential =  0.1256 cm, Actual =  0.0314 cm
Transpiration:  Potential =  2.3858 cm, Actual =  0.1437 cm
RHMEAN = 66.2 %;  TMEAN = 293.4 K;  HDRY =  5.6623E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 106, Simulated Time = 24.0000 hr
-------------
Node Number        =       2           12          25
Depth (cm)         =     5.00000     50.00000   122.00000
```

```
Water (cm3/cm3)     =     0.12038     0.27044     0.26724
Head (cm)           = 1.49106E+04 8.49575E+02 9.04196E+02
Water Flow (cm)     =-1.82111E-04-1.35167E-02 9.25000E-04
Plant Sink (cm)     = 1.59183E-04 5.02955E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 29.7991+ 0.0000+ 0.0000 - 0.0192- 0.0774-  0.0009 = 29.7016  Versus  29.7016

Mass Balance =  1.1444E-05 cm;  Time step attempts = 5200 and successes = 5200
  Evaporation:  Potential =  0.0767 cm, Actual =  0.0192 cm
Transpiration:  Potential =  1.4577 cm, Actual =  0.0774 cm
RHMEAN = 85.5 %;  TMEAN = 294.3 K;  HDRY =  2.1402E+05 cm;  DAYUBC =     0

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 107, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12           25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.26201     0.26990     0.26764
Head (cm)           = 5.68750E+02 8.58474E+02 8.97199E+02
Water Flow (cm)     = 1.04335E+00-1.27782E-02 9.47270E-04
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 29.7016+ 2.0760+ 0.7688 - 0.0000- 0.0000-  0.0009 = 31.7767  Versus  31.7771

Mass Balance = -4.8256E-04 cm;  Time step attempts =21556 and successes =21556
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 91.6 %;  TMEAN = 289.5 K;  HDRY =  1.1984E+05 cm;  DAYUBC =  6364

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 108, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12           25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.19885     0.26826     0.26805
Head (cm)           = 1.52394E+03 8.86295E+02 8.90034E+02
Water Flow (cm)     = 5.76272E-02-1.28177E-02 9.70600E-04
Plant Sink (cm)     = 7.13791E-02 1.12150E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 31.7771+ 0.0000+ 0.0000 - 0.0428- 0.7821-  0.0010 = 30.9513  Versus  30.9513

Mass Balance =  1.1444E-05 cm;  Time step attempts = 1588 and successes = 1588
  Evaporation:  Potential =  0.1711 cm, Actual =  0.0428 cm
Transpiration:  Potential =  3.2503 cm, Actual =  0.7821 cm
RHMEAN = 53.6 %;  TMEAN = 287.3 K;  HDRY =  8.5508E+05 cm;  DAYUBC =     0

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 109, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12           25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.23251     0.26736     0.26843
Head (cm)           = 8.71031E+02 9.02174E+02 8.83386E+02
Water Flow (cm)     = 3.50415E-01-1.30917E-02 9.93072E-04
```

```
Plant Sink (cm)    = 2.81590E-02 4.42431E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR             STORAGE
 30.9513+ 0.7112+ 0.0000 - 0.0169- 0.3109-  0.0010 = 31.3337  Versus  31.3337

Mass Balance =  2.2888E-05 cm;  Time step attempts = 3490 and successes = 3490
  Evaporation:  Potential =  0.0682 cm, Actual =  0.0169 cm
Transpiration:  Potential =  1.2952 cm, Actual =  0.3109 cm
RHMEAN = 74.0 %;  TMEAN = 285.1 K;  HDRY =  4.1180E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 110, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.18084     0.26597     0.26880
Head (cm)          = 2.17470E+03 9.27191E+02 8.76990E+02
Water Flow (cm)    = 1.67933E-02-1.32381E-02 1.01538E-03
Plant Sink (cm)    = 6.13381E-02 9.63736E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR             STORAGE
 31.3337+ 0.0000+ 0.0000 - 0.0368- 0.6767-  0.0010 = 30.6192  Versus  30.6192

Mass Balance = -3.8147E-06 cm;  Time step attempts =  647 and successes =  647
  Evaporation:  Potential =  0.1470 cm, Actual =  0.0368 cm
Transpiration:  Potential =  2.7931 cm, Actual =  0.6767 cm
RHMEAN = 64.2 %;  TMEAN = 289.0 K;  HDRY =  6.0660E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 111, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.14345     0.26464     0.26915
Head (cm)          = 5.79523E+03 9.51986E+02 8.71079E+02
Water Flow (cm)    =-5.79897E-03-1.36755E-02 1.03669E-03
Plant Sink (cm)    = 4.85629E-02 9.59492E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR             STORAGE
 30.6192+ 0.0254+ 0.0000 - 0.0366- 0.5995-  0.0010 = 30.0074  Versus  30.0073

Mass Balance =  9.9182E-05 cm;  Time step attempts = 3550 and successes = 3550
  Evaporation:  Potential =  0.1478 cm, Actual =  0.0366 cm
Transpiration:  Potential =  2.8089 cm, Actual =  0.5995 cm
RHMEAN = 62.5 %;  TMEAN = 287.3 K;  HDRY =  6.4469E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 112, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.32114     0.26430     0.26946
Head (cm)          = 2.50150E+02 9.58488E+02 8.65814E+02
Water Flow (cm)    = 2.41313E+00-1.33220E-02 1.05627E-03
Plant Sink (cm)    = 9.28273E-05 1.45849E-06 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR             STORAGE
```

```
 30.0073+ 3.5757+ 1.2757 - 0.0001- 0.0010-  0.0011 = 33.5808  Versus  33.5810

Mass Balance = -1.7166E-04 cm;  Time step attempts =12251 and successes =12251
  Evaporation:  Potential =  0.0002 cm, Actual =  0.0001 cm
Transpiration:  Potential =  0.0044 cm, Actual =  0.0010 cm
RHMEAN = 89.0 %;  TMEAN = 280.4 K;  HDRY =  1.5926E+05 cm;  DAYUBC =  5548

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 113, Simulated Time = 24.0000 hr
-------------
Node Number         =       2           12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.29380     0.26347     0.26976
Head (cm)           = 3.68189E+02 9.74689E+02 8.60769E+02
Water Flow (cm)     = 1.57782E-01-1.28220E-02 1.07533E-03
Plant Sink (cm)     = 3.14431E-02 4.94029E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 33.5810+ 0.1270+ 0.0000 - 0.0188- 0.3580-  0.0011 = 33.3302  Versus  33.3305

Mass Balance = -3.5095E-04 cm;  Time step attempts = 5502 and successes = 5502
  Evaporation:  Potential =  0.0761 cm, Actual =  0.0188 cm
Transpiration:  Potential =  1.4463 cm, Actual =  0.3580 cm
RHMEAN = 69.5 %;  TMEAN = 283.4 K;  HDRY =  4.9797E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 114, Simulated Time = 24.0000 hr
-------------
Node Number         =       2           12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.26737     0.26256     0.27005
Head (cm)           = 5.28170E+02 9.92756E+02 8.56003E+02
Water Flow (cm)     = 1.36907E-02-1.27975E-02 1.09388E-03
Plant Sink (cm)     = 3.85749E-02 6.06083E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 33.3305+ 0.0254+ 0.0000 - 0.0231- 0.4391-  0.0011 = 32.8926  Versus  32.8927

Mass Balance = -9.5367E-05 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.0934 cm, Actual =  0.0231 cm
Transpiration:  Potential =  1.7743 cm, Actual =  0.4391 cm
RHMEAN = 62.6 %;  TMEAN = 285.1 K;  HDRY =  6.4149E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 115, Simulated Time = 24.0000 hr
-------------
Node Number         =       2           12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.21864     0.26117     0.27032
Head (cm)           = 1.08319E+03 1.02111E+03 8.51566E+02
Water Flow (cm)     =-5.28973E-02-1.31659E-02 1.11158E-03
Plant Sink (cm)     = 7.52489E-02 1.18230E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 32.8927+ 0.0000+ 0.0000 - 0.0451- 0.8566-  0.0011 = 31.9898  Versus  31.9898

Mass Balance = -9.5367E-06 cm;  Time step attempts =  268 and successes =  268
```

```
  Evaporation:  Potential =  0.1803 cm, Actual =  0.0451 cm
Transpiration:  Potential =  3.4266 cm, Actual =  0.8566 cm
RHMEAN = 57.1 %;  TMEAN = 288.2 K;  HDRY =  7.6914E+05 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day = 116, Simulated Time = 24.0000 hr
-------------
Node Number       =       2           12          25
Depth (cm)        =     5.00000    50.00000   122.00000
Water (cm3/cm3)   =     0.17479     0.26011     0.27056
Head (cm)         = 2.48257E+03 1.04353E+03 8.47504E+02
Water Flow (cm)   =-4.76796E-02-1.35378E-02 1.12815E-03
Plant Sink (cm)   = 6.30259E-02 9.90254E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 31.9898+ 0.0000+ 0.0000 - 0.0378- 0.7175-  0.0011 = 31.2334  Versus  31.2334

Mass Balance = -7.6294E-06 cm;  Time step attempts =  664 and successes =  664
  Evaporation:  Potential =  0.1511 cm, Actual =  0.0378 cm
Transpiration:  Potential =  2.8700 cm, Actual =  0.7175 cm
RHMEAN = 67.7 %;  TMEAN = 287.6 K;  HDRY =  5.3488E+05 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day = 117, Simulated Time = 24.0000 hr
-------------
Node Number       =       2           12          25
Depth (cm)        =     5.00000    50.00000   122.00000
Water (cm3/cm3)   =     0.14557     0.25934     0.27079
Head (cm)         = 5.40856E+03 1.06023E+03 8.43807E+02
Water Flow (cm)   =-2.66397E-02-1.34897E-02 1.14356E-03
Plant Sink (cm)   = 4.06565E-02 8.00155E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 31.2334+ 0.0000+ 0.0000 - 0.0305- 0.5331-  0.0011 = 30.6687  Versus  30.6687

Mass Balance = -1.9073E-06 cm;  Time step attempts = 1166 and successes = 1166
  Evaporation:  Potential =  0.1221 cm, Actual =  0.0305 cm
Transpiration:  Potential =  2.3190 cm, Actual =  0.5331 cm
RHMEAN = 54.8 %;  TMEAN = 283.7 K;  HDRY =  8.2392E+05 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day = 118, Simulated Time = 24.0000 hr
-------------
Node Number       =       2           12          25
Depth (cm)        =     5.00000    50.00000   122.00000
Water (cm3/cm3)   =     0.13507     0.25886     0.27100
Head (cm)         = 7.79510E+03 1.07098E+03 8.40457E+02
Water Flow (cm)   =-1.06466E-02-1.31425E-02 1.15779E-03
Plant Sink (cm)   = 1.55957E-02 5.74519E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 30.6687+ 0.0000+ 0.0000 - 0.0219- 0.3057-  0.0012 = 30.3399  Versus  30.3399

Mass Balance = -1.1444E-05 cm;  Time step attempts = 1015 and successes = 1015
  Evaporation:  Potential =  0.0876 cm, Actual =  0.0219 cm
Transpiration:  Potential =  1.6651 cm, Actual =  0.3057 cm
RHMEAN = 67.3 %;  TMEAN = 287.9 K;  HDRY =  5.4344E+05 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day = 119, Simulated Time = 24.0000 hr
-------------
Node Number         =        2           12          25
Depth (cm)          =     5.00000     50.00000   122.00000
Water (cm3/cm3)     =     0.15094      0.25834     0.27118
Head (cm)           = 4.58349E+03 1.08252E+03 8.37503E+02
Water Flow (cm)     = 2.53663E-03-1.27375E-02 1.17058E-03
Plant Sink (cm)     = 2.77982E-02 6.27120E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR           STORAGE
 30.3399+ 0.3302+ 0.0000 - 0.0239- 0.3524-  0.0012 = 30.2927   Versus  30.2927

Mass Balance = -4.7684E-05 cm;  Time step attempts = 3958 and successes = 3958
  Evaporation:  Potential =  0.0966 cm, Actual =  0.0239 cm
Transpiration:  Potential =  1.8359 cm, Actual =  0.3524 cm
RHMEAN = 74.7 %;  TMEAN = 291.5 K;  HDRY =  4.0020E+05 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day = 120, Simulated Time = 24.0000 hr
-------------
Node Number         =        2           12          25
Depth (cm)          =     5.00000     50.00000   122.00000
Water (cm3/cm3)     =     0.22028      0.25830     0.27134
Head (cm)           = 1.05474E+03 1.08341E+03 8.34894E+02
Water Flow (cm)     = 2.74525E-01-1.21744E-02 1.18204E-03
Plant Sink (cm)     = 9.15837E-03 1.43895E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR           STORAGE
 30.2927+ 0.7059+ 0.1069 - 0.0055- 0.1007-  0.0012 = 30.8913   Versus  30.8917

Mass Balance = -4.2915E-04 cm;  Time step attempts = 6980 and successes = 6980
  Evaporation:  Potential =  0.0222 cm, Actual =  0.0055 cm
Transpiration:  Potential =  0.4213 cm, Actual =  0.1007 cm
RHMEAN = 87.5 %;  TMEAN = 287.9 K;  HDRY =  1.8275E+05 cm;  DAYUBC =   501
```

```
DAILY SUMMARY:  Day = 121, Simulated Time = 24.0000 hr
-------------
Node Number         =        2           12          25
Depth (cm)          =     5.00000     50.00000   122.00000
Water (cm3/cm3)     =     0.19636      0.25809     0.27149
Head (cm)           = 1.59625E+03 1.08824E+03 8.32468E+02
Water Flow (cm)     = 6.66845E-02-1.15305E-02 1.19287E-03
Plant Sink (cm)     = 1.96314E-02 3.08445E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR           STORAGE
 30.8917+ 0.0000+ 0.0000 - 0.0118- 0.2229-  0.0012 = 30.6559   Versus  30.6558

Mass Balance =  1.9073E-06 cm;  Time step attempts =  344 and successes =  344
  Evaporation:  Potential =  0.0470 cm, Actual =  0.0118 cm
Transpiration:  Potential =  0.8939 cm, Actual =  0.2229 cm
RHMEAN = 87.3 %;  TMEAN = 287.5 K;  HDRY =  1.8574E+05 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day = 122, Simulated Time = 24.0000 hr
-------------
Node Number        =       2           12          25
Depth (cm)         =      5.00000    50.00000   122.00000
Water (cm3/cm3)    =      0.18042     0.25784     0.27162
Head (cm)          = 2.19425E+03 1.09387E+03 8.30373E+02
Water Flow (cm)    = 2.29580E-02-1.11058E-02 1.20236E-03
Plant Sink (cm)    = 2.06411E-02 3.24309E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR           STORAGE
 30.6558+ 0.0254+ 0.0000 - 0.0124- 0.2349-  0.0012 = 30.4328   Versus  30.4329

Mass Balance = -9.7275E-05 cm;  Time step attempts = 2284 and successes = 2284
  Evaporation:  Potential =  0.0500 cm, Actual =  0.0124 cm
Transpiration:  Potential =  0.9494 cm, Actual =  0.2349 cm
RHMEAN = 87.3 %;  TMEAN = 287.5 K;  HDRY =  1.8574E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 123, Simulated Time = 24.0000 hr
-------------
Node Number        =       2           12          25
Depth (cm)         =      5.00000    50.00000   122.00000
Water (cm3/cm3)    =      0.19673     0.25784     0.27174
Head (cm)          = 1.58512E+03 1.09387E+03 8.28544E+02
Water Flow (cm)    = 5.16139E-02-1.06173E-02 1.21079E-03
Plant Sink (cm)    = 3.48673E-03 5.47829E-05 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR           STORAGE
 30.4329+ 0.1778+ 0.0000 - 0.0021- 0.0397-  0.0012 = 30.5677   Versus  30.5679

Mass Balance = -1.4496E-04 cm;  Time step attempts = 2230 and successes = 2230
  Evaporation:  Potential =  0.0084 cm, Actual =  0.0021 cm
Transpiration:  Potential =  0.1604 cm, Actual =  0.0397 cm
RHMEAN = 87.1 %;  TMEAN = 287.0 K;  HDRY =  1.8876E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 124, Simulated Time = 24.0000 hr
-------------
Node Number        =       2           12          25
Depth (cm)         =      5.00000    50.00000   122.00000
Water (cm3/cm3)    =      0.15211     0.25700     0.27184
Head (cm)          = 4.42900E+03 1.11333E+03 8.26951E+02
Water Flow (cm)    = 1.82582E-02-1.05389E-02 1.21822E-03
Plant Sink (cm)    = 5.20039E-02 8.87577E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR           STORAGE
 30.5679+ 0.0254+ 0.0000 - 0.0338- 0.5966-  0.0012 = 29.9616   Versus  29.9617

Mass Balance = -4.0054E-05 cm;  Time step attempts = 3085 and successes = 3085
  Evaporation:  Potential =  0.1368 cm, Actual =  0.0338 cm
Transpiration:  Potential =  2.5984 cm, Actual =  0.5966 cm
RHMEAN = 67.4 %;  TMEAN = 288.7 K;  HDRY =  5.3974E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 125, Simulated Time = 24.0000 hr
-------------
```

```
Node Number          =        2           12           25
Depth (cm)           =     5.00000     50.00000    122.00000
Water (cm3/cm3)      =     0.23043      0.25662      0.27192
Head (cm)            = 8.99196E+02 1.12218E+03 8.25646E+02
Water Flow (cm)      = 4.92480E-01-1.06543E-02 1.22441E-03
Plant Sink (cm)      = 2.63027E-02 4.13265E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS     DRAIN   NEWSTOR            STORAGE
 29.9617+ 1.1153+ 0.2055 - 0.0158- 0.2881-  0.0012 = 30.7719  Versus  30.7722

Mass Balance = -2.1362E-04 cm;  Time step attempts = 6334 and successes = 6334
  Evaporation:  Potential =  0.0643 cm, Actual =  0.0158 cm
Transpiration:  Potential =  1.2222 cm, Actual =  0.2881 cm
RHMEAN = 79.2 %;  TMEAN = 286.8 K;  HDRY =  3.1885E+05 cm;  DAYUBC =  1427

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 126, Simulated Time = 24.0000 hr
-------------
Node Number          =        2           12           25
Depth (cm)           =     5.00000     50.00000    122.00000
Water (cm3/cm3)      =     0.30624      0.25632      0.27199
Head (cm)            = 3.09987E+02 1.12926E+03 8.24590E+02
Water Flow (cm)      = 1.89123E+00-1.04636E-02 1.22955E-03
Plant Sink (cm)      = 2.00660E-02 3.15275E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS     DRAIN   NEWSTOR            STORAGE
 30.7722+ 2.5086+ 0.5394 - 0.0120- 0.2284-  0.0012 = 33.0391  Versus  33.0394

Mass Balance = -3.0518E-04 cm;  Time step attempts = 9026 and successes = 9026
  Evaporation:  Potential =  0.0501 cm, Actual =  0.0120 cm
Transpiration:  Potential =  0.9518 cm, Actual =  0.2284 cm
RHMEAN = 83.5 %;  TMEAN = 290.9 K;  HDRY =  2.4767E+05 cm;  DAYUBC =  1256

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 127, Simulated Time = 24.0000 hr
-------------
Node Number          =        2           12           25
Depth (cm)           =     5.00000     50.00000    122.00000
Water (cm3/cm3)      =     0.35309      0.25630      0.27205
Head (cm)            = 1.46414E+02 1.12975E+03 8.23628E+02
Water Flow (cm)      = 2.06216E+00-1.01267E-02 1.23417E-03
Plant Sink (cm)      = 3.63234E-03 5.71137E-05 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS     DRAIN   NEWSTOR            STORAGE
 33.0394+ 2.4055+ 2.3951 - 0.0022- 0.0414-  0.0012 = 35.4001  Versus  35.4004

Mass Balance = -2.8992E-04 cm;  Time step attempts = 6182 and successes = 6182
  Evaporation:  Potential =  0.0092 cm, Actual =  0.0022 cm
Transpiration:  Potential =  0.1742 cm, Actual =  0.0414 cm
RHMEAN = 89.0 %;  TMEAN = 290.9 K;  HDRY =  1.5983E+05 cm;  DAYUBC =  1081

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 128, Simulated Time = 24.0000 hr
-------------
Node Number          =        2           12           25
Depth (cm)           =     5.00000     50.00000    122.00000
Water (cm3/cm3)      =     0.29414      0.25667      0.27210
```

```
Head (cm)          = 3.66498E+02 1.12104E+03 8.22804E+02
Water Flow (cm)    =-6.09917E-02-9.77315E-03 1.23825E-03
Plant Sink (cm)    = 9.27071E-02 1.45660E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 35.4004+ 0.0000+ 0.0000 - 0.0555- 1.0554-  0.0012 = 34.2882  Versus  34.2883

Mass Balance = -3.4332E-05 cm;  Time step attempts =  103 and successes =  103
  Evaporation:  Potential =  0.2222 cm, Actual =  0.0555 cm
Transpiration:  Potential =  4.2215 cm, Actual =  1.0554 cm
RHMEAN = 55.3 %;  TMEAN = 292.0 K;  HDRY =  8.1283E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 129, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.25249     0.26032     0.27214
Head (cm)          = 6.50007E+02 1.03907E+03 8.22160E+02
Water Flow (cm)    =-9.49667E-02-6.79900E-03 1.24151E-03
Plant Sink (cm)    = 7.56834E-02 1.18913E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 34.2883+ 0.0000+ 0.0000 - 0.0453- 0.8616-  0.0012 = 33.3801  Versus  33.3801

Mass Balance = -2.6703E-05 cm;  Time step attempts =  144 and successes =  144
  Evaporation:  Potential =  0.1814 cm, Actual =  0.0453 cm
Transpiration:  Potential =  3.4464 cm, Actual =  0.8616 cm
RHMEAN = 56.3 %;  TMEAN = 291.5 K;  HDRY =  7.8728E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 130, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.22228     0.26417     0.27217
Head (cm)          = 1.02148E+03 9.61039E+02 8.21689E+02
Water Flow (cm)    =-7.87122E-02-1.75578E-03 1.24400E-03
Plant Sink (cm)    = 5.58290E-02 8.77177E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 33.3801+ 0.0000+ 0.0000 - 0.0335- 0.6356-  0.0012 = 32.7099  Versus  32.7099

Mass Balance = -7.6294E-06 cm;  Time step attempts =  216 and successes =  216
  Evaporation:  Potential =  0.1338 cm, Actual =  0.0335 cm
Transpiration:  Potential =  2.5423 cm, Actual =  0.6356 cm
RHMEAN = 62.7 %;  TMEAN = 287.3 K;  HDRY =  6.3973E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 131, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.19788     0.26684     0.27219
Head (cm)          = 1.55149E+03 9.11419E+02 8.21377E+02
Water Flow (cm)    =-5.92246E-02 2.37799E-03 1.24575E-03
Plant Sink (cm)    = 4.32576E-02 6.79657E-04 0.00000E+00
```

```
 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR             STORAGE
 32.7099+ 0.0000+ 0.0000 - 0.0259- 0.4924-  0.0012 = 32.1903  Versus  32.1903

Mass Balance = -3.8147E-06 cm;  Time step attempts =  284 and successes =  284
  Evaporation:  Potential =  0.1037 cm, Actual =  0.0259 cm
Transpiration:  Potential =  1.9698 cm, Actual =  0.4924 cm
RHMEAN = 68.2 %;  TMEAN = 288.7 K;  HDRY =  5.2518E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 132, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.17736     0.26837     0.27220
Head (cm)          = 2.34455E+03 8.84494E+02 8.21220E+02
Water Flow (cm)    =-4.41650E-02 4.65273E-03 1.24679E-03
Plant Sink (cm)    = 3.48588E-02 5.47696E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR             STORAGE
 32.1903+ 0.0000+ 0.0000 - 0.0209- 0.3968-  0.0012 = 31.7713  Versus  31.7713

Mass Balance = -9.5367E-06 cm;  Time step attempts =  414 and successes =  414
  Evaporation:  Potential =  0.0835 cm, Actual =  0.0209 cm
Transpiration:  Potential =  1.5873 cm, Actual =  0.3968 cm
RHMEAN = 81.0 %;  TMEAN = 291.5 K;  HDRY =  2.8823E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 133, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.12872     0.26780     0.27220
Head (cm)          = 1.00726E+04 8.94338E+02 8.21193E+02
Water Flow (cm)    =-1.93766E-02 4.30768E-03 1.24718E-03
Plant Sink (cm)    = 5.62963E-02 1.63919E-03 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR             STORAGE
 31.7713+ 0.0000+ 0.0000 - 0.0625- 0.9325-  0.0012 = 30.7750  Versus  30.7751

Mass Balance = -5.7220E-05 cm;  Time step attempts = 2942 and successes = 2942
  Evaporation:  Potential =  0.2500 cm, Actual =  0.0625 cm
Transpiration:  Potential =  4.7507 cm, Actual =  0.9325 cm
RHMEAN = 46.0 %;  TMEAN = 300.4 K;  HDRY =  1.0641E+06 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 134, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.12321     0.26722     0.27220
Head (cm)          = 1.29434E+04 9.04528E+02 8.21246E+02
Water Flow (cm)    =-2.66991E-03 2.44779E-03 1.24715E-03
Plant Sink (cm)    = 7.24874E-03 9.96621E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR             STORAGE
 30.7751+ 0.0000+ 0.0000 - 0.0380- 0.3569-  0.0012 = 30.3790  Versus  30.3790
```

```
Mass Balance = -2.2888E-05 cm;  Time step attempts = 1372 and successes = 1372
  Evaporation:  Potential =  0.1520 cm, Actual =  0.0380 cm
Transpiration:  Potential =  2.8884 cm, Actual =  0.3569 cm
RHMEAN = 70.2 %;  TMEAN = 293.7 K;  HDRY =  4.8563E+05 cm;  DAYUBC =     0

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 135, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.12152     0.26651     0.27219
Head (cm)          = 1.40665E+04 9.17339E+02 8.21413E+02
Water Flow (cm)    =-1.02413E-03 8.63665E-04 1.24664E-03
Plant Sink (cm)    = 2.21290E-03 7.97275E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 30.3790+ 0.0000+ 0.0000 - 0.0304- 0.2250-  0.0012 = 30.1223  Versus  30.1224

Mass Balance = -6.1035E-05 cm;  Time step attempts = 1899 and successes = 1899
  Evaporation:  Potential =  0.1216 cm, Actual =  0.0304 cm
Transpiration:  Potential =  2.3107 cm, Actual =  0.2250 cm
RHMEAN = 74.7 %;  TMEAN = 295.7 K;  HDRY =  4.0059E+05 cm;  DAYUBC =     0

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 136, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.12089     0.26582     0.27217
Head (cm)          = 1.45195E+04 9.29956E+02 8.21667E+02
Water Flow (cm)    =-5.68516E-04-5.07465E-04 1.24569E-03
Plant Sink (cm)    = 7.59306E-04 5.93688E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 30.1224+ 0.0000+ 0.0000 - 0.0226- 0.1442-  0.0012 = 29.9543  Versus  29.9544

Mass Balance = -1.0681E-04 cm;  Time step attempts = 2713 and successes = 2713
  Evaporation:  Potential =  0.0906 cm, Actual =  0.0226 cm
Transpiration:  Potential =  1.7206 cm, Actual =  0.1442 cm
RHMEAN = 77.0 %;  TMEAN = 297.6 K;  HDRY =  3.5870E+05 cm;  DAYUBC =     0

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 137, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.12033     0.26445     0.27216
Head (cm)          = 1.49459E+04 9.55610E+02 8.21822E+02
Water Flow (cm)    =-3.10280E-04-2.15557E-03 1.24460E-03
Plant Sink (cm)    = 4.98222E-04 1.16194E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 29.9544+ 0.0000+ 0.0000 - 0.0443- 0.2402-  0.0012 = 29.6686  Versus  29.6700

Mass Balance = -1.3790E-03 cm;  Time step attempts =21455 and successes =21455
  Evaporation:  Potential =  0.1772 cm, Actual =  0.0443 cm
```

```
 Transpiration:  Potential =  3.3676 cm, Actual =  0.2402 cm
 RHMEAN = 59.1 %;  TMEAN = 296.2 K;  HDRY =  7.2029E+05 cm;  DAYUBC =     0

-------------------------------------------------------------------------------

 DAILY SUMMARY:  Day = 138, Simulated Time = 24.0000 hr
 -------------
 Node Number       =       2           12          25
 Depth (cm)        =     5.00000    50.00000   122.00000
 Water (cm3/cm3)   =     0.12003     0.26356     0.27216
 Head (cm)         = 1.51802E+04 9.72862E+02 8.21886E+02
 Water Flow (cm)   =-1.60829E-04-3.75590E-03 1.24415E-03
 Plant Sink (cm)   = 5.78134E-06 7.17168E-04 0.00000E+00

  PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
  29.6700+ 0.0000+ 0.0000 - 0.0273- 0.1286-  0.0012 = 29.5128  Versus  29.5177

 Mass Balance = -4.9400E-03 cm;  Time step attempts =78319 and successes =78319
   Evaporation:  Potential =  0.1094 cm, Actual =  0.0273 cm
 Transpiration:  Potential =  2.0785 cm, Actual =  0.1286 cm
 RHMEAN = 65.3 %;  TMEAN = 287.6 K;  HDRY =  5.8399E+05 cm;  DAYUBC =     0

-------------------------------------------------------------------------------

 DAILY SUMMARY:  Day = 139, Simulated Time = 24.0000 hr
 -------------
 Node Number       =       2           12          25
 Depth (cm)        =     5.00000    50.00000   122.00000
 Water (cm3/cm3)   =     0.11912     0.26257     0.27214
 Head (cm)         = 1.59292E+04 9.92433E+02 8.22151E+02
 Water Flow (cm)   =-1.54863E-04-4.85477E-03 1.24379E-03
 Plant Sink (cm)   = 0.00000E+00 8.05391E-04 0.00000E+00

  PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
  29.5177+ 0.0000+ 0.0000 - 0.0104- 0.1307-  0.0012 = 29.3754  Versus  29.3790

 Mass Balance = -3.6030E-03 cm;  Time step attempts =53482 and successes =53482
   Evaporation:  Potential =  0.1229 cm, Actual =  0.0104 cm
 Transpiration:  Potential =  2.3342 cm, Actual =  0.1307 cm
 RHMEAN = 60.0 %;  TMEAN = 287.9 K;  HDRY =  7.0116E+05 cm;  DAYUBC =  4137

-------------------------------------------------------------------------------

 DAILY SUMMARY:  Day = 140, Simulated Time = 24.0000 hr
 -------------
 Node Number       =       2           12          25
 Depth (cm)        =     5.00000    50.00000   122.00000
 Water (cm3/cm3)   =     0.11800     0.26127     0.27211
 Head (cm)         = 1.69249E+04 1.01916E+03 8.22582E+02
 Water Flow (cm)   =-2.02672E-04-6.03811E-03 1.24217E-03
 Plant Sink (cm)   = 0.00000E+00 1.05590E-03 0.00000E+00

  PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
  29.3790+ 0.0000+ 0.0000 - 0.0060- 0.1538-  0.0012 = 29.2179  Versus  29.2202

 Mass Balance = -2.2850E-03 cm;  Time step attempts =24718 and successes =24718
   Evaporation:  Potential =  0.1611 cm, Actual =  0.0060 cm
 Transpiration:  Potential =  3.0602 cm, Actual =  0.1538 cm
 RHMEAN = 56.6 %;  TMEAN = 292.6 K;  HDRY =  7.8017E+05 cm;  DAYUBC =  1575
```

```
------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 141, Simulated Time = 24.0000 hr
-------------
Node Number       =        2          12          25
Depth (cm)        =     5.00000    50.00000   122.00000
Water (cm3/cm3)   =     0.11788     0.26017     0.27211
Head (cm)         = 1.70313E+04 1.04230E+03 8.22694E+02
Water Flow (cm)   =-2.25761E-04-7.11028E-03 1.24062E-03
Plant Sink (cm)   = 0.00000E+00 8.48655E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR          STORAGE
 29.2202+ 0.0508+ 0.0000 - 0.0324- 0.1127-  0.0012 = 29.1247  Versus  29.1285

Mass Balance = -3.7880E-03 cm;  Time step attempts =47033 and successes =47033
  Evaporation:  Potential =  0.1308 cm, Actual =  0.0324 cm
Transpiration:  Potential =  2.4844 cm, Actual =  0.1127 cm
RHMEAN = 59.9 %;  TMEAN = 295.1 K;  HDRY =  7.0326E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 142, Simulated Time = 24.0000 hr
-------------
Node Number       =        2          12          25
Depth (cm)        =     5.00000    50.00000   122.00000
Water (cm3/cm3)   =     0.11723     0.25877     0.27209
Head (cm)         = 1.76571E+04 1.07289E+03 8.22994E+02
Water Flow (cm)   =-2.38778E-04-8.18061E-03 1.24017E-03
Plant Sink (cm)   = 0.00000E+00 1.27814E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR          STORAGE
 29.1285+ 0.0000+ 0.0000 - 0.0219- 0.1531-  0.0012 = 28.9522  Versus  28.9571

Mass Balance = -4.8962E-03 cm;  Time step attempts =55493 and successes =55493
  Evaporation:  Potential =  0.1950 cm, Actual =  0.0219 cm
Transpiration:  Potential =  3.7044 cm, Actual =  0.1531 cm
RHMEAN = 60.3 %;  TMEAN = 295.9 K;  HDRY =  6.9389E+05 cm;  DAYUBC =  4459

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 143, Simulated Time = 24.0000 hr
-------------
Node Number       =        2          12          25
Depth (cm)        =     5.00000    50.00000   122.00000
Water (cm3/cm3)   =     0.19612     0.25827     0.27206
Head (cm)         = 1.60344E+03 1.08410E+03 8.23524E+02
Water Flow (cm)   = 5.26849E-02-8.69313E-03 1.23820E-03
Plant Sink (cm)   = 1.72226E-02 2.73374E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR          STORAGE
 28.9571+ 0.8049+ 0.0079 - 0.0104- 0.1122-  0.0012 = 29.6381  Versus  29.6390

Mass Balance = -8.3733E-04 cm;  Time step attempts =14131 and successes =14131
  Evaporation:  Potential =  0.0421 cm, Actual =  0.0104 cm
Transpiration:  Potential =  0.8003 cm, Actual =  0.1122 cm
RHMEAN = 86.6 %;  TMEAN = 293.2 K;  HDRY =  1.9776E+05 cm;  DAYUBC =   123

------------------------------------------------------------------------------
```

```
DAILY SUMMARY:  Day = 144, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12          25
Depth (cm)         =      5.00000     50.00000   122.00000
Water (cm3/cm3)    =      0.25456     0.25804     0.27203
Head (cm)          = 6.31207E+02 1.08923E+03 8.23898E+02
Water Flow (cm)    = 8.43432E-01-8.44094E-03 1.23620E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR           STORAGE
 29.6390+ 1.2270+ 0.0430 - 0.0000- 0.0000-  0.0012 = 30.8647  Versus  30.8659

Mass Balance = -1.1406E-03 cm;  Time step attempts =15603 and successes =15603
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 92.7 %;  TMEAN = 287.0 K;  HDRY =  1.0339E+05 cm;  DAYUBC =   595

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 145, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12          25
Depth (cm)         =      5.00000     50.00000   122.00000
Water (cm3/cm3)    =      0.26224     0.25780     0.27199
Head (cm)          = 5.66946E+02 1.09478E+03 8.24525E+02
Water Flow (cm)    = 4.84435E-01-8.14209E-03 1.23387E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR           STORAGE
 30.8659+ 0.5334+ 0.0000 - 0.0000- 0.0000-  0.0012 = 31.3980  Versus  31.3984

Mass Balance = -3.3569E-04 cm;  Time step attempts = 8434 and successes = 8434
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 94.6 %;  TMEAN = 286.5 K;  HDRY =  7.5435E+04 cm;  DAYUBC =     0

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 146, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12          25
Depth (cm)         =      5.00000     50.00000   122.00000
Water (cm3/cm3)    =      0.33963     0.25721     0.27195
Head (cm)          = 1.86980E+02 1.10836E+03 8.25133E+02
Water Flow (cm)    = 2.59887E+00-8.10834E-03 1.23128E-03
Plant Sink (cm)    = 2.33077E-02 3.66397E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR           STORAGE
 31.3984+ 3.2522+ 2.4119 - 0.0140- 0.2654-  0.0012 = 34.3700  Versus  34.3707

Mass Balance = -6.5613E-04 cm;  Time step attempts = 9372 and successes = 9372
  Evaporation:  Potential =  0.0595 cm, Actual =  0.0140 cm
Transpiration:  Potential =  1.1297 cm, Actual =  0.2654 cm
RHMEAN = 88.8 %;  TMEAN = 292.3 K;  HDRY =  1.6260E+05 cm;  DAYUBC =  2748

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 147, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12          25
```

```
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.30471     0.25606     0.27191
Head (cm)           = 3.16700E+02 1.13547E+03 8.25887E+02
Water Flow (cm)     = 2.60016E-01-8.63810E-03 1.22813E-03
Plant Sink (cm)     = 6.65692E-02 1.04592E-03 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR           STORAGE
 34.3707+ 0.3556+ 0.0000 - 0.0399- 0.7578-  0.0012 = 33.9273  Versus  33.9276

Mass Balance = -2.8610E-04 cm;  Time step attempts = 3166 and successes = 3166
  Evaporation:  Potential =  0.1612 cm, Actual =  0.0399 cm
Transpiration:  Potential =  3.0619 cm, Actual =  0.7578 cm
RHMEAN = 69.7 %;  TMEAN = 294.8 K;  HDRY =  4.9513E+05 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day = 148, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.26318     0.25556     0.27185
Head (cm)           = 5.59552E+02 1.14771E+03 8.26703E+02
Water Flow (cm)     =-6.49883E-02-9.06616E-03 1.22459E-03
Plant Sink (cm)     = 6.97107E-02 1.09528E-03 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR           STORAGE
 33.9276+ 0.0000+ 0.0000 - 0.0418- 0.7936-  0.0012 = 33.0910  Versus  33.0910

Mass Balance = -3.4332E-05 cm;  Time step attempts =   96 and successes =   96
  Evaporation:  Potential =  0.1671 cm, Actual =  0.0418 cm
Transpiration:  Potential =  3.1744 cm, Actual =  0.7936 cm
RHMEAN = 58.0 %;  TMEAN = 292.6 K;  HDRY =  7.4647E+05 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day = 149, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.24792     0.25657     0.27180
Head (cm)           = 6.93832E+02 1.12347E+03 8.27539E+02
Water Flow (cm)     =-5.14865E-02-8.22277E-03 1.22098E-03
Plant Sink (cm)     = 3.10198E-02 4.87378E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR           STORAGE
 33.0910+ 0.0000+ 0.0000 - 0.0186- 0.3531-  0.0012 = 32.7181  Versus  32.7181

Mass Balance = -3.8147E-06 cm;  Time step attempts =   96 and successes =   96
  Evaporation:  Potential =  0.0743 cm, Actual =  0.0186 cm
Transpiration:  Potential =  1.4125 cm, Actual =  0.3531 cm
RHMEAN = 74.3 %;  TMEAN = 289.3 K;  HDRY =  4.0751E+05 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day = 150, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.24404     0.25834     0.27175
Head (cm)           = 7.33859E+02 1.08249E+03 8.28395E+02
```

```
Water Flow (cm)     =-2.90155E-02-6.23027E-03 1.21729E-03
Plant Sink (cm)     = 1.10500E-02 1.73616E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 32.7181+ 0.0000+ 0.0000 - 0.0066- 0.1258-  0.0012 = 32.5845  Versus  32.5845

Mass Balance = -3.8147E-06 cm;  Time step attempts =   96 and successes =   96
  Evaporation:  Potential =  0.0265 cm, Actual =  0.0066 cm
Transpiration:  Potential =  0.5032 cm, Actual =  0.1258 cm
RHMEAN = 83.3 %;  TMEAN = 291.8 K;  HDRY =  2.5061E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 151, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.31635     0.25950     0.27170
Head (cm)           = 2.68382E+02 1.05683E+03 8.29207E+02
Water Flow (cm)     = 1.62225E+00-4.33942E-03 1.21381E-03
Plant Sink (cm)     = 4.92556E-02 7.73897E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 32.5845+ 2.3793+ 0.2877 - 0.0295- 0.5607-  0.0012 = 34.3723  Versus  34.3726

Mass Balance = -3.0518E-04 cm;  Time step attempts = 3149 and successes = 3149
  Evaporation:  Potential =  0.1217 cm, Actual =  0.0295 cm
Transpiration:  Potential =  2.3123 cm, Actual =  0.5607 cm
RHMEAN = 72.2 %;  TMEAN = 294.3 K;  HDRY =  4.4650E+05 cm;  DAYUBC =   499

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 152, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.28741     0.26113     0.27164
Head (cm)           = 4.01757E+02 1.02192E+03 8.30070E+02
Water Flow (cm)     = 2.85077E-02-2.78050E-03 1.21013E-03
Plant Sink (cm)     = 4.90680E-02 7.70948E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 34.3726+ 0.0762+ 0.0000 - 0.0294- 0.5586-  0.0012 = 33.8596  Versus  33.8597

Mass Balance = -1.2207E-04 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.1188 cm, Actual =  0.0294 cm
Transpiration:  Potential =  2.2569 cm, Actual =  0.5586 cm
RHMEAN = 75.9 %;  TMEAN = 294.0 K;  HDRY =  3.7842E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 153, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.27493     0.26344     0.27159
Head (cm)           = 4.76207E+02 9.75251E+02 8.30961E+02
Water Flow (cm)     = 1.90519E-01-3.21015E-04 1.20635E-03
Plant Sink (cm)     = 5.44044E-02 8.54794E-04 0.00000E+00
```

```
 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS     DRAIN   NEWSTOR            STORAGE
 33.8597+ 0.3810+ 0.0000 - 0.0326- 0.6193-  0.0012 = 33.5876  Versus  33.5877

Mass Balance = -1.2207E-04 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.1317 cm, Actual =  0.0326 cm
Transpiration:  Potential =  2.5024 cm, Actual =  0.6193 cm
RHMEAN = 65.0 %;  TMEAN = 297.0 K;  HDRY =  5.9112E+05 cm;  DAYUBC =     0
-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 154, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12          25
Depth (cm)        =     5.00000    50.00000   122.00000
Water (cm3/cm3)   =     0.31480     0.26610     0.27153
Head (cm)         = 2.74465E+02 9.24898E+02 8.31867E+02
Water Flow (cm)   = 9.90493E-01 2.76015E-03 1.20250E-03
Plant Sink (cm)   = 3.44844E-02 5.41815E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS     DRAIN   NEWSTOR            STORAGE
 33.5877+ 1.4445+ 0.0033 - 0.0207- 0.3926-  0.0012 = 34.6178  Versus  34.6181

Mass Balance = -3.4332E-04 cm;  Time step attempts = 2207 and successes = 2207
  Evaporation:  Potential =  0.0843 cm, Actual =  0.0207 cm
Transpiration:  Potential =  1.6023 cm, Actual =  0.3926 cm
RHMEAN = 83.1 %;  TMEAN = 294.8 K;  HDRY =  2.5352E+05 cm;  DAYUBC =    32
-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 155, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12          25
Depth (cm)        =     5.00000    50.00000   122.00000
Water (cm3/cm3)   =     0.35209     0.27479     0.27147
Head (cm)         = 1.49304E+02 7.81780E+02 8.32796E+02
Water Flow (cm)   = 1.78317E+00 8.64292E-03 1.19859E-03
Plant Sink (cm)   = 3.32425E-02 5.22789E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS     DRAIN   NEWSTOR            STORAGE
 34.6181+ 2.2122+ 2.1566 - 0.0199- 0.3785-  0.0012 = 36.4307  Versus  36.4310

Mass Balance = -2.9373E-04 cm;  Time step attempts = 2343 and successes = 2343
  Evaporation:  Potential =  0.0839 cm, Actual =  0.0199 cm
Transpiration:  Potential =  1.5949 cm, Actual =  0.3785 cm
RHMEAN = 78.0 %;  TMEAN = 294.3 K;  HDRY =  3.4100E+05 cm;  DAYUBC =   514
-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 156, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12          25
Depth (cm)        =     5.00000    50.00000   122.00000
Water (cm3/cm3)   =     0.32731     0.29448     0.27141
Head (cm)         = 2.27907E+02 5.46135E+02 8.33754E+02
Water Flow (cm)   = 1.21432E-01 4.32105E-02 1.19458E-03
Plant Sink (cm)   = 4.49882E-02 7.06849E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS     DRAIN   NEWSTOR            STORAGE
 36.4310+ 0.1778+ 0.0000 - 0.0270- 0.5122-  0.0012 = 36.0685  Versus  36.0685
```

```
Mass Balance = -3.8147E-05 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.1089 cm, Actual =  0.0270 cm
Transpiration:  Potential =  2.0693 cm, Actual =  0.5122 cm
RHMEAN = 80.0 %;  TMEAN = 293.7 K;  HDRY =  3.0592E+05 cm;  DAYUBC =      0

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 157, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.32355     0.30527     0.27135
Head (cm)           = 2.41311E+02 4.52014E+02 8.34703E+02
Water Flow (cm)     = 4.85258E-01 8.78259E-02 1.19060E-03
Plant Sink (cm)     = 5.42919E-02 8.53026E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS    DRAIN    NEWSTOR          STORAGE
 36.0685+ 0.7359+ 0.0007 - 0.0325- 0.6181-  0.0012 = 36.1526  Versus  36.1527

Mass Balance = -1.2207E-04 cm;  Time step attempts = 3231 and successes = 3231
  Evaporation:  Potential =  0.1314 cm, Actual =  0.0325 cm
Transpiration:  Potential =  2.4972 cm, Actual =  0.6181 cm
RHMEAN = 80.7 %;  TMEAN = 297.0 K;  HDRY =  2.9341E+05 cm;  DAYUBC =     17

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 158, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.28031     0.30806     0.27129
Head (cm)           = 4.42525E+02 4.30625E+02 8.35746E+02
Water Flow (cm)     =-1.06164E-01 1.05231E-01 1.18626E-03
Plant Sink (cm)     = 8.01937E-02 1.25999E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS    DRAIN    NEWSTOR          STORAGE
 36.1527+ 0.0000+ 0.0000 - 0.0480- 0.9129-  0.0012 = 35.1906  Versus  35.1906

Mass Balance = -3.8147E-05 cm;  Time step attempts =   96 and successes =   96
  Evaporation:  Potential =  0.1922 cm, Actual =  0.0480 cm
Transpiration:  Potential =  3.6517 cm, Actual =  0.9129 cm
RHMEAN = 74.6 %;  TMEAN = 300.9 K;  HDRY =  4.0153E+05 cm;  DAYUBC =      0

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 159, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.26528     0.30675     0.27122
Head (cm)           = 5.43586E+02 4.40501E+02 8.36807E+02
Water Flow (cm)     =-8.19317E-02 9.05843E-02 1.18185E-03
Plant Sink (cm)     = 3.67030E-02 5.76673E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS    DRAIN    NEWSTOR          STORAGE
 35.1906+ 0.0000+ 0.0000 - 0.0220- 0.4178-  0.0012 = 34.7496  Versus  34.7496

Mass Balance = -3.8147E-06 cm;  Time step attempts =   96 and successes =   96
  Evaporation:  Potential =  0.0880 cm, Actual =  0.0220 cm
Transpiration:  Potential =  1.6713 cm, Actual =  0.4178 cm
```

```
RHMEAN = 80.4 %;  TMEAN = 298.7 K;  HDRY =  2.9831E+05 cm;  DAYUBC =     0
--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 160, Simulated Time = 24.0000 hr
-------------
Node Number        =         2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.37068     0.32459     0.27116
Head (cm)          = 9.74094E+01 3.22205E+02 8.37845E+02
Water Flow (cm)    = 2.92479E+00 9.85023E-02 1.17754E-03
Plant Sink (cm)    = 1.11140E-02 1.78660E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 34.7496+ 3.7184+ 6.2638 - 0.0068- 0.1262-  0.0012 = 38.3338  Versus  38.3340

Mass Balance = -2.1362E-04 cm;  Time step attempts = 2767 and successes = 2767
  Evaporation:  Potential =  0.0379 cm, Actual =  0.0068 cm
Transpiration:  Potential =  0.7192 cm, Actual =  0.1262 cm
RHMEAN = 83.7 %;  TMEAN = 295.4 K;  HDRY =  2.4343E+05 cm;  DAYUBC =   686
--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 161, Simulated Time = 24.0000 hr
-------------
Node Number        =         2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.36776     0.35187     0.27109
Head (cm)          = 1.05394E+02 1.90906E+02 8.38892E+02
Water Flow (cm)    = 7.30418E-01 3.56950E-01 1.17319E-03
Plant Sink (cm)    = 6.92714E-03 1.08968E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 38.3340+ 0.7451+ 0.4741 - 0.0042- 0.0789-  0.0012 = 38.9949  Versus  38.9950

Mass Balance = -6.4850E-05 cm;  Time step attempts = 2175 and successes = 2175
  Evaporation:  Potential =  0.0170 cm, Actual =  0.0042 cm
Transpiration:  Potential =  0.3223 cm, Actual =  0.0789 cm
RHMEAN = 87.9 %;  TMEAN = 292.0 K;  HDRY =  1.7667E+05 cm;  DAYUBC =  1321
--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 162, Simulated Time = 24.0000 hr
-------------
Node Number        =         2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.34282     0.35122     0.27103
Head (cm)          = 1.77024E+02 1.93569E+02 8.39917E+02
Water Flow (cm)    = 2.02745E-01 3.79655E-01 1.16890E-03
Plant Sink (cm)    = 5.91563E-02 9.29456E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 38.9950+ 0.3302+ 0.0000 - 0.0354- 0.6734-  0.0012 = 38.6151  Versus  38.6151

Mass Balance = -1.9073E-05 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.1432 cm, Actual =  0.0354 cm
Transpiration:  Potential =  2.7210 cm, Actual =  0.6734 cm
RHMEAN = 69.5 %;  TMEAN = 290.4 K;  HDRY =  4.9894E+05 cm;  DAYUBC =     0
--------------------------------------------------------------------------------
```

```
DAILY SUMMARY:  Day = 163, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =    5.00000    50.00000   122.00000
Water (cm3/cm3)    =    0.31409     0.34426     0.27097
Head (cm)          = 2.77302E+02 2.23259E+02 8.40912E+02
Water Flow (cm)    =-1.04218E-01 2.29264E-01 1.16466E-03
Plant Sink (cm)    = 5.98164E-02 9.39827E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS    DRAIN    NEWSTOR            STORAGE
 38.6151+ 0.0000+ 0.0000 - 0.0358- 0.6810-  0.0012 = 37.8972  Versus  37.8972

Mass Balance = -3.8147E-06 cm;  Time step attempts =   96 and successes =   96
  Evaporation:  Potential =  0.1434 cm, Actual =  0.0358 cm
Transpiration:  Potential =  2.7238 cm, Actual =  0.6810 cm
RHMEAN = 61.7 %;  TMEAN = 291.5 K;  HDRY =  6.6147E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 164, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =    5.00000    50.00000   122.00000
Water (cm3/cm3)    =    0.27677     0.33702     0.27092
Head (cm)          = 4.64359E+02 2.56755E+02 8.41762E+02
Water Flow (cm)    =-1.35306E-01 1.31689E-01 1.16083E-03
Plant Sink (cm)    = 7.78246E-02 1.22277E-03 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS    DRAIN    NEWSTOR            STORAGE
 37.8972+ 0.0000+ 0.0000 - 0.0466- 0.8860-  0.0012 = 36.9634  Versus  36.9635

Mass Balance = -4.1962E-05 cm;  Time step attempts =   96 and successes =   96
  Evaporation:  Potential =  0.1865 cm, Actual =  0.0466 cm
Transpiration:  Potential =  3.5438 cm, Actual =  0.8860 cm
RHMEAN = 58.0 %;  TMEAN = 294.8 K;  HDRY =  7.4731E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 165, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =    5.00000    50.00000   122.00000
Water (cm3/cm3)    =    0.22644     0.33003     0.27089
Head (cm)          = 9.56562E+02 2.92125E+02 8.42256E+02
Water Flow (cm)    =-1.33281E-01 7.32233E-02 1.15798E-03
Plant Sink (cm)    = 9.38422E-02 1.47443E-03 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS    DRAIN    NEWSTOR            STORAGE
 36.9635+ 0.0000+ 0.0000 - 0.0562- 1.0683-  0.0012 = 35.8378  Versus  35.8378

Mass Balance = -1.5259E-05 cm;  Time step attempts =  268 and successes =  268
  Evaporation:  Potential =  0.2249 cm, Actual =  0.0562 cm
Transpiration:  Potential =  4.2732 cm, Actual =  1.0683 cm
RHMEAN = 60.5 %;  TMEAN = 297.6 K;  HDRY =  6.8925E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 166, Simulated Time = 24.0000 hr
```

```
-------------
Node Number        =        2           12          25
Depth (cm)         =     5.00000     50.00000   122.00000
Water (cm3/cm3)    =     0.15800      0.32361     0.27091
Head (cm)          = 3.75348E+03 3.27847E+02 8.41910E+02
Water Flow (cm)    =-8.48962E-02 3.71264E-02 1.15744E-03
Plant Sink (cm)    = 9.62542E-02 1.56032E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 35.8378+ 0.0000+ 0.0000 - 0.0595- 1.1168-  0.0012 = 34.6603  Versus  34.6603

Mass Balance =  3.8147E-06 cm;  Time step attempts = 1122 and successes = 1122
  Evaporation:  Potential =  0.2380 cm, Actual =  0.0595 cm
Transpiration:  Potential =  4.5222 cm, Actual =  1.1168 cm
RHMEAN = 57.8 %;  TMEAN = 298.2 K;  HDRY =  7.5055E+05 cm;  DAYUBC =     0

-------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 167, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12          25
Depth (cm)         =     5.00000     50.00000   122.00000
Water (cm3/cm3)    =     0.13029      0.31813     0.27103
Head (cm)          = 9.42757E+03 3.61192E+02 8.39846E+02
Water Flow (cm)    =-3.02714E-02 1.57784E-02 1.16204E-03
Plant Sink (cm)    = 3.93865E-02 1.32420E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 34.6603+ 0.0000+ 0.0000 - 0.0505- 0.7437-  0.0012 = 33.8650  Versus  33.8650

Mass Balance =  0.0000E+00 cm;  Time step attempts = 2478 and successes = 2478
  Evaporation:  Potential =  0.2020 cm, Actual =  0.0505 cm
Transpiration:  Potential =  3.8378 cm, Actual =  0.7437 cm
RHMEAN = 63.6 %;  TMEAN = 297.6 K;  HDRY =  6.2045E+05 cm;  DAYUBC =     0

-------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 168, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12          25
Depth (cm)         =     5.00000     50.00000   122.00000
Water (cm3/cm3)    =     0.12358      0.31351     0.27133
Head (cm)          = 1.27116E+04 3.91584E+02 8.35077E+02
Water Flow (cm)    =-5.91592E-03 3.62797E-03 1.17581E-03
Plant Sink (cm)    = 9.35708E-03 1.09840E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 33.8650+ 0.0000+ 0.0000 - 0.0419- 0.4506-  0.0012 = 33.3713  Versus  33.3713

Mass Balance = -3.8147E-06 cm;  Time step attempts = 1471 and successes = 1471
  Evaporation:  Potential =  0.1675 cm, Actual =  0.0419 cm
Transpiration:  Potential =  3.1834 cm, Actual =  0.4506 cm
RHMEAN = 64.1 %;  TMEAN = 297.0 K;  HDRY =  6.0945E+05 cm;  DAYUBC =     0

-------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 169, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12          25
Depth (cm)         =     5.00000     50.00000   122.00000
```

```
Water (cm3/cm3)     =     0.12126     0.30941     0.27184
Head (cm)           = 1.42517E+04 4.20560E+02 8.26848E+02
Water Flow (cm)     =-1.85025E-03-3.96573E-03 1.20310E-03
Plant Sink (cm)     = 3.01281E-03 1.10247E-03 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
 33.3713+ 0.0000+ 0.0000 - 0.0420- 0.3592-  0.0012 = 32.9689  Versus  32.9689

Mass Balance = -3.8147E-06 cm;  Time step attempts = 2662 and successes = 2662
  Evaporation:  Potential =  0.1682 cm, Actual =  0.0420 cm
Transpiration:  Potential =  3.1952 cm, Actual =  0.3592 cm
RHMEAN = 61.2 %;  TMEAN = 296.5 K;  HDRY =  6.7224E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 170, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12           25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.12051     0.30578     0.27260
Head (cm)           = 1.48103E+04 4.48055E+02 8.15018E+02
Water Flow (cm)     =-7.20294E-04-9.14513E-03 1.24722E-03
Plant Sink (cm)     = 8.38296E-04 1.06121E-03 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
 32.9689+ 0.0000+ 0.0000 - 0.0405- 0.2860-  0.0012 = 32.6412  Versus  32.6412

Mass Balance = -3.0518E-05 cm;  Time step attempts = 8801 and successes = 8801
  Evaporation:  Potential =  0.1619 cm, Actual =  0.0405 cm
Transpiration:  Potential =  3.0756 cm, Actual =  0.2860 cm
RHMEAN = 62.1 %;  TMEAN = 297.3 K;  HDRY =  6.5396E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 171, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12           25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.12016     0.30246     0.27344
Head (cm)           = 1.50787E+04 4.74766E+02 8.01946E+02
Water Flow (cm)     =-3.28002E-04-1.28039E-02 1.30610E-03
Plant Sink (cm)     = 1.53381E-04 1.08586E-03 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
 32.6412+ 0.0000+ 0.0000 - 0.0414- 0.2527-  0.0013 = 32.3458  Versus  32.3455

Mass Balance =  2.9373E-04 cm;  Time step attempts =68096 and successes =68096
  Evaporation:  Potential =  0.1656 cm, Actual =  0.0414 cm
Transpiration:  Potential =  3.1471 cm, Actual =  0.2527 cm
RHMEAN = 59.4 %;  TMEAN = 298.2 K;  HDRY =  7.1372E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 172, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12           25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.11929     0.29942     0.27440
Head (cm)           = 1.57859E+04 5.00666E+02 7.87590E+02
Water Flow (cm)     =-1.99096E-04-1.59069E-02 1.37048E-03
```

```
Plant Sink (cm)    = 0.00000E+00 1.12918E-03 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
 32.3455+ 0.0000+ 0.0000 - 0.0139- 0.2318-  0.0014 = 32.0985  Versus  32.0982

Mass Balance =  2.3270E-04 cm;  Time step attempts =56783 and successes =56783
  Evaporation:  Potential =  0.1722 cm, Actual =  0.0139 cm
Transpiration:  Potential =  3.2726 cm, Actual =  0.2318 cm
RHMEAN = 58.8 %;  TMEAN = 298.7 K;  HDRY =  7.2887E+05 cm;  DAYUBC =  3452

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 173, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.11827     0.29668     0.27563
Head (cm)          = 1.66785E+04 5.25363E+02 7.69432E+02
Water Flow (cm)    =-2.07550E-04-1.78986E-02 1.45969E-03
Plant Sink (cm)    = 0.00000E+00 1.03948E-03 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
 32.0982+ 0.0000+ 0.0000 - 0.0043- 0.1909-  0.0015 = 31.9016  Versus  31.9016

Mass Balance =  5.7220E-06 cm;  Time step attempts =  737 and successes =  737
  Evaporation:  Potential =  0.1586 cm, Actual =  0.0043 cm
Transpiration:  Potential =  3.0126 cm, Actual =  0.1909 cm
RHMEAN = 60.6 %;  TMEAN = 299.0 K;  HDRY =  6.8619E+05 cm;  DAYUBC =   720

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 174, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.11738     0.29426     0.27692
Head (cm)          = 1.75175E+04 5.48252E+02 7.51078E+02
Water Flow (cm)    =-2.51167E-04-1.88820E-02 1.56536E-03
Plant Sink (cm)    = 0.00000E+00 8.97627E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
 31.9016+ 0.0000+ 0.0000 - 0.0028- 0.1528-  0.0016 = 31.7444  Versus  31.7445

Mass Balance = -6.2943E-05 cm;  Time step attempts = 2113 and successes = 2113
  Evaporation:  Potential =  0.1369 cm, Actual =  0.0028 cm
Transpiration:  Potential =  2.6015 cm, Actual =  0.1528 cm
RHMEAN = 66.0 %;  TMEAN = 297.6 K;  HDRY =  5.7028E+05 cm;  DAYUBC =  2078

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 175, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.11659     0.29194     0.27820
Head (cm)          = 1.83145E+04 5.71375E+02 7.33296E+02
Water Flow (cm)    =-2.96441E-04-1.95962E-02 1.67976E-03
Plant Sink (cm)    = 0.00000E+00 9.70748E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
```

```
 31.7445+ 0.0000+ 0.0000 - 0.0029- 0.1560-  0.0017 = 31.5838  Versus  31.5838

Mass Balance =  1.9073E-06 cm;  Time step attempts =  829 and successes =  829
  Evaporation:  Potential =  0.1481 cm, Actual =  0.0029 cm
Transpiration:  Potential =  2.8134 cm, Actual =  0.1560 cm
RHMEAN = 68.7 %;  TMEAN = 295.9 K;  HDRY =  5.1361E+05 cm;  DAYUBC =   800

------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 176, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.11563     0.28956     0.27929
Head (cm)          = 1.93568E+04 5.96109E+02 7.18518E+02
Water Flow (cm)    =-3.45868E-04-2.04966E-02 1.78775E-03
Plant Sink (cm)    = 0.00000E+00 1.29372E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 31.5838+ 0.0000+ 0.0000 - 0.0074- 0.1932-  0.0018 = 31.3813  Versus  31.3852

Mass Balance = -3.8624E-03 cm;  Time step attempts =47779 and successes =47779
  Evaporation:  Potential =  0.1973 cm, Actual =  0.0074 cm
Transpiration:  Potential =  3.7495 cm, Actual =  0.1932 cm
RHMEAN = 59.3 %;  TMEAN = 295.4 K;  HDRY =  7.1576E+05 cm;  DAYUBC =  4332

------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 177, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.11455     0.28739     0.28039
Head (cm)          = 2.06391E+04 6.19754E+02 7.04100E+02
Water Flow (cm)    =-4.06641E-04-2.15200E-02 1.89862E-03
Plant Sink (cm)    = 0.00000E+00 1.14635E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 31.3852+ 0.0000+ 0.0000 - 0.0061- 0.1563-  0.0019 = 31.2209  Versus  31.2234

Mass Balance = -2.4757E-03 cm;  Time step attempts =24180 and successes =24180
  Evaporation:  Potential =  0.1749 cm, Actual =  0.0061 cm
Transpiration:  Potential =  3.3224 cm, Actual =  0.1563 cm
RHMEAN = 55.9 %;  TMEAN = 295.1 K;  HDRY =  7.9764E+05 cm;  DAYUBC =  2796

------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 178, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.11359     0.28549     0.28147
Head (cm)          = 2.18823E+04 6.41377E+02 6.90287E+02
Water Flow (cm)    =-4.60726E-04-2.19440E-02 2.01504E-03
Plant Sink (cm)    = 0.00000E+00 9.27178E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 31.2234+ 0.0000+ 0.0000 - 0.0035- 0.1189-  0.0020 = 31.0990  Versus  31.0991

Mass Balance = -1.7166E-05 cm;  Time step attempts = 2033 and successes = 2033
```

```
  Evaporation:  Potential =  0.1414 cm, Actual =  0.0035 cm
Transpiration:  Potential =  2.6872 cm, Actual =  0.1189 cm
RHMEAN = 61.2 %;  TMEAN = 297.0 K;  HDRY =  6.7386E+05 cm;  DAYUBC =  2008

-----------------------------------------------------------------------------

DAILY SUMMARY:  Day = 179, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12         25
Depth (cm)        =    5.00000    50.00000   122.00000
Water (cm3/cm3)   =    0.11269     0.28345     0.28245
Head (cm)         = 2.31611E+04 6.65644E+02 6.77904E+02
Water Flow (cm)   =-5.02487E-04-2.22910E-02 2.12865E-03
Plant Sink (cm)   = 0.00000E+00 1.18387E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 31.0991+ 0.0000+ 0.0000 - 0.0043- 0.1440-  0.0021 = 30.9486  Versus  30.9487

Mass Balance = -1.3542E-04 cm;  Time step attempts = 2409 and successes = 2409
  Evaporation:  Potential =  0.1806 cm, Actual =  0.0043 cm
Transpiration:  Potential =  3.4311 cm, Actual =  0.1440 cm
RHMEAN = 62.1 %;  TMEAN = 299.3 K;  HDRY =  6.5291E+05 cm;  DAYUBC =  2409

-----------------------------------------------------------------------------

DAILY SUMMARY:  Day = 180, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12         25
Depth (cm)        =    5.00000    50.00000   122.00000
Water (cm3/cm3)   =    0.16131     0.28218     0.28332
Head (cm)         = 3.43807E+03 6.81351E+02 6.67187E+02
Water Flow (cm)   = 9.30714E-03-2.19615E-02 2.23477E-03
Plant Sink (cm)   = 2.50736E-02 5.02671E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 30.9487+ 0.6604+ 0.0000 - 0.0192- 0.1728-  0.0022 = 31.4149  Versus  31.4152

Mass Balance = -3.4714E-04 cm;  Time step attempts =13072 and successes =13072
  Evaporation:  Potential =  0.0775 cm, Actual =  0.0192 cm
Transpiration:  Potential =  1.4716 cm, Actual =  0.1728 cm
RHMEAN = 79.5 %;  TMEAN = 295.7 K;  HDRY =  3.1468E+05 cm;  DAYUBC =     0

-----------------------------------------------------------------------------

DAILY SUMMARY:  Day = 181, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12         25
Depth (cm)        =    5.00000    50.00000   122.00000
Water (cm3/cm3)   =    0.18376     0.28095     0.28410
Head (cm)         = 2.04528E+03 6.96922E+02 6.57819E+02
Water Flow (cm)   = 4.98675E-02-2.10510E-02 2.33356E-03
Plant Sink (cm)   = 3.21386E-02 5.04957E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 31.4152+ 0.3048+ 0.0000 - 0.0193- 0.2154-  0.0023 = 31.4831  Versus  31.4834

Mass Balance = -3.8528E-04 cm;  Time step attempts = 7044 and successes = 7044
  Evaporation:  Potential =  0.0778 cm, Actual =  0.0193 cm
Transpiration:  Potential =  1.4783 cm, Actual =  0.2154 cm
RHMEAN = 74.5 %;  TMEAN = 293.4 K;  HDRY =  4.0319E+05 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day = 182, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12          25
Depth (cm)        =     5.00000    50.00000   122.00000
Water (cm3/cm3)   =     0.14001     0.27929     0.28480
Head (cm)         = 6.51361E+03 7.18626E+02 6.49514E+02
Water Flow (cm)   = 1.86582E-02-2.09817E-02 2.42630E-03
Plant Sink (cm)   = 4.76994E-02 9.99852E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 31.4834+ 0.0000+ 0.0000 - 0.0381- 0.3630-  0.0024 = 31.0799  Versus  31.0799

Mass Balance =  1.3351E-05 cm;  Time step attempts = 2118 and successes = 2118
  Evaporation:  Potential =  0.1525 cm, Actual =  0.0381 cm
Transpiration:  Potential =  2.8978 cm, Actual =  0.3630 cm
RHMEAN = 62.3 %;  TMEAN = 292.9 K;  HDRY =  6.4928E+05 cm;  DAYUBC =      0
```

```
DAILY SUMMARY:  Day = 183, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12          25
Depth (cm)        =     5.00000    50.00000   122.00000
Water (cm3/cm3)   =     0.15763     0.27811     0.28540
Head (cm)         = 3.79158E+03 7.34564E+02 6.42419E+02
Water Flow (cm)   = 1.34619E-02-2.08632E-02 2.50997E-03
Plant Sink (cm)   = 3.32787E-02 5.88363E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 31.0799+ 0.3302+ 0.0000 - 0.0224- 0.2291-  0.0025 = 31.1560  Versus  31.1560

Mass Balance =  1.1444E-05 cm;  Time step attempts = 3792 and successes = 3792
  Evaporation:  Potential =  0.0907 cm, Actual =  0.0224 cm
Transpiration:  Potential =  1.7224 cm, Actual =  0.2291 cm
RHMEAN = 75.8 %;  TMEAN = 294.8 K;  HDRY =  3.8045E+05 cm;  DAYUBC =      0
```

```
DAILY SUMMARY:  Day = 184, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12          25
Depth (cm)        =     5.00000    50.00000   122.00000
Water (cm3/cm3)   =     0.12764     0.27615     0.28593
Head (cm)         = 1.05562E+04 7.61876E+02 6.36346E+02
Water Flow (cm)   = 5.02715E-03-2.12701E-02 2.58455E-03
Plant Sink (cm)   = 3.63407E-02 1.43876E-03 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 31.1560+ 0.0000+ 0.0000 - 0.0549- 0.3373-  0.0026 = 30.7613  Versus  30.7614

Mass Balance = -5.9128E-05 cm;  Time step attempts = 2666 and successes = 2666
  Evaporation:  Potential =  0.2195 cm, Actual =  0.0549 cm
Transpiration:  Potential =  4.1699 cm, Actual =  0.3373 cm
RHMEAN = 65.1 %;  TMEAN = 299.5 K;  HDRY =  5.8841E+05 cm;  DAYUBC =      0
```

```
DAILY SUMMARY:  Day = 185, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.12118     0.27396     0.28638
Head (cm)          = 1.43103E+04 7.94192E+02 6.31207E+02
Water Flow (cm)    = 2.79534E-04-2.25582E-02 2.65032E-03
Plant Sink (cm)    = 7.83863E-03 1.80991E-03 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR            STORAGE
 30.7614+ 0.0000+ 0.0000 - 0.0690- 0.2164-  0.0027 = 30.4733  Versus  30.4734

Mass Balance = -4.0054E-05 cm;  Time step attempts = 2512 and successes = 2512
  Evaporation:  Potential =  0.2761 cm, Actual =  0.0690 cm
Transpiration:  Potential =  5.2455 cm, Actual =  0.2164 cm
RHMEAN = 54.1 %;  TMEAN = 300.4 K;  HDRY =  8.4204E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 186, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.12044     0.27245     0.28676
Head (cm)          = 1.48583E+04 8.17363E+02 6.26909E+02
Water Flow (cm)    = 1.45735E-05-2.30951E-02 2.70738E-03
Plant Sink (cm)    = 8.39131E-04 1.20001E-03 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR            STORAGE
 30.4734+ 0.0000+ 0.0000 - 0.0458- 0.1118-  0.0027 = 30.3131  Versus  30.3132

Mass Balance = -1.0872E-04 cm;  Time step attempts = 4833 and successes = 4833
  Evaporation:  Potential =  0.1830 cm, Actual =  0.0458 cm
Transpiration:  Potential =  3.4779 cm, Actual =  0.1118 cm
RHMEAN = 52.4 %;  TMEAN = 298.2 K;  HDRY =  8.8515E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 187, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.12020     0.27091     0.28698
Head (cm)          = 1.50484E+04 8.41883E+02 6.24364E+02
Water Flow (cm)    =-7.48539E-06-2.31181E-02 2.75105E-03
Plant Sink (cm)    = 1.08701E-04 1.31641E-03 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR            STORAGE
 30.3132+ 0.0000+ 0.0000 - 0.0502- 0.1125-  0.0028 = 30.1477  Versus  30.1501

Mass Balance = -2.4185E-03 cm;  Time step attempts =39422 and successes =39422
  Evaporation:  Potential =  0.2008 cm, Actual =  0.0502 cm
Transpiration:  Potential =  3.8153 cm, Actual =  0.1125 cm
RHMEAN = 57.2 %;  TMEAN = 300.9 K;  HDRY =  7.6569E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 188, Simulated Time = 24.0000 hr
-------------
```

```
Node Number        =       2          12          25
Depth (cm)         =    5.00000    50.00000   122.00000
Water (cm3/cm3)    =    0.11934     0.26909     0.28717
Head (cm)          = 1.57418E+04 8.72093E+02 6.22285E+02
Water Flow (cm)    =-4.07711E-05-2.37274E-02 2.77565E-03
Plant Sink (cm)    = 0.00000E+00 1.68592E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 30.1501+ 0.0000+ 0.0000 - 0.0276- 0.1355-  0.0028 = 29.9843  Versus  29.9902

Mass Balance = -5.8918E-03 cm;  Time step attempts =53275 and successes =53275
  Evaporation:  Potential =  0.2572 cm, Actual =  0.0276 cm
Transpiration:  Potential =  4.8862 cm, Actual =  0.1355 cm
RHMEAN = 52.2 %;  TMEAN = 302.0 K;  HDRY =  8.8979E+05 cm;  DAYUBC =  3375

------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 189, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =    5.00000    50.00000   122.00000
Water (cm3/cm3)    =    0.11802     0.26736     0.28739
Head (cm)          = 1.69002E+04 9.02049E+02 6.19815E+02
Water Flow (cm)    =-1.43411E-04-2.42861E-02 2.80646E-03
Plant Sink (cm)    = 0.00000E+00 1.71346E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 29.9902+ 0.0000+ 0.0000 - 0.0065- 0.1266-  0.0028 = 29.8542  Versus  29.8563

Mass Balance = -2.0847E-03 cm;  Time step attempts =15638 and successes =15638
  Evaporation:  Potential =  0.2614 cm, Actual =  0.0065 cm
Transpiration:  Potential =  4.9660 cm, Actual =  0.1266 cm
RHMEAN = 49.9 %;  TMEAN = 302.6 K;  HDRY =  9.5391E+05 cm;  DAYUBC =  4150

------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 190, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =    5.00000    50.00000   122.00000
Water (cm3/cm3)    =    0.11682     0.26601     0.28758
Head (cm)          = 1.80738E+04 9.26391E+02 6.17681E+02
Water Flow (cm)    =-2.40363E-04-2.41941E-02 2.83747E-03
Plant Sink (cm)    = 0.00000E+00 1.35189E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 29.8563+ 0.0000+ 0.0000 - 0.0050- 0.0933-  0.0028 = 29.7552  Versus  29.7552

Mass Balance = -6.2943E-05 cm;  Time step attempts = 1893 and successes = 1893
  Evaporation:  Potential =  0.2062 cm, Actual =  0.0050 cm
Transpiration:  Potential =  3.9181 cm, Actual =  0.0933 cm
RHMEAN = 53.3 %;  TMEAN = 302.9 K;  HDRY =  8.6139E+05 cm;  DAYUBC =  1879

------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 191, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =    5.00000    50.00000   122.00000
Water (cm3/cm3)    =    0.11580     0.26485     0.28773
```

```
Head (cm)           = 1.91592E+04 9.48166E+02 6.16051E+02
Water Flow (cm)     =-3.15947E-04-2.37669E-02 2.86224E-03
Plant Sink (cm)     = 0.00000E+00 1.19124E-03 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR             STORAGE
 29.7552+ 0.0000+ 0.0000 - 0.0032- 0.0785-  0.0029 = 29.6707  Versus  29.6707

Mass Balance =  0.0000E+00 cm;  Time step attempts =  716 and successes =  716
  Evaporation:  Potential =  0.1817 cm, Actual =  0.0032 cm
Transpiration:  Potential =  3.4525 cm, Actual =  0.0785 cm
RHMEAN = 60.8 %;  TMEAN = 301.5 K;  HDRY =  6.8159E+05 cm;  DAYUBC =   676

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 192, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.11455     0.26344     0.28780
Head (cm)           = 2.06332E+04 9.75262E+02 6.15217E+02
Water Flow (cm)     =-3.83160E-04-2.39758E-02 2.87637E-03
Plant Sink (cm)     = 0.00000E+00 1.61536E-03 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR             STORAGE
 29.6707+ 0.0000+ 0.0000 - 0.0091- 0.1016-  0.0029 = 29.5572  Versus  29.5664

Mass Balance = -9.1743E-03 cm;  Time step attempts =60528 and successes =60528
  Evaporation:  Potential =  0.2464 cm, Actual =  0.0091 cm
Transpiration:  Potential =  4.6817 cm, Actual =  0.1016 cm
RHMEAN = 46.8 %;  TMEAN = 304.8 K;  HDRY =  1.0406E+06 cm;  DAYUBC =  3935

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 193, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.11331     0.26205     0.28788
Head (cm)           = 2.22789E+04 1.00310E+03 6.14350E+02
Water Flow (cm)     =-4.52197E-04-2.39643E-02 2.88972E-03
Plant Sink (cm)     = 0.00000E+00 1.55335E-03 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR             STORAGE
 29.5664+ 0.0000+ 0.0000 - 0.0056- 0.0930-  0.0029 = 29.4650  Versus  29.4650

Mass Balance = -5.7220E-05 cm;  Time step attempts = 1461 and successes = 1461
  Evaporation:  Potential =  0.2369 cm, Actual =  0.0056 cm
Transpiration:  Potential =  4.5020 cm, Actual =  0.0930 cm
RHMEAN = 49.5 %;  TMEAN = 304.3 K;  HDRY =  9.6385E+05 cm;  DAYUBC =  1452

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 194, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.11227     0.26092     0.28792
Head (cm)           = 2.37926E+04 1.02630E+03 6.13870E+02
Water Flow (cm)     =-5.05538E-04-2.36647E-02 2.89872E-03
Plant Sink (cm)     = 0.00000E+00 1.31814E-03 0.00000E+00
```

```
 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR             STORAGE
 29.4650+ 0.0000+ 0.0000 - 0.0033- 0.0755-  0.0029 = 29.3834  Versus  29.3835

Mass Balance = -1.3161E-04 cm;  Time step attempts = 1937 and successes = 1937
  Evaporation:  Potential =  0.2011 cm, Actual =  0.0033 cm
Transpiration:  Potential =  3.8203 cm, Actual =  0.0755 cm
RHMEAN = 58.5 %;  TMEAN = 303.2 K;  HDRY =  7.3454E+05 cm;  DAYUBC =  1903
```

```
DAILY SUMMARY:  Day = 195, Simulated Time = 24.0000 hr
-------------
Node Number        =       2           12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.11143     0.25992     0.28794
Head (cm)          = 2.51381E+04 1.04767E+03 6.13712E+02
Water Flow (cm)    =-5.42043E-04-2.32185E-02 2.90301E-03
Plant Sink (cm)    = 0.00000E+00 1.21882E-03 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR             STORAGE
 29.3835+ 0.0000+ 0.0000 - 0.0026- 0.0667-  0.0029 = 29.3114  Versus  29.3114

Mass Balance = -1.1444E-05 cm;  Time step attempts =  641 and successes =  641
  Evaporation:  Potential =  0.1859 cm, Actual =  0.0026 cm
Transpiration:  Potential =  3.5324 cm, Actual =  0.0667 cm
RHMEAN = 65.1 %;  TMEAN = 301.5 K;  HDRY =  5.8823E+05 cm;  DAYUBC =   586
```

```
DAILY SUMMARY:  Day = 196, Simulated Time = 24.0000 hr
-------------
Node Number        =       2           12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.11050     0.25900     0.28793
Head (cm)          = 2.67687E+04 1.06772E+03 6.13782E+02
Water Flow (cm)    =-5.73730E-04-2.29817E-02 2.90350E-03
Plant Sink (cm)    = 0.00000E+00 1.19075E-03 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR             STORAGE
 29.3114+ 0.0000+ 0.0000 - 0.0064- 0.0625-  0.0029 = 29.2396  Versus  29.2444

Mass Balance = -4.7703E-03 cm;  Time step attempts =40867 and successes =40867
  Evaporation:  Potential =  0.1816 cm, Actual =  0.0064 cm
Transpiration:  Potential =  3.4510 cm, Actual =  0.0625 cm
RHMEAN = 59.1 %;  TMEAN = 301.5 K;  HDRY =  7.2187E+05 cm;  DAYUBC =  4930
```

```
DAILY SUMMARY:  Day = 197, Simulated Time = 24.0000 hr
-------------
Node Number        =       2           12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.10961     0.25817     0.28790
Head (cm)          = 2.84760E+04 1.08624E+03 6.14126E+02
Water Flow (cm)    =-6.04122E-04-2.25181E-02 2.90083E-03
Plant Sink (cm)    = 0.00000E+00 1.08449E-03 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR             STORAGE
 29.2444+ 0.0000+ 0.0000 - 0.0040- 0.0549-  0.0029 = 29.1826  Versus  29.1827
```

```
Mass Balance = -1.1444E-04 cm;  Time step attempts = 1943 and successes = 1943
  Evaporation:  Potential =  0.1654 cm, Actual =  0.0040 cm
Transpiration:  Potential =  3.1431 cm, Actual =  0.0549 cm
RHMEAN = 61.5 %;  TMEAN = 300.9 K;  HDRY =  6.6667E+05 cm;  DAYUBC =  1921

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 198, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.10890     0.25776     0.28784
Head (cm)          = 2.99541E+04 1.09567E+03 6.14726E+02
Water Flow (cm)    =-6.27532E-04-2.18191E-02 2.89435E-03
Plant Sink (cm)    = 0.00000E+00 6.45335E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 29.1827+ 0.0000+ 0.0000 - 0.0010- 0.0320-  0.0029 = 29.1468  Versus  29.1469

Mass Balance = -1.2779E-04 cm;  Time step attempts = 1528 and successes = 1528
  Evaporation:  Potential =  0.0984 cm, Actual =  0.0010 cm
Transpiration:  Potential =  1.8703 cm, Actual =  0.0320 cm
RHMEAN = 70.6 %;  TMEAN = 299.3 K;  HDRY =  4.7782E+05 cm;  DAYUBC =  1455

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 199, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.10809     0.25690     0.28780
Head (cm)          = 3.17763E+04 1.11567E+03 6.15252E+02
Water Flow (cm)    =-6.47626E-04-2.15255E-02 2.88789E-03
Plant Sink (cm)    = 0.00000E+00 1.12709E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 29.1469+ 0.0000+ 0.0000 - 0.0071- 0.0547-  0.0029 = 29.0822  Versus  29.0878

Mass Balance = -5.6095E-03 cm;  Time step attempts =50596 and successes =50596
  Evaporation:  Potential =  0.1719 cm, Actual =  0.0071 cm
Transpiration:  Potential =  3.2665 cm, Actual =  0.0547 cm
RHMEAN = 61.8 %;  TMEAN = 300.4 K;  HDRY =  6.6063E+05 cm;  DAYUBC =  4359

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 200, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.10737     0.25615     0.28771
Head (cm)          = 3.35483E+04 1.13329E+03 6.16254E+02
Water Flow (cm)    =-6.68442E-04-2.12433E-02 2.87668E-03
Plant Sink (cm)    = 0.00000E+00 1.01261E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 29.0878+ 0.0000+ 0.0000 - 0.0021- 0.0478-  0.0029 = 29.0351  Versus  29.0351

Mass Balance = -7.6294E-06 cm;  Time step attempts =  582 and successes =  582
  Evaporation:  Potential =  0.1545 cm, Actual =  0.0021 cm
```

```
Transpiration:  Potential =  2.9348 cm, Actual =  0.0478 cm
RHMEAN = 68.0 %;  TMEAN = 299.8 K;  HDRY =  5.2903E+05 cm;  DAYUBC =   529

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 201, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12          25
Depth (cm)        =     5.00000    50.00000   122.00000
Water (cm3/cm3)   =     0.10723     0.25576     0.28769
Head (cm)         = 3.38996E+04 1.14286E+03 6.16478E+02
Water Flow (cm)   =-6.73812E-04-2.09121E-02 2.86770E-03
Plant Sink (cm)   = 0.00000E+00 6.24563E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR          STORAGE
 29.0351+ 0.0254+ 0.0000 - 0.0238- 0.0290-  0.0029 = 29.0048  Versus  29.0172

Mass Balance = -1.2449E-02 cm;  Time step attempts =86812 and successes =86812
  Evaporation:  Potential =  0.0962 cm, Actual =  0.0238 cm
Transpiration:  Potential =  1.8284 cm, Actual =  0.0290 cm
RHMEAN = 74.1 %;  TMEAN = 299.5 K;  HDRY =  4.1038E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 202, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12          25
Depth (cm)        =     5.00000    50.00000   122.00000
Water (cm3/cm3)   =     0.10662     0.25495     0.28761
Head (cm)         = 3.55511E+04 1.16273E+03 6.17318E+02
Water Flow (cm)   =-6.82609E-04-2.08501E-02 2.86322E-03
Plant Sink (cm)   = 0.00000E+00 1.11824E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR          STORAGE
 29.0172+ 0.0000+ 0.0000 - 0.0066- 0.0511-  0.0029 = 28.9567  Versus  28.9618

Mass Balance = -5.1556E-03 cm;  Time step attempts =47244 and successes =47244
  Evaporation:  Potential =  0.1706 cm, Actual =  0.0066 cm
Transpiration:  Potential =  3.2409 cm, Actual =  0.0511 cm
RHMEAN = 68.0 %;  TMEAN = 301.2 K;  HDRY =  5.2763E+05 cm;  DAYUBC =  3363

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 203, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12          25
Depth (cm)        =     5.00000    50.00000   122.00000
Water (cm3/cm3)   =     0.12378     0.25419     0.28750
Head (cm)         = 1.25918E+04 1.18170E+03 6.18501E+02
Water Flow (cm)   =-1.36118E-04-2.06607E-02 2.84926E-03
Plant Sink (cm)   = 1.87045E-04 1.07974E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR          STORAGE
 28.9618+ 0.4064+ 0.0000 - 0.0412- 0.0489-  0.0028 = 29.2753  Versus  29.2764

Mass Balance = -1.1101E-03 cm;  Time step attempts =15865 and successes =15865
  Evaporation:  Potential =  0.1664 cm, Actual =  0.0412 cm
Transpiration:  Potential =  3.1609 cm, Actual =  0.0489 cm
RHMEAN = 66.3 %;  TMEAN = 300.9 K;  HDRY =  5.6420E+05 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day = 204, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12           25
Depth (cm)         =     5.00000     50.00000    122.00000
Water (cm3/cm3)    =     0.23364      0.25345      0.28739
Head (cm)          = 8.56338E+02 1.20048E+03 6.19729E+02
Water Flow (cm)    = 9.94464E-01-2.04436E-02 2.83411E-03
Plant Sink (cm)    = 6.77664E-02 1.06473E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 29.2764+ 1.9277+ 0.7647 - 0.0406- 0.5900-  0.0028 = 30.5706  Versus  30.5730

Mass Balance = -2.3937E-03 cm;  Time step attempts =24920 and successes =24920
  Evaporation:  Potential =  0.1674 cm, Actual =  0.0406 cm
Transpiration:  Potential =  3.1813 cm, Actual =  0.5900 cm
RHMEAN = 64.0 %;  TMEAN = 299.3 K;  HDRY =  6.1224E+05 cm;  DAYUBC =  8257
```

```
DAILY SUMMARY:  Day = 205, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12           25
Depth (cm)         =     5.00000     50.00000    122.00000
Water (cm3/cm3)    =     0.25831      0.25287      0.28725
Head (cm)          = 5.98834E+02 1.21577E+03 6.21302E+02
Water Flow (cm)    = 1.02720E+00-2.01475E-02 2.81486E-03
Plant Sink (cm)    = 6.04756E-02 9.50184E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 30.5730+ 1.4986+ 0.0000 - 0.0362- 0.6011-  0.0028 = 31.4315  Versus  31.4323

Mass Balance = -7.8201E-04 cm;  Time step attempts =11370 and successes =11370
  Evaporation:  Potential =  0.1479 cm, Actual =  0.0362 cm
Transpiration:  Potential =  2.8100 cm, Actual =  0.6011 cm
RHMEAN = 72.4 %;  TMEAN = 297.9 K;  HDRY =  4.4272E+05 cm;  DAYUBC =     8
```

```
DAILY SUMMARY:  Day = 206, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12           25
Depth (cm)         =     5.00000     50.00000    122.00000
Water (cm3/cm3)    =     0.19899      0.25205      0.28709
Head (cm)          = 1.52023E+03 1.23767E+03 6.23172E+02
Water Flow (cm)    =-1.21794E-03-1.99261E-02 2.79210E-03
Plant Sink (cm)    = 7.73329E-02 1.21504E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 31.4323+ 0.0000+ 0.0000 - 0.0463- 0.7891-  0.0028 = 30.5940  Versus  30.5940

Mass Balance =  0.0000E+00 cm;  Time step attempts = 2201 and successes = 2201
  Evaporation:  Potential =  0.1853 cm, Actual =  0.0463 cm
Transpiration:  Potential =  3.5215 cm, Actual =  0.7891 cm
RHMEAN = 67.5 %;  TMEAN = 300.7 K;  HDRY =  5.3882E+05 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day = 207, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12          25
Depth (cm)         =     5.00000     50.00000   122.00000
Water (cm3/cm3)    =     0.14099      0.25113     0.28691
Head (cm)          = 6.29498E+03 1.26278E+03 6.25165E+02
Water Flow (cm)    =-1.85379E-02-1.98582E-02 2.76752E-03
Plant Sink (cm)    = 6.99684E-02 1.35542E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR          STORAGE
 30.5940+ 0.0000+ 0.0000 - 0.0517- 0.8082-  0.0028 = 29.7313  Versus  29.7313

Mass Balance =  3.8147E-06 cm;  Time step attempts = 1985 and successes = 1985
  Evaporation:  Potential =  0.2068 cm, Actual =  0.0517 cm
Transpiration:  Potential =  3.9283 cm, Actual =  0.8082 cm
RHMEAN = 66.6 %;  TMEAN = 300.4 K;  HDRY =  5.5779E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 208, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12          25
Depth (cm)         =     5.00000     50.00000   122.00000
Water (cm3/cm3)    =     0.12361      0.25003     0.28672
Head (cm)          = 1.26982E+04 1.29371E+03 6.27258E+02
Water Flow (cm)    =-4.27018E-03-1.98964E-02 2.74185E-03
Plant Sink (cm)    = 2.11284E-02 1.59651E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR          STORAGE
 29.7313+ 0.0000+ 0.0000 - 0.0609- 0.4961-  0.0027 = 29.1716  Versus  29.1716

Mass Balance =  2.6703E-05 cm;  Time step attempts = 2805 and successes = 2805
  Evaporation:  Potential =  0.2435 cm, Actual =  0.0609 cm
Transpiration:  Potential =  4.6270 cm, Actual =  0.4961 cm
RHMEAN = 57.7 %;  TMEAN = 303.7 K;  HDRY =  7.5342E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 209, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12          25
Depth (cm)         =     5.00000     50.00000   122.00000
Water (cm3/cm3)    =     0.12100      0.24926     0.28653
Head (cm)          = 1.44419E+04 1.31600E+03 6.29456E+02
Water Flow (cm)    =-6.73092E-04-1.98392E-02 2.71523E-03
Plant Sink (cm)    = 3.23556E-03 1.31960E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR          STORAGE
 29.1716+ 0.0000+ 0.0000 - 0.0503- 0.1940-  0.0027 = 28.9245  Versus  28.9245

Mass Balance =  5.7220E-06 cm;  Time step attempts = 2695 and successes = 2695
  Evaporation:  Potential =  0.2013 cm, Actual =  0.0503 cm
Transpiration:  Potential =  3.8245 cm, Actual =  0.1940 cm
RHMEAN = 59.8 %;  TMEAN = 302.9 K;  HDRY =  7.0510E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 210, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12          25
```

```
Depth (cm)           =      5.00000     50.00000   122.00000
Water (cm3/cm3)      =      0.12039      0.24869     0.28634
Head (cm)            = 1.49006E+04 1.33291E+03 6.31598E+02
Water Flow (cm)      =-2.31526E-04-1.95774E-02 2.68862E-03
Plant Sink (cm)      = 6.16500E-04 1.13673E-03 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR          STORAGE
 28.9245+ 0.0000+ 0.0000 - 0.0433- 0.1050-  0.0027 = 28.7734  Versus  28.7737

Mass Balance = -3.1090E-04 cm;  Time step attempts = 8012 and successes = 8012
  Evaporation:  Potential =  0.1734 cm, Actual =  0.0433 cm
Transpiration:  Potential =  3.2945 cm, Actual =  0.1050 cm
RHMEAN = 69.1 %;  TMEAN = 301.2 K;  HDRY =  5.0562E+05 cm;  DAYUBC =     0
-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 211, Simulated Time = 24.0000 hr
-------------
Node Number          =        2           12          25
Depth (cm)           =      5.00000     50.00000   122.00000
Water (cm3/cm3)      =      0.12019      0.24837     0.28622
Head (cm)            = 1.50562E+04 1.34261E+03 6.33026E+02
Water Flow (cm)      =-1.11369E-04-1.92273E-02 2.66597E-03
Plant Sink (cm)      = 5.17727E-05 9.34066E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR          STORAGE
 28.7737+ 0.0000+ 0.0000 - 0.0356- 0.0641-  0.0027 = 28.6713  Versus  28.6775

Mass Balance = -6.2523E-03 cm;  Time step attempts =44413 and successes =44413
  Evaporation:  Potential =  0.1425 cm, Actual =  0.0356 cm
Transpiration:  Potential =  2.7071 cm, Actual =  0.0641 cm
RHMEAN = 68.9 %;  TMEAN = 300.1 K;  HDRY =  5.1010E+05 cm;  DAYUBC =     0
-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 212, Simulated Time = 24.0000 hr
-------------
Node Number          =        2           12          25
Depth (cm)           =      5.00000     50.00000   122.00000
Water (cm3/cm3)      =      0.12038      0.24833     0.28602
Head (cm)            = 1.49075E+04 1.34362E+03 6.35326E+02
Water Flow (cm)      =-6.07346E-05-1.87604E-02 2.64543E-03
Plant Sink (cm)      = 5.06146E-05 5.35241E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR          STORAGE
 28.6775+ 0.1016+ 0.0000 - 0.0204- 0.0316-  0.0026 = 28.7244  Versus  28.7252

Mass Balance = -7.3242E-04 cm;  Time step attempts =11339 and successes =11339
  Evaporation:  Potential =  0.0825 cm, Actual =  0.0204 cm
Transpiration:  Potential =  1.5669 cm, Actual =  0.0316 cm
RHMEAN = 78.6 %;  TMEAN = 298.2 K;  HDRY =  3.3055E+05 cm;  DAYUBC =     0
-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 213, Simulated Time = 24.0000 hr
-------------
Node Number          =        2           12          25
Depth (cm)           =      5.00000     50.00000   122.00000
Water (cm3/cm3)      =      0.34144      0.24845     0.28587
Head (cm)            = 1.81327E+02 1.34025E+03 6.37024E+02
```

```
Water Flow (cm)     = 3.44567E+00-1.81771E-02 2.62360E-03
Plant Sink (cm)     = 1.94501E-02 3.05597E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN    NEWSTOR           STORAGE
 28.7252+ 5.0765+ 3.7881 - 0.0117- 0.2037-  0.0026 = 33.5837  Versus  33.5877

Mass Balance = -4.0283E-03 cm;  Time step attempts =36918 and successes =36918
  Evaporation:  Potential =  0.0575 cm, Actual =  0.0117 cm
Transpiration:  Potential =  1.0919 cm, Actual =  0.2037 cm
RHMEAN = 84.0 %;  TMEAN = 297.9 K;  HDRY =  2.3862E+05 cm;  DAYUBC = 23274

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 214, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.30941     0.24831     0.28566
Head (cm)           = 2.96442E+02 1.34420E+03 6.39475E+02
Water Flow (cm)     = 2.27052E-01-1.76587E-02 2.59711E-03
Plant Sink (cm)     = 3.41276E-02 5.36208E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN    NEWSTOR           STORAGE
 33.5877+ 0.1778+ 0.0000 - 0.0204- 0.3739-  0.0026 = 33.3686  Versus  33.3691

Mass Balance = -4.7302E-04 cm;  Time step attempts = 7816 and successes = 7816
  Evaporation:  Potential =  0.0826 cm, Actual =  0.0204 cm
Transpiration:  Potential =  1.5697 cm, Actual =  0.3739 cm
RHMEAN = 81.7 %;  TMEAN = 298.7 K;  HDRY =  2.7639E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 215, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.29033     0.24823     0.28544
Head (cm)           = 3.86079E+02 1.34680E+03 6.41974E+02
Water Flow (cm)     = 6.08528E-02-1.72504E-02 2.56856E-03
Plant Sink (cm)     = 2.91649E-02 4.58235E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS     DRAIN    NEWSTOR           STORAGE
 33.3691+ 0.0762+ 0.0000 - 0.0175- 0.3268-  0.0026 = 33.0985  Versus  33.0990

Mass Balance = -5.2643E-04 cm;  Time step attempts = 6059 and successes = 6059
  Evaporation:  Potential =  0.0706 cm, Actual =  0.0175 cm
Transpiration:  Potential =  1.3415 cm, Actual =  0.3268 cm
RHMEAN = 80.0 %;  TMEAN = 299.0 K;  HDRY =  3.0642E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 216, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.26536     0.24799     0.28522
Head (cm)           = 5.42959E+02 1.35401E+03 6.44595E+02
Water Flow (cm)     =-1.86189E-02-1.69062E-02 2.53899E-03
Plant Sink (cm)     = 3.78468E-02 5.94644E-04 0.00000E+00
```

```
 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 33.0990+ 0.0000+ 0.0000 - 0.0227- 0.4254-  0.0025 = 32.6484  Versus  32.6484

Mass Balance =  0.0000E+00 cm;  Time step attempts =  696 and successes =  696
  Evaporation:  Potential =  0.0907 cm, Actual =  0.0227 cm
Transpiration:  Potential =  1.7234 cm, Actual =  0.4254 cm
RHMEAN = 77.3 %;  TMEAN = 299.5 K;  HDRY =  3.5320E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 217, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.23675     0.24761     0.28499
Head (cm)           = 8.17161E+02 1.36554E+03 6.47263E+02
Water Flow (cm)     =-3.98085E-02-1.66966E-02 2.50932E-03
Plant Sink (cm)     = 4.66485E-02 7.32934E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 32.6484+ 0.0000+ 0.0000 - 0.0280- 0.5270-  0.0025 = 32.0909  Versus  32.0909

Mass Balance = -1.5259E-05 cm;  Time step attempts =  535 and successes =  535
  Evaporation:  Potential =  0.1118 cm, Actual =  0.0280 cm
Transpiration:  Potential =  2.1242 cm, Actual =  0.5270 cm
RHMEAN = 74.8 %;  TMEAN = 299.5 K;  HDRY =  3.9715E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 218, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.26520     0.24691     0.28476
Head (cm)           = 5.44175E+02 1.38752E+03 6.49914E+02
Water Flow (cm)     = 7.43215E-01-1.66688E-02 2.48026E-03
Plant Sink (cm)     = 6.93223E-02 1.08918E-03 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 32.0909+ 1.2954+ 0.0000 - 0.0415- 0.7867-  0.0025 = 32.5556  Versus  32.5559

Mass Balance = -3.2425E-04 cm;  Time step attempts = 2287 and successes = 2287
  Evaporation:  Potential =  0.1695 cm, Actual =  0.0415 cm
Transpiration:  Potential =  3.2211 cm, Actual =  0.7867 cm
RHMEAN = 71.3 %;  TMEAN = 300.7 K;  HDRY =  4.6378E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 219, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.20414     0.24595     0.28453
Head (cm)           = 1.38512E+03 1.41818E+03 6.52658E+02
Water Flow (cm)     =-5.22320E-02-1.68346E-02 2.45060E-03
Plant Sink (cm)     = 8.98907E-02 1.41235E-03 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 32.5559+ 0.0000+ 0.0000 - 0.0539- 1.0199-  0.0025 = 31.4797  Versus  31.4797
```

```
Mass Balance = -5.7220E-06 cm;  Time step attempts =  396 and successes =  396
  Evaporation:  Potential =  0.2154 cm, Actual =  0.0539 cm
Transpiration:  Potential =  4.0933 cm, Actual =  1.0199 cm
RHMEAN = 64.8 %;  TMEAN = 302.0 K;  HDRY =  5.9446E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 220, Simulated Time = 24.0000 hr
-------------
Node Number       =        2          12          25
Depth (cm)        =     5.00000    50.00000   122.00000
Water (cm3/cm3)   =     0.15548     0.24537     0.28430
Head (cm)         = 4.02283E+03 1.43724E+03 6.55434E+02
Water Flow (cm)   =-4.03353E-02-1.68971E-02 2.42104E-03
Plant Sink (cm)   = 6.57308E-02 1.08696E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 31.4797+ 0.0000+ 0.0000 - 0.0415- 0.7691-  0.0024 = 30.6668  Versus  30.6668

Mass Balance =  3.8147E-06 cm;  Time step attempts = 1044 and successes = 1044
  Evaporation:  Potential =  0.1658 cm, Actual =  0.0415 cm
Transpiration:  Potential =  3.1502 cm, Actual =  0.7691 cm
RHMEAN = 71.5 %;  TMEAN = 301.5 K;  HDRY =  4.6073E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 221, Simulated Time = 24.0000 hr
-------------
Node Number       =        2          12          25
Depth (cm)        =     5.00000    50.00000   122.00000
Water (cm3/cm3)   =     0.12779     0.24454     0.28406
Head (cm)         = 1.04877E+04 1.46497E+03 6.58232E+02
Water Flow (cm)   =-1.31851E-02-1.68998E-02 2.39166E-03
Plant Sink (cm)   = 3.44310E-02 1.37455E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 30.6668+ 0.0000+ 0.0000 - 0.0524- 0.7006-  0.0024 = 29.9114  Versus  29.9113

Mass Balance =  7.6294E-06 cm;  Time step attempts = 2509 and successes = 2509
  Evaporation:  Potential =  0.2097 cm, Actual =  0.0524 cm
Transpiration:  Potential =  3.9838 cm, Actual =  0.7006 cm
RHMEAN = 58.0 %;  TMEAN = 300.9 K;  HDRY =  7.4761E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 222, Simulated Time = 24.0000 hr
-------------
Node Number       =        2          12          25
Depth (cm)        =     5.00000    50.00000   122.00000
Water (cm3/cm3)   =     0.12211     0.24388     0.28383
Head (cm)         = 1.36591E+04 1.48762E+03 6.61060E+02
Water Flow (cm)   =-1.93540E-03-1.69074E-02 2.36247E-03
Plant Sink (cm)   = 7.04292E-03 1.24798E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 29.9113+ 0.0000+ 0.0000 - 0.0476- 0.3974-  0.0024 = 29.4640  Versus  29.4640

Mass Balance =  1.9073E-06 cm;  Time step attempts = 1922 and successes = 1922
  Evaporation:  Potential =  0.1904 cm, Actual =  0.0476 cm
Transpiration:  Potential =  3.6169 cm, Actual =  0.3974 cm
```

```
RHMEAN = 61.2 %;  TMEAN = 299.5 K;  HDRY =  6.7409E+05 cm;  DAYUBC =      0
```

```
DAILY SUMMARY:  Day = 223, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =    5.00000   50.00000   122.00000
Water (cm3/cm3)    =    0.12065    0.24326     0.28359
Head (cm)          = 1.47028E+04 1.50938E+03 6.63911E+02
Water Flow (cm)    =-5.53299E-04-1.68384E-02 2.33349E-03
Plant Sink (cm)    = 1.67419E-03 1.23591E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
 29.4640+ 0.0000+ 0.0000 - 0.0471- 0.2760-  0.0023 = 29.1385  Versus  29.1385

Mass Balance = -3.8147E-05 cm;  Time step attempts = 4938 and successes = 4938
  Evaporation:  Potential =  0.1885 cm, Actual =  0.0471 cm
Transpiration:  Potential =  3.5819 cm, Actual =  0.2760 cm
RHMEAN = 62.0 %;  TMEAN = 301.5 K;  HDRY =  6.5483E+05 cm;  DAYUBC =      0
```

```
DAILY SUMMARY:  Day = 224, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =    5.00000   50.00000   122.00000
Water (cm3/cm3)    =    0.12024    0.24265     0.28343
Head (cm)          = 1.50141E+04 1.53147E+03 6.65862E+02
Water Flow (cm)    =-2.05053E-04-1.67868E-02 2.30820E-03
Plant Sink (cm)    = 2.89133E-04 1.26766E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
 29.1385+ 0.0000+ 0.0000 - 0.0483- 0.2128-  0.0023 = 28.8751  Versus  28.8796

Mass Balance = -4.4556E-03 cm;  Time step attempts =34360 and successes =34360
  Evaporation:  Potential =  0.1934 cm, Actual =  0.0483 cm
Transpiration:  Potential =  3.6740 cm, Actual =  0.2128 cm
RHMEAN = 63.1 %;  TMEAN = 301.8 K;  HDRY =  6.3119E+05 cm;  DAYUBC =      0
```

```
DAILY SUMMARY:  Day = 225, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =    5.00000   50.00000   122.00000
Water (cm3/cm3)    =    0.11959    0.24201     0.28327
Head (cm)          = 1.55333E+04 1.55485E+03 6.67872E+02
Water Flow (cm)    =-1.04282E-04-1.68149E-02 2.29121E-03
Plant Sink (cm)    = 0.00000E+00 1.34615E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
 28.8796+ 0.0000+ 0.0000 - 0.0242- 0.1738-  0.0023 = 28.6793  Versus  28.6852

Mass Balance = -5.9013E-03 cm;  Time step attempts =51501 and successes =51501
  Evaporation:  Potential =  0.2053 cm, Actual =  0.0242 cm
Transpiration:  Potential =  3.9014 cm, Actual =  0.1738 cm
RHMEAN = 63.9 %;  TMEAN = 301.8 K;  HDRY =  6.1346E+05 cm;  DAYUBC =   4316
```

```
DAILY SUMMARY:  Day = 226, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.11867     0.24148     0.28303
Head (cm)          = 1.63157E+04 1.57441E+03 6.70740E+02
Water Flow (cm)    =-1.33394E-04-1.67410E-02 2.26579E-03
Plant Sink (cm)    = 0.00000E+00 1.22264E-03 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 28.6852+ 0.0000+ 0.0000 - 0.0039- 0.1246-  0.0023 = 28.5544  Versus  28.5545

Mass Balance = -1.1444E-04 cm;  Time step attempts = 1700 and successes = 1700
  Evaporation:  Potential =  0.1865 cm, Actual =  0.0039 cm
Transpiration:  Potential =  3.5435 cm, Actual =  0.1246 cm
RHMEAN = 65.1 %;  TMEAN = 302.3 K;  HDRY =  5.8876E+05 cm;  DAYUBC =  1687

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 227, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.11830     0.24130     0.28288
Head (cm)          = 1.66514E+04 1.58099E+03 6.72592E+02
Water Flow (cm)    =-1.68568E-04-1.65865E-02 2.24408E-03
Plant Sink (cm)    = 0.00000E+00 8.95308E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 28.5545+ 0.0254+ 0.0000 - 0.0248- 0.0770-  0.0022 = 28.4758  Versus  28.4824

Mass Balance = -6.5975E-03 cm;  Time step attempts =65944 and successes =65944
  Evaporation:  Potential =  0.1379 cm, Actual =  0.0248 cm
Transpiration:  Potential =  2.6210 cm, Actual =  0.0770 cm
RHMEAN = 73.0 %;  TMEAN = 300.1 K;  HDRY =  4.3055E+05 cm;  DAYUBC =  3010

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 228, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.11742     0.24081     0.28273
Head (cm)          = 1.74698E+04 1.59990E+03 6.74462E+02
Water Flow (cm)    =-2.14099E-04-1.65293E-02 2.22818E-03
Plant Sink (cm)    = 0.00000E+00 1.14976E-03 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 28.4824+ 0.0000+ 0.0000 - 0.0083- 0.0858-  0.0022 = 28.3861  Versus  28.3920

Mass Balance = -5.8670E-03 cm;  Time step attempts =55021 and successes =55021
  Evaporation:  Potential =  0.1754 cm, Actual =  0.0083 cm
Transpiration:  Potential =  3.3322 cm, Actual =  0.0858 cm
RHMEAN = 61.2 %;  TMEAN = 302.3 K;  HDRY =  6.7266E+05 cm;  DAYUBC =  3434

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 229, Simulated Time = 24.0000 hr
```

```
-------------
Node Number        =        2            12           25
Depth (cm)         =      5.00000     50.00000    122.00000
Water (cm3/cm3)    =      0.11635      0.24010      0.28253
Head (cm)          = 1.85695E+04 1.62760E+03 6.76936E+02
Water Flow (cm)    =-2.85029E-04-1.65279E-02 2.20628E-03
Plant Sink (cm)    = 0.00000E+00 1.39322E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 28.3920+ 0.0000+ 0.0000 - 0.0062- 0.0885-  0.0022 = 28.2950  Versus  28.2978

Mass Balance = -2.7847E-03 cm;  Time step attempts =28098 and successes =28098
  Evaporation:  Potential =  0.2125 cm, Actual =  0.0062 cm
Transpiration:  Potential =  4.0379 cm, Actual =  0.0885 cm
RHMEAN = 57.0 %;  TMEAN = 302.3 K;  HDRY =  7.7071E+05 cm;  DAYUBC =  3915

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 230, Simulated Time = 24.0000 hr
-------------
Node Number        =        2            12           25
Depth (cm)         =      5.00000     50.00000    122.00000
Water (cm3/cm3)    =      0.11532      0.23955      0.28229
Head (cm)          = 1.97074E+04 1.64905E+03 6.79865E+02
Water Flow (cm)    =-3.52450E-04-1.64339E-02 2.17927E-03
Plant Sink (cm)    = 0.00000E+00 1.29808E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 28.2978+ 0.0000+ 0.0000 - 0.0044- 0.0710-  0.0022 = 28.2202  Versus  28.2203

Mass Balance = -3.2425E-05 cm;  Time step attempts =  972 and successes =  972
  Evaporation:  Potential =  0.1980 cm, Actual =  0.0044 cm
Transpiration:  Potential =  3.7621 cm, Actual =  0.0710 cm
RHMEAN = 59.2 %;  TMEAN = 302.0 K;  HDRY =  7.1869E+05 cm;  DAYUBC =   965

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 231, Simulated Time = 24.0000 hr
-------------
Node Number        =        2            12           25
Depth (cm)         =      5.00000     50.00000    122.00000
Water (cm3/cm3)    =      0.11438      0.23933      0.28206
Head (cm)          = 2.08536E+04 1.65813E+03 6.82784E+02
Water Flow (cm)    =-4.07562E-04-1.62256E-02 2.15245E-03
Plant Sink (cm)    = 0.00000E+00 9.81312E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 28.2203+ 0.0000+ 0.0000 - 0.0040- 0.0480-  0.0022 = 28.1660  Versus  28.1662

Mass Balance = -1.9073E-04 cm;  Time step attempts = 1952 and successes = 1952
  Evaporation:  Potential =  0.1497 cm, Actual =  0.0040 cm
Transpiration:  Potential =  2.8441 cm, Actual =  0.0480 cm
RHMEAN = 61.6 %;  TMEAN = 301.5 K;  HDRY =  6.6374E+05 cm;  DAYUBC =  1939

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 232, Simulated Time = 24.0000 hr
-------------
Node Number        =        2            12           25
Depth (cm)         =      5.00000     50.00000    122.00000
```

```
Water (cm3/cm3)     =     0.11358      0.23915      0.28183
Head (cm)           = 2.18956E+04 1.66531E+03 6.85733E+02
Water Flow (cm)     =-4.50741E-04-1.59435E-02 2.12582E-03
Plant Sink (cm)     = 0.00000E+00 9.13863E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 28.1662+ 0.0000+ 0.0000 - 0.0022- 0.0413-  0.0021 = 28.1207  Versus  28.1207

Mass Balance = -9.5367E-06 cm;  Time step attempts =  426 and successes =  426
  Evaporation:  Potential =  0.1394 cm, Actual =  0.0022 cm
Transpiration:  Potential =  2.6486 cm, Actual =  0.0413 cm
RHMEAN = 67.9 %;  TMEAN = 301.5 K;  HDRY =  5.3087E+05 cm;  DAYUBC =   371

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 233, Simulated Time = 24.0000 hr
-------------
Node Number         =       2           12           25
Depth (cm)          =     5.00000     50.00000    122.00000
Water (cm3/cm3)     =     0.11267      0.23880      0.28167
Head (cm)           = 2.31938E+04 1.67966E+03 6.87715E+02
Water Flow (cm)     =-4.88666E-04-1.58137E-02 2.10672E-03
Plant Sink (cm)     = 0.00000E+00 1.05395E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 28.1207+ 0.0000+ 0.0000 - 0.0069- 0.0442-  0.0021 = 28.0675  Versus  28.0739

Mass Balance = -6.4621E-03 cm;  Time step attempts =49951 and successes =49951
  Evaporation:  Potential =  0.1608 cm, Actual =  0.0069 cm
Transpiration:  Potential =  3.0546 cm, Actual =  0.0442 cm
RHMEAN = 59.9 %;  TMEAN = 300.9 K;  HDRY =  7.0257E+05 cm;  DAYUBC =  4639

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 234, Simulated Time = 24.0000 hr
-------------
Node Number         =       2           12           25
Depth (cm)          =     5.00000     50.00000    122.00000
Water (cm3/cm3)     =     0.11183      0.23862      0.28144
Head (cm)           = 2.44926E+04 1.68715E+03 6.90628E+02
Water Flow (cm)     =-5.25795E-04-1.56080E-02 2.08242E-03
Plant Sink (cm)     = 0.00000E+00 9.06368E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 28.0739+ 0.0000+ 0.0000 - 0.0030- 0.0354-  0.0021 = 28.0334  Versus  28.0335

Mass Balance = -1.5640E-04 cm;  Time step attempts = 1999 and successes = 1999
  Evaporation:  Potential =  0.1383 cm, Actual =  0.0030 cm
Transpiration:  Potential =  2.6269 cm, Actual =  0.0354 cm
RHMEAN = 64.6 %;  TMEAN = 300.4 K;  HDRY =  5.9791E+05 cm;  DAYUBC =  1976

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 235, Simulated Time = 24.0000 hr
-------------
Node Number         =       2           12           25
Depth (cm)          =     5.00000     50.00000    122.00000
Water (cm3/cm3)     =     0.11095      0.23834      0.28125
Head (cm)           = 2.59673E+04 1.69874E+03 6.93037E+02
Water Flow (cm)     =-5.57618E-04-1.54346E-02 2.06118E-03
```

```
Plant Sink (cm)     = 0.00000E+00 9.75074E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 28.0335+ 0.0000+ 0.0000 - 0.0054- 0.0359-  0.0021 = 27.9902  Versus  27.9933

Mass Balance = -3.1223E-03 cm;  Time step attempts =27439 and successes =27439
  Evaporation:  Potential =  0.1487 cm, Actual =  0.0054 cm
Transpiration:  Potential =  2.8260 cm, Actual =  0.0359 cm
RHMEAN = 61.8 %;  TMEAN = 300.4 K;  HDRY =  6.6063E+05 cm;  DAYUBC =  1721
```

```
DAILY SUMMARY:  Day = 236, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =    5.00000    50.00000   122.00000
Water (cm3/cm3)     =    0.10973     0.23779     0.28110
Head (cm)           = 2.82229E+04 1.72190E+03 6.94951E+02
Water Flow (cm)     =-5.95798E-04-1.54079E-02 2.04358E-03
Plant Sink (cm)     = 0.00000E+00 1.21598E-03 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 27.9933+ 0.0000+ 0.0000 - 0.0097- 0.0420-  0.0020 = 27.9396  Versus  27.9462

Mass Balance = -6.5384E-03 cm;  Time step attempts =64957 and successes =64957
  Evaporation:  Potential =  0.1855 cm, Actual =  0.0097 cm
Transpiration:  Potential =  3.5242 cm, Actual =  0.0420 cm
RHMEAN = 44.7 %;  TMEAN = 300.1 K;  HDRY =  1.1040E+06 cm;  DAYUBC =  4357
```

```
DAILY SUMMARY:  Day = 237, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =    5.00000    50.00000   122.00000
Water (cm3/cm3)     =    0.10854     0.23742     0.28087
Head (cm)           = 3.07442E+04 1.73765E+03 6.97871E+02
Water Flow (cm)     =-6.38524E-04-1.53110E-02 2.02047E-03
Plant Sink (cm)     = 0.00000E+00 1.11653E-03 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 27.9462+ 0.0000+ 0.0000 - 0.0051- 0.0361-  0.0020 = 27.9030  Versus  27.9033

Mass Balance = -3.0899E-04 cm;  Time step attempts = 2810 and successes = 2810
  Evaporation:  Potential =  0.1703 cm, Actual =  0.0051 cm
Transpiration:  Potential =  3.2359 cm, Actual =  0.0361 cm
RHMEAN = 49.8 %;  TMEAN = 301.2 K;  HDRY =  9.5533E+05 cm;  DAYUBC =  2795
```

```
DAILY SUMMARY:  Day = 238, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =    5.00000    50.00000   122.00000
Water (cm3/cm3)     =    0.10755     0.23723     0.28064
Head (cm)           = 3.30917E+04 1.74579E+03 7.00843E+02
Water Flow (cm)     =-6.71228E-04-1.51255E-02 1.99576E-03
Plant Sink (cm)     = 0.00000E+00 9.31546E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
```

```
 27.9033+ 0.0000+ 0.0000 - 0.0034- 0.0286-  0.0020 = 27.8693  Versus  27.8694

Mass Balance = -9.5367E-05 cm;  Time step attempts = 1602 and successes = 1602
  Evaporation:  Potential =  0.1421 cm, Actual =  0.0034 cm
Transpiration:  Potential =  2.6998 cm, Actual =  0.0286 cm
RHMEAN = 58.0 %;  TMEAN = 302.0 K;  HDRY =  7.4552E+05 cm;  DAYUBC =  1550

-------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 239, Simulated Time = 24.0000 hr
-------------
Node Number        =      2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.10657     0.23701     0.28044
Head (cm)          = 3.56897E+04 1.75545E+03 7.03503E+02
Water Flow (cm)    =-6.97874E-04-1.49414E-02 1.97378E-03
Plant Sink (cm)    = 0.00000E+00 9.40760E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 27.8694+ 0.0000+ 0.0000 - 0.0055- 0.0277-  0.0020 = 27.8343  Versus  27.8361

Mass Balance = -1.7815E-03 cm;  Time step attempts =15140 and successes =15140
  Evaporation:  Potential =  0.1435 cm, Actual =  0.0055 cm
Transpiration:  Potential =  2.7265 cm, Actual =  0.0277 cm
RHMEAN = 56.6 %;  TMEAN = 302.3 K;  HDRY =  7.7967E+05 cm;  DAYUBC =  2321

-------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 240, Simulated Time = 24.0000 hr
-------------
Node Number        =      2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.10554     0.23679     0.28024
Head (cm)          = 3.87391E+04 1.76514E+03 7.06001E+02
Water Flow (cm)    =-7.25653E-04-1.47838E-02 1.95342E-03
Plant Sink (cm)    = 0.00000E+00 9.23005E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 27.8361+ 0.0000+ 0.0000 - 0.0058- 0.0262-  0.0020 = 27.8021  Versus  27.8048

Mass Balance = -2.6855E-03 cm;  Time step attempts =24081 and successes =24081
  Evaporation:  Potential =  0.1408 cm, Actual =  0.0058 cm
Transpiration:  Potential =  2.6751 cm, Actual =  0.0262 cm
RHMEAN = 54.5 %;  TMEAN = 301.8 K;  HDRY =  8.3277E+05 cm;  DAYUBC =  3403

-------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 241, Simulated Time = 24.0000 hr
-------------
Node Number        =      2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.10447     0.23640     0.28004
Head (cm)          = 4.23592E+04 1.78268E+03 7.08716E+02
Water Flow (cm)    =-7.55198E-04-1.46635E-02 1.93198E-03
Plant Sink (cm)    = 0.00000E+00 1.10241E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 27.8048+ 0.0000+ 0.0000 - 0.0060- 0.0300-  0.0019 = 27.7668  Versus  27.7683

Mass Balance = -1.4572E-03 cm;  Time step attempts =14876 and successes =14876
```

```
  Evaporation:  Potential =  0.1682 cm, Actual =  0.0060 cm
Transpiration:  Potential =  3.1950 cm, Actual =  0.0300 cm
RHMEAN = 52.4 %;  TMEAN = 302.6 K;  HDRY =  8.8587E+05 cm;  DAYUBC =  1805

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 242, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.10336     0.23580     0.27982
Head (cm)          = 4.66683E+04 1.80950E+03 7.11498E+02
Water Flow (cm)    =-7.87786E-04-1.46314E-02 1.91013E-03
Plant Sink (cm)    = 0.00000E+00 1.31529E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 27.7683+ 0.0000+ 0.0000 - 0.0062- 0.0342-  0.0019 = 27.7260  Versus  27.7272

Mass Balance = -1.1139E-03 cm;  Time step attempts =14107 and successes =14107
  Evaporation:  Potential =  0.2006 cm, Actual =  0.0062 cm
Transpiration:  Potential =  3.8120 cm, Actual =  0.0342 cm
RHMEAN = 50.4 %;  TMEAN = 303.4 K;  HDRY =  9.3858E+05 cm;  DAYUBC =  2996

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 243, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.10226     0.23539     0.27960
Head (cm)          = 5.16118E+04 1.82843E+03 7.14428E+02
Water Flow (cm)    =-8.23332E-04-1.45768E-02 1.88748E-03
Plant Sink (cm)    = 0.00000E+00 1.16839E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 27.7272+ 0.0000+ 0.0000 - 0.0058- 0.0290-  0.0019 = 27.6905  Versus  27.6908

Mass Balance = -2.9755E-04 cm;  Time step attempts = 4111 and successes = 4111
  Evaporation:  Potential =  0.1782 cm, Actual =  0.0058 cm
Transpiration:  Potential =  3.3862 cm, Actual =  0.0290 cm
RHMEAN = 50.4 %;  TMEAN = 302.0 K;  HDRY =  9.3987E+05 cm;  DAYUBC =  3940

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 244, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.10122     0.23509     0.27938
Head (cm)          = 5.70193E+04 1.84249E+03 7.17432E+02
Water Flow (cm)    =-8.61566E-04-1.44542E-02 1.86460E-03
Plant Sink (cm)    = 0.00000E+00 1.06558E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 27.6908+ 0.0000+ 0.0000 - 0.0052- 0.0255-  0.0019 = 27.6583  Versus  27.6583

Mass Balance = -5.7220E-06 cm;  Time step attempts = 2028 and successes = 2028
  Evaporation:  Potential =  0.1625 cm, Actual =  0.0052 cm
Transpiration:  Potential =  3.0883 cm, Actual =  0.0255 cm
RHMEAN = 52.2 %;  TMEAN = 301.8 K;  HDRY =  8.9176E+05 cm;  DAYUBC =  2019
```

```
-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 245, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12           25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.10010     0.23449     0.27919
Head (cm)          = 6.38070E+04 1.87061E+03 7.19967E+02
Water Flow (cm)    =-9.07657E-04-1.44229E-02 1.84524E-03
Plant Sink (cm)    = 0.00000E+00 1.30959E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 27.6583+ 0.0000+ 0.0000 - 0.0067- 0.0302-  0.0018 = 27.6195  Versus  27.6215

Mass Balance = -1.9341E-03 cm;  Time step attempts =29597 and successes =29597
  Evaporation:  Potential =  0.1998 cm, Actual =  0.0067 cm
Transpiration:  Potential =  3.7955 cm, Actual =  0.0302 cm
RHMEAN = 48.1 %;  TMEAN = 303.2 K;  HDRY =  1.0042E+06 cm;  DAYUBC =  6937

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 246, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12           25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.09881     0.23358     0.27900
Head (cm)          = 7.33087E+04 1.91523E+03 7.22408E+02
Water Flow (cm)    =-9.71010E-04-1.45075E-02 1.82703E-03
Plant Sink (cm)    = 0.00000E+00 1.66623E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 27.6215+ 0.0000+ 0.0000 - 0.0083- 0.0366-  0.0018 = 27.5748  Versus  27.5771

Mass Balance = -2.2945E-03 cm;  Time step attempts =45243 and successes =45243
  Evaporation:  Potential =  0.2542 cm, Actual =  0.0083 cm
Transpiration:  Potential =  4.8291 cm, Actual =  0.0366 cm
RHMEAN = 39.6 %;  TMEAN = 305.1 K;  HDRY =  1.2708E+06 cm;  DAYUBC =  6131

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 247, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12           25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.09762     0.23303     0.27878
Head (cm)          = 8.39742E+04 1.94269E+03 7.25371E+02
Water Flow (cm)    =-1.05099E-03-1.45105E-02 1.80571E-03
Plant Sink (cm)    = 0.00000E+00 1.39053E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 27.5771+ 0.0000+ 0.0000 - 0.0057- 0.0292-  0.0018 = 27.5404  Versus  27.5406

Mass Balance = -2.1744E-04 cm;  Time step attempts = 5991 and successes = 5991
  Evaporation:  Potential =  0.2121 cm, Actual =  0.0057 cm
Transpiration:  Potential =  4.0301 cm, Actual =  0.0292 cm
RHMEAN = 43.6 %;  TMEAN = 304.3 K;  HDRY =  1.1363E+06 cm;  DAYUBC =  5971

-------------------------------------------------------------------------------
```

```
DAILY SUMMARY:  Day = 248, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.09680     0.23272     0.27856
Head (cm)          = 9.27612E+04 1.95811E+03 7.28364E+02
Water Flow (cm)    =-1.13116E-03-1.43933E-02 1.78412E-03
Plant Sink (cm)    = 0.00000E+00 1.15359E-03 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR          STORAGE
 27.5406+ 0.0000+ 0.0000 - 0.0014- 0.0234-  0.0018 = 27.5140  Versus  27.5141

Mass Balance = -1.0109E-04 cm;  Time step attempts = 1953 and successes = 1953
  Evaporation:  Potential =  0.1760 cm, Actual =  0.0014 cm
Transpiration:  Potential =  3.3434 cm, Actual =  0.0234 cm
RHMEAN = 60.6 %;  TMEAN = 299.8 K;  HDRY =  6.8616E+05 cm;  DAYUBC =  1783

-----------------------------------------------------------------------------


DAILY SUMMARY:  Day = 249, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.09600     0.23206     0.27838
Head (cm)          = 1.02662E+05 1.99251E+03 7.30833E+02
Water Flow (cm)    =-1.20135E-03-1.43586E-02 1.76630E-03
Plant Sink (cm)    = 0.00000E+00 1.44875E-03 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR          STORAGE
 27.5141+ 0.0000+ 0.0000 - 0.0062- 0.0285-  0.0018 = 27.4776  Versus  27.4801

Mass Balance = -2.4204E-03 cm;  Time step attempts =34309 and successes =34309
  Evaporation:  Potential =  0.2210 cm, Actual =  0.0062 cm
Transpiration:  Potential =  4.1988 cm, Actual =  0.0285 cm
RHMEAN = 54.9 %;  TMEAN = 302.6 K;  HDRY =  8.2278E+05 cm;  DAYUBC =  6099

-----------------------------------------------------------------------------


DAILY SUMMARY:  Day = 250, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.11139     0.23236     0.27823
Head (cm)          = 2.52014E+04 1.97688E+03 7.32905E+02
Water Flow (cm)    =-7.39178E-04-1.41862E-02 1.75057E-03
Plant Sink (cm)    = 0.00000E+00 5.28451E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR          STORAGE
 27.4801+ 0.4318+ 0.0000 - 0.0202- 0.0102-  0.0018 = 27.8797  Versus  27.8839

Mass Balance = -4.2133E-03 cm;  Time step attempts =35918 and successes =35918
  Evaporation:  Potential =  0.0814 cm, Actual =  0.0202 cm
Transpiration:  Potential =  1.5470 cm, Actual =  0.0102 cm
RHMEAN = 77.8 %;  TMEAN = 294.8 K;  HDRY =  3.4402E+05 cm;  DAYUBC =     0

-----------------------------------------------------------------------------


DAILY SUMMARY:  Day = 251, Simulated Time = 24.0000 hr
-------------
```

```
Node Number        =       2           12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.12374     0.23276     0.27801
Head (cm)          = 1.26179E+04 1.95638E+03 7.35917E+02
Water Flow (cm)    = 1.23667E-04-1.38144E-02 1.73123E-03
Plant Sink (cm)    = 9.24879E-05 4.02329E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 27.8839+ 0.0000+ 0.0000 - 0.0153- 0.0082-  0.0017 = 27.8586  Versus  27.8586

Mass Balance = -2.2888E-05 cm;  Time step attempts = 4980 and successes = 4980
  Evaporation:  Potential =  0.0614 cm, Actual =  0.0153 cm
Transpiration:  Potential =  1.1660 cm, Actual =  0.0082 cm
RHMEAN = 71.9 %;  TMEAN = 290.4 K;  HDRY =  4.5128E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 252, Simulated Time = 24.0000 hr
-------------
Node Number        =       2           12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.12618     0.23294     0.27779
Head (cm)          = 1.12658E+04 1.94724E+03 7.38917E+02
Water Flow (cm)    = 8.47202E-04-1.34834E-02 1.71074E-03
Plant Sink (cm)    = 4.23151E-03 5.78631E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 27.8586+ 0.0000+ 0.0000 - 0.0221- 0.0303-  0.0017 = 27.8045  Versus  27.8046

Mass Balance = -7.6294E-06 cm;  Time step attempts = 1039 and successes = 1039
  Evaporation:  Potential =  0.0883 cm, Actual =  0.0221 cm
Transpiration:  Potential =  1.6770 cm, Actual =  0.0303 cm
RHMEAN = 66.2 %;  TMEAN = 292.6 K;  HDRY =  5.6534E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 253, Simulated Time = 24.0000 hr
-------------
Node Number        =       2           12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.12558     0.23318     0.27757
Head (cm)          = 1.15755E+04 1.93497E+03 7.41920E+02
Water Flow (cm)    = 9.05575E-04-1.31984E-02 1.69058E-03
Plant Sink (cm)    = 3.80821E-03 4.78989E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 27.8046+ 0.0000+ 0.0000 - 0.0183- 0.0265-  0.0017 = 27.7581  Versus  27.7581

Mass Balance =  0.0000E+00 cm;  Time step attempts =  677 and successes =  677
  Evaporation:  Potential =  0.0731 cm, Actual =  0.0183 cm
Transpiration:  Potential =  1.3882 cm, Actual =  0.0265 cm
RHMEAN = 63.7 %;  TMEAN = 294.5 K;  HDRY =  6.1716E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 254, Simulated Time = 24.0000 hr
-------------
Node Number        =       2           12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.14421     0.23357     0.27736
```

```
Head (cm)           = 5.65216E+03 1.91555E+03 7.44856E+02
Water Flow (cm)     = 3.20019E-03-1.28899E-02 1.67115E-03
Plant Sink (cm)     = 7.21024E-03 2.89547E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF   EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 27.7581+ 0.2286+ 0.0000 - 0.0110- 0.0381-  0.0017 = 27.9359  Versus  27.9361

Mass Balance = -2.7466E-04 cm;  Time step attempts = 3991 and successes = 3991
  Evaporation:  Potential =  0.0446 cm, Actual =  0.0110 cm
Transpiration:  Potential =  0.8476 cm, Actual =  0.0381 cm
RHMEAN = 77.4 %;  TMEAN = 293.7 K;  HDRY =  3.5170E+05 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day = 255, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.25754     0.23362     0.27718
Head (cm)           = 6.05336E+02 1.91319E+03 7.47418E+02
Water Flow (cm)     = 1.34399E+00-1.26564E-02 1.65418E-03
Plant Sink (cm)     = 3.78235E-02 5.94278E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF   EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 27.9361+ 2.2013+ 0.8721 - 0.0227- 0.3375-  0.0017 = 29.7756  Versus  29.7775

Mass Balance = -1.9455E-03 cm;  Time step attempts =19622 and successes =19622
  Evaporation:  Potential =  0.0944 cm, Actual =  0.0227 cm
Transpiration:  Potential =  1.7941 cm, Actual =  0.3375 cm
RHMEAN = 78.4 %;  TMEAN = 295.7 K;  HDRY =  3.3270E+05 cm;  DAYUBC =  3610
```

```
DAILY SUMMARY:  Day = 256, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.21106     0.23341     0.27696
Head (cm)           = 1.22849E+03 1.92350E+03 7.50435E+02
Water Flow (cm)     = 4.28445E-02-1.25337E-02 1.63508E-03
Plant Sink (cm)     = 5.38776E-02 8.46517E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF   EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 29.7775+ 0.0000+ 0.0000 - 0.0323- 0.5190-  0.0016 = 29.2246  Versus  29.2246

Mass Balance =  3.8147E-06 cm;  Time step attempts = 1991 and successes = 1991
  Evaporation:  Potential =  0.1291 cm, Actual =  0.0323 cm
Transpiration:  Potential =  2.4534 cm, Actual =  0.5190 cm
RHMEAN = 66.0 %;  TMEAN = 297.9 K;  HDRY =  5.6902E+05 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day = 257, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.18523     0.23350     0.27675
Head (cm)           = 1.98461E+03 1.91902E+03 7.53440E+02
Water Flow (cm)     =-2.27524E-03-1.23952E-02 1.61601E-03
Plant Sink (cm)     = 3.41197E-02 5.36084E-04 0.00000E+00
```

```
 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR              STORAGE
 29.2246+ 0.0000+ 0.0000 - 0.0204- 0.3322-  0.0016 = 28.8704  Versus  28.8704

Mass Balance = -1.9073E-06 cm;  Time step attempts =  948 and successes =  948
  Evaporation:  Potential =  0.0818 cm, Actual =  0.0204 cm
Transpiration:  Potential =  1.5537 cm, Actual =  0.3322 cm
RHMEAN = 73.2 %;  TMEAN = 297.3 K;  HDRY =  4.2669E+05 cm;  DAYUBC =     0

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 258, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.30595     0.23408     0.27654
Head (cm)          = 3.11228E+02 1.89032E+03 7.56336E+02
Water Flow (cm)    = 1.65004E+00-1.21073E-02 1.59792E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR              STORAGE
 28.8704+ 2.4697+ 0.1719 - 0.0000- 0.0000-  0.0016 = 31.3385  Versus  31.3390

Mass Balance = -4.6730E-04 cm;  Time step attempts = 9307 and successes = 9307
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 92.8 %;  TMEAN = 294.5 K;  HDRY =  1.0175E+05 cm;  DAYUBC =   700

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 259, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.30863     0.23432     0.27634
Head (cm)          = 2.99724E+02 1.87915E+03 7.59226E+02
Water Flow (cm)    = 5.96693E-01-1.18074E-02 1.58018E-03
Plant Sink (cm)    = 1.90610E-02 2.99484E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR              STORAGE
 31.3390+ 0.7112+ 0.0000 - 0.0114- 0.2000-  0.0016 = 31.8372  Versus  31.8376

Mass Balance = -4.3297E-04 cm;  Time step attempts = 9045 and successes = 9045
  Evaporation:  Potential =  0.0461 cm, Actual =  0.0114 cm
Transpiration:  Potential =  0.8767 cm, Actual =  0.2000 cm
RHMEAN = 87.0 %;  TMEAN = 297.3 K;  HDRY =  1.9128E+05 cm;  DAYUBC =     0

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 260, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.28082     0.23435     0.27613
Head (cm)          = 4.39429E+02 1.87774E+03 7.62223E+02
Water Flow (cm)    = 3.63476E-02-1.16270E-02 1.56198E-03
Plant Sink (cm)    = 3.09008E-02 4.85509E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR              STORAGE
 31.8376+ 0.0000+ 0.0000 - 0.0185- 0.3310-  0.0016 = 31.4865  Versus  31.4865
```

```
Mass Balance = -1.1444E-05 cm;  Time step attempts = 2084 and successes = 2084
  Evaporation:  Potential =  0.0741 cm, Actual =  0.0185 cm
Transpiration:  Potential =  1.4071 cm, Actual =  0.3310 cm
RHMEAN = 82.3 %;  TMEAN = 297.0 K;  HDRY =  2.6677E+05 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day = 261, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.32718     0.23454     0.27593
Head (cm)          = 2.28366E+02 1.86830E+03 7.65113E+02
Water Flow (cm)    = 1.24583E+00-1.14624E-02 1.54470E-03
Plant Sink (cm)    = 1.81005E-02 2.84392E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR              STORAGE
 31.4865+ 1.6607+ 0.1935 - 0.0108- 0.1971-  0.0015 = 32.9377  Versus  32.9382

Mass Balance = -4.5013E-04 cm;  Time step attempts = 7677 and successes = 7677
  Evaporation:  Potential =  0.0443 cm, Actual =  0.0108 cm
Transpiration:  Potential =  0.8410 cm, Actual =  0.1971 cm
RHMEAN = 83.0 %;  TMEAN = 296.5 K;  HDRY =  2.5461E+05 cm;  DAYUBC =   431
```

```
DAILY SUMMARY:  Day = 262, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.31053     0.23464     0.27573
Head (cm)          = 2.91776E+02 1.86347E+03 7.67993E+02
Water Flow (cm)    = 1.78216E-01-1.12865E-02 1.52775E-03
Plant Sink (cm)    = 2.26749E-02 3.56265E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR              STORAGE
 32.9382+ 0.1778+ 0.0000 - 0.0136- 0.2503-  0.0015 = 32.8506  Versus  32.8509

Mass Balance = -3.3951E-04 cm;  Time step attempts = 6898 and successes = 6898
  Evaporation:  Potential =  0.0549 cm, Actual =  0.0136 cm
Transpiration:  Potential =  1.0430 cm, Actual =  0.2503 cm
RHMEAN = 86.3 %;  TMEAN = 293.7 K;  HDRY =  2.0140E+05 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day = 263, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.29946     0.23496     0.27552
Head (cm)          = 3.40629E+02 1.84841E+03 7.70974E+02
Water Flow (cm)    = 3.89441E-02-1.10809E-02 1.51044E-03
Plant Sink (cm)    = 7.55076E-03 1.18636E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR              STORAGE
 32.8509+ 0.0000+ 0.0000 - 0.0045- 0.0844-  0.0015 = 32.7605  Versus  32.7605

Mass Balance =  3.8147E-06 cm;  Time step attempts = 1688 and successes = 1688
  Evaporation:  Potential =  0.0181 cm, Actual =  0.0045 cm
```

```
Transpiration:  Potential =  0.3438 cm, Actual =  0.0844 cm
RHMEAN = 84.6 %;  TMEAN = 288.4 K;  HDRY =  2.2909E+05 cm;  DAYUBC =      0
```

```
DAILY SUMMARY:  Day = 264, Simulated Time = 24.0000 hr
-------------
Node Number         =      2          12          25
Depth (cm)          =    5.00000    50.00000   122.00000
Water (cm3/cm3)     =    0.34123     0.23528     0.27533
Head (cm)           = 1.81967E+02 1.83332E+03 7.73834E+02
Water Flow (cm)     = 1.23939E+00-1.08412E-02 1.49407E-03
Plant Sink (cm)     = 4.04482E-03 6.35517E-05 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 32.7605+ 1.5511+ 0.3031 - 0.0024- 0.0455-  0.0015 = 34.2622  Versus  34.2627

Mass Balance = -4.4250E-04 cm;  Time step attempts = 5856 and successes = 5856
   Evaporation:  Potential =  0.0099 cm, Actual =  0.0024 cm
Transpiration:  Potential =  0.1879 cm, Actual =  0.0455 cm
RHMEAN = 82.8 %;  TMEAN = 283.4 K;  HDRY =  2.5842E+05 cm;  DAYUBC =    618
```

```
DAILY SUMMARY:  Day = 265, Simulated Time = 24.0000 hr
-------------
Node Number         =      2          12          25
Depth (cm)          =    5.00000    50.00000   122.00000
Water (cm3/cm3)     =    0.31082     0.23516     0.27512
Head (cm)           = 2.90558E+02 1.83927E+03 7.76808E+02
Water Flow (cm)     = 1.46860E-02-1.07181E-02 1.47732E-03
Plant Sink (cm)     = 3.87436E-02 6.08734E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 34.2627+ 0.0000+ 0.0000 - 0.0232- 0.4398-  0.0015 = 33.7982  Versus  33.7982

Mass Balance =  0.0000E+00 cm;  Time step attempts =  984 and successes =  984
   Evaporation:  Potential =  0.0929 cm, Actual =  0.0232 cm
Transpiration:  Potential =  1.7642 cm, Actual =  0.4398 cm
RHMEAN = 61.2 %;  TMEAN = 282.0 K;  HDRY =  6.7357E+05 cm;  DAYUBC =      0
```

```
DAILY SUMMARY:  Day = 266, Simulated Time = 24.0000 hr
-------------
Node Number         =      2          12          25
Depth (cm)          =    5.00000    50.00000   122.00000
Water (cm3/cm3)     =    0.28255     0.23578     0.27492
Head (cm)           = 4.29232E+02 1.81035E+03 7.79778E+02
Water Flow (cm)     =-4.51071E-02-1.05485E-02 1.46081E-03
Plant Sink (cm)     = 4.76137E-02 7.48100E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 33.7982+ 0.0000+ 0.0000 - 0.0285- 0.5420-  0.0015 = 33.2261  Versus  33.2261

Mass Balance = -1.1444E-05 cm;  Time step attempts =  315 and successes =  315
   Evaporation:  Potential =  0.1141 cm, Actual =  0.0285 cm
Transpiration:  Potential =  2.1682 cm, Actual =  0.5420 cm
RHMEAN = 54.9 %;  TMEAN = 285.4 K;  HDRY =  8.2280E+05 cm;  DAYUBC =      0
```

```
DAILY SUMMARY:  Day = 267, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.29211     0.23850     0.27473
Head (cm)          = 3.76814E+02 1.69201E+03 7.82680E+02
Water Flow (cm)    = 1.89173E-01-9.65846E-03 1.44490E-03
Plant Sink (cm)    = 9.45364E-03 1.48534E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR          STORAGE
 33.2261+ 0.3048+ 0.0000 - 0.0057- 0.1076-  0.0014 = 33.4162  Versus  33.4164

Mass Balance = -2.0218E-04 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.0229 cm, Actual =  0.0057 cm
Transpiration:  Potential =  0.4348 cm, Actual =  0.1076 cm
RHMEAN = 75.8 %;  TMEAN = 285.9 K;  HDRY =  3.7959E+05 cm;  DAYUBC =      0

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 268, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.32328     0.24254     0.27453
Head (cm)          = 2.42294E+02 1.53512E+03 7.85521E+02
Water Flow (cm)    = 7.16483E-01-7.77590E-03 1.42956E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR          STORAGE
 33.4164+ 0.9339+ 0.0059 - 0.0000- 0.0000-  0.0014 = 34.3489  Versus  34.3493

Mass Balance = -3.2425E-04 cm;  Time step attempts = 3231 and successes = 3231
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 90.5 %;  TMEAN = 286.2 K;  HDRY =  1.3744E+05 cm;  DAYUBC =     46

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 269, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.29853     0.24738     0.27434
Head (cm)          = 3.45046E+02 1.37290E+03 7.88417E+02
Water Flow (cm)    = 1.93134E-02-5.01375E-03 1.41414E-03
Plant Sink (cm)    = 3.51232E-02 5.51850E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR          STORAGE
 34.3493+ 0.0254+ 0.0000 - 0.0210- 0.3998-  0.0014 = 33.9524  Versus  33.9525

Mass Balance = -1.7929E-04 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.0850 cm, Actual =  0.0210 cm
Transpiration:  Potential =  1.6155 cm, Actual =  0.3998 cm
RHMEAN = 78.2 %;  TMEAN = 288.7 K;  HDRY =  3.3762E+05 cm;  DAYUBC =      0

-------------------------------------------------------------------------------
```

```
DAILY SUMMARY:  Day = 270, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.29307     0.25353     0.27415
Head (cm)          = 3.71893E+02 1.19860E+03 7.91303E+02
Water Flow (cm)    = 6.35119E-02-8.25163E-04 1.39897E-03
Plant Sink (cm)    = 1.49316E-02 2.34604E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR          STORAGE
 33.9525+ 0.1016+ 0.0000 - 0.0089- 0.1700-  0.0014 = 33.8738  Versus  33.8740

Mass Balance = -1.6785E-04 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.0361 cm, Actual =  0.0089 cm
Transpiration:  Potential =  0.6868 cm, Actual =  0.1700 cm
RHMEAN = 85.8 %;  TMEAN = 291.8 K;  HDRY =  2.0918E+05 cm;  DAYUBC =     0

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 271, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.26246     0.25867     0.27395
Head (cm)          = 5.65221E+02 1.07509E+03 7.94242E+02
Water Flow (cm)    =-4.99644E-02 4.23921E-03 1.38375E-03
Plant Sink (cm)    = 5.17994E-02 8.13864E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR          STORAGE
 33.8740+ 0.0000+ 0.0000 - 0.0310- 0.5897-  0.0014 = 33.2519  Versus  33.2519

Mass Balance = -1.9073E-05 cm;  Time step attempts =   96 and successes =   96
  Evaporation:  Potential =  0.1241 cm, Actual =  0.0310 cm
Transpiration:  Potential =  2.3588 cm, Actual =  0.5897 cm
RHMEAN = 76.2 %;  TMEAN = 297.6 K;  HDRY =  3.7208E+05 cm;  DAYUBC =     0

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 272, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.21442     0.26189     0.27376
Head (cm)          = 1.16108E+03 1.00624E+03 7.97173E+02
Water Flow (cm)    =-7.68369E-02 8.16041E-03 1.36878E-03
Plant Sink (cm)    = 7.85001E-02 1.23338E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR          STORAGE
 33.2519+ 0.0000+ 0.0000 - 0.0470- 0.8937-  0.0014 = 32.3098  Versus  32.3098

Mass Balance = -1.1444E-05 cm;  Time step attempts =  296 and successes =  296
  Evaporation:  Potential =  0.1881 cm, Actual =  0.0470 cm
Transpiration:  Potential =  3.5746 cm, Actual =  0.8937 cm
RHMEAN = 64.5 %;  TMEAN = 299.5 K;  HDRY =  6.0189E+05 cm;  DAYUBC =     0

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 273, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
```

```
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.17964     0.26386     0.27357
Head (cm)           = 2.23112E+03 9.67075E+02 8.00093E+02
Water Flow (cm)     =-5.88078E-02 1.01767E-02 1.35406E-03
Plant Sink (cm)     = 5.51042E-02 8.65789E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 32.3098+ 0.0000+ 0.0000 - 0.0330- 0.6273-  0.0014 = 31.6482  Versus  31.6482

Mass Balance = -1.9073E-06 cm;  Time step attempts =  535 and successes =  535
  Evaporation:  Potential =  0.1321 cm, Actual =  0.0330 cm
Transpiration:  Potential =  2.5092 cm, Actual =  0.6273 cm
RHMEAN = 71.2 %;  TMEAN = 294.0 K;  HDRY =  4.6601E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 274, Simulated Time = 24.0000 hr
-------------
Node Number         =           2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.15432     0.26483     0.27338
Head (cm)           = 4.15581E+03 9.48467E+02 8.03006E+02
Water Flow (cm)     =-3.71167E-02 1.07033E-02 1.33959E-03
Plant Sink (cm)     = 3.86242E-02 6.66921E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 31.6482+ 0.0000+ 0.0000 - 0.0254- 0.4660-  0.0013 = 31.1554  Versus  31.1554

Mass Balance =  9.5367E-06 cm;  Time step attempts =  870 and successes =  870
  Evaporation:  Potential =  0.1017 cm, Actual =  0.0254 cm
Transpiration:  Potential =  1.9329 cm, Actual =  0.4660 cm
RHMEAN = 59.9 %;  TMEAN = 290.1 K;  HDRY =  7.0312E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 275, Simulated Time = 24.0000 hr
-------------
Node Number         =           2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.30296     0.26574     0.27320
Head (cm)           = 3.24518E+02 9.31411E+02 8.05735E+02
Water Flow (cm)     = 1.49864E+00 1.05659E-02 1.32619E-03
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR            STORAGE
 31.1554+ 2.4911+ 0.3537 - 0.0000- 0.0000-  0.0013 = 33.6451  Versus  33.6455

Mass Balance = -4.4250E-04 cm;  Time step attempts = 6029 and successes = 6029
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 90.3 %;  TMEAN = 287.6 K;  HDRY =  1.4060E+05 cm;  DAYUBC =  2868

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 276, Simulated Time = 24.0000 hr
-------------
Node Number         =           2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.27278     0.26562     0.27301
Head (cm)           = 4.90402E+02 9.33700E+02 8.08571E+02
```

```
Water Flow (cm)    = 2.62881E-02 9.72999E-03 1.31250E-03
Plant Sink (cm)    = 4.13365E-02 6.49472E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 33.6455+ 0.0254+ 0.0000 - 0.0248- 0.4706-  0.0013 = 33.1743  Versus  33.1744

Mass Balance = -7.6294E-05 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.1001 cm, Actual =  0.0248 cm
Transpiration:  Potential =  1.9013 cm, Actual =  0.4706 cm
RHMEAN = 65.4 %;  TMEAN = 290.1 K;  HDRY =  5.8179E+05 cm;  DAYUBC =     0

-------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 277, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.23231     0.26507     0.27283
Head (cm)          = 8.73674E+02 9.43975E+02 8.11449E+02
Water Flow (cm)    =-5.35645E-02 7.95597E-03 1.29875E-03
Plant Sink (cm)    = 6.53024E-02 1.02602E-03 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 33.1744+ 0.0000+ 0.0000 - 0.0391- 0.7434-  0.0013 = 32.3905  Versus  32.3905

Mass Balance = -1.5259E-05 cm;  Time step attempts =  176 and successes =  176
  Evaporation:  Potential =  0.1565 cm, Actual =  0.0391 cm
Transpiration:  Potential =  2.9736 cm, Actual =  0.7434 cm
RHMEAN = 56.5 %;  TMEAN = 292.3 K;  HDRY =  7.8194E+05 cm;  DAYUBC =     0

-------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 278, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.17854     0.26433     0.27264
Head (cm)          = 2.28482E+03 9.58052E+02 8.14305E+02
Water Flow (cm)    =-5.63763E-02 6.03688E-03 1.28528E-03
Plant Sink (cm)    = 7.67430E-02 1.20577E-03 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 32.3905+ 0.0000+ 0.0000 - 0.0460- 0.8736-  0.0013 = 31.4696  Versus  31.4696

Mass Balance = -1.9073E-06 cm;  Time step attempts =  648 and successes =  648
  Evaporation:  Potential =  0.1839 cm, Actual =  0.0460 cm
Transpiration:  Potential =  3.4946 cm, Actual =  0.8736 cm
RHMEAN = 50.2 %;  TMEAN = 288.7 K;  HDRY =  9.4580E+05 cm;  DAYUBC =     0

-------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 279, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.14648     0.26380     0.27246
Head (cm)          = 5.25415E+03 9.68158E+02 8.17137E+02
Water Flow (cm)    =-3.23330E-02 4.40191E-03 1.27209E-03
Plant Sink (cm)    = 4.55193E-02 8.67347E-04 0.00000E+00
```

```
 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 31.4696+ 0.0000+ 0.0000 - 0.0331- 0.5849-  0.0013 = 30.8504  Versus  30.8504

Mass Balance = -1.5259E-05 cm;  Time step attempts = 1142 and successes = 1142
  Evaporation:  Potential =  0.1323 cm, Actual =  0.0331 cm
Transpiration:  Potential =  2.5138 cm, Actual =  0.5849 cm
RHMEAN = 57.1 %;  TMEAN = 286.8 K;  HDRY =  7.6792E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 280, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =    5.00000    50.00000   122.00000
Water (cm3/cm3)    =    0.13300     0.26326     0.27228
Head (cm)          = 8.44756E+03 9.78729E+02 8.19940E+02
Water Flow (cm)    =-1.19371E-02 3.12256E-03 1.25920E-03
Plant Sink (cm)    = 1.90231E-02 7.32953E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 30.8504+ 0.0000+ 0.0000 - 0.0280- 0.3876-  0.0013 = 30.4337  Versus  30.4337

Mass Balance =  0.0000E+00 cm;  Time step attempts = 1270 and successes = 1270
  Evaporation:  Potential =  0.1118 cm, Actual =  0.0280 cm
Transpiration:  Potential =  2.1243 cm, Actual =  0.3876 cm
RHMEAN = 55.6 %;  TMEAN = 288.2 K;  HDRY =  8.0410E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 281, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =    5.00000    50.00000   122.00000
Water (cm3/cm3)    =    0.12414     0.26226     0.27211
Head (cm)          = 1.23789E+04 9.98764E+02 8.22709E+02
Water Flow (cm)    =-3.85486E-03 1.67458E-03 1.24662E-03
Plant Sink (cm)    = 1.07800E-02 1.04256E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 30.4337+ 0.0000+ 0.0000 - 0.0398- 0.4047-  0.0012 = 29.9879  Versus  29.9879

Mass Balance = -1.9073E-06 cm;  Time step attempts = 1632 and successes = 1632
  Evaporation:  Potential =  0.1590 cm, Actual =  0.0398 cm
Transpiration:  Potential =  3.0216 cm, Actual =  0.4047 cm
RHMEAN = 54.1 %;  TMEAN = 292.0 K;  HDRY =  8.4202E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 282, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =    5.00000    50.00000   122.00000
Water (cm3/cm3)    =    0.12261     0.26168     0.27193
Head (cm)          = 1.33256E+04 1.01071E+03 8.25438E+02
Water Flow (cm)    =-1.44437E-03 3.86668E-04 1.23436E-03
Plant Sink (cm)    = 2.16746E-03 5.13229E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 29.9879+ 0.0000+ 0.0000 - 0.0196- 0.1562-  0.0012 = 29.8109  Versus  29.8109
```

```
Mass Balance =  7.6294E-06 cm;  Time step attempts = 1054 and successes = 1054
  Evaporation:  Potential =  0.0783 cm, Actual =  0.0196 cm
Transpiration:  Potential =  1.4875 cm, Actual =  0.1562 cm
RHMEAN = 74.0 %;  TMEAN = 291.8 K;  HDRY =  4.1335E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 283, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000   50.00000   122.00000
Water (cm3/cm3)    =     0.12152    0.26098     0.27176
Head (cm)          = 1.40653E+04 1.02519E+03 8.28121E+02
Water Flow (cm)    =-9.12012E-04-5.45345E-04 1.22245E-03
Plant Sink (cm)    = 1.35981E-03 5.59752E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 29.8109+ 0.0000+ 0.0000 - 0.0213- 0.1496-  0.0012 = 29.6387  Versus  29.6387

Mass Balance = -7.6294E-06 cm;  Time step attempts = 1989 and successes = 1989
  Evaporation:  Potential =  0.0854 cm, Actual =  0.0213 cm
Transpiration:  Potential =  1.6223 cm, Actual =  0.1496 cm
RHMEAN = 73.8 %;  TMEAN = 293.7 K;  HDRY =  4.1614E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 284, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000   50.00000   122.00000
Water (cm3/cm3)    =     0.12061    0.25987     0.27161
Head (cm)          = 1.47326E+04 1.04881E+03 8.30569E+02
Water Flow (cm)    =-5.14527E-04-1.71936E-03 1.21128E-03
Plant Sink (cm)    = 9.36806E-04 9.20464E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 29.6387+ 0.0000+ 0.0000 - 0.0351- 0.2081-  0.0012 = 29.3943  Versus  29.3946

Mass Balance = -2.7084E-04 cm;  Time step attempts = 8701 and successes = 8701
  Evaporation:  Potential =  0.1404 cm, Actual =  0.0351 cm
Transpiration:  Potential =  2.6677 cm, Actual =  0.2081 cm
RHMEAN = 57.4 %;  TMEAN = 297.3 K;  HDRY =  7.6023E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 285, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000   50.00000   122.00000
Water (cm3/cm3)    =     0.12015    0.25861     0.27155
Head (cm)          = 1.50841E+04 1.07644E+03 8.31593E+02
Water Flow (cm)    =-2.41204E-04-3.15018E-03 1.20281E-03
Plant Sink (cm)    = 2.23241E-04 1.12959E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 29.3946+ 0.0000+ 0.0000 - 0.0431- 0.2108-  0.0012 = 29.1395  Versus  29.1429

Mass Balance = -3.4752E-03 cm;  Time step attempts =71807 and successes =71807
  Evaporation:  Potential =  0.1723 cm, Actual =  0.0431 cm
Transpiration:  Potential =  3.2738 cm, Actual =  0.2108 cm
```

```
RHMEAN = 53.4 %;   TMEAN = 297.0 K;   HDRY =  8.6015E+05 cm;   DAYUBC =      0
------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 286, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =      5.00000    50.00000   122.00000
Water (cm3/cm3)     =      0.11934     0.25772     0.27145
Head (cm)           = 1.57386E+04 1.09666E+03 8.33183E+02
Water Flow (cm)     =-1.61982E-04-4.27742E-03 1.19921E-03
Plant Sink (cm)     = 0.00000E+00 8.01195E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR           STORAGE
 29.1429+ 0.0000+ 0.0000 - 0.0118- 0.1282-  0.0012 = 29.0018  Versus  29.0054

Mass Balance = -3.6564E-03 cm;  Time step attempts =49464 and successes =49464
  Evaporation:  Potential =  0.1222 cm, Actual =  0.0118 cm
Transpiration:  Potential =  2.3220 cm, Actual =  0.1282 cm
RHMEAN = 62.9 %;  TMEAN = 288.2 K;  HDRY =  6.3536E+05 cm;  DAYUBC =  3249
------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 287, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =      5.00000    50.00000   122.00000
Water (cm3/cm3)     =      0.11815     0.25693     0.27135
Head (cm)           = 1.67853E+04 1.11489E+03 8.34820E+02
Water Flow (cm)     =-2.04756E-04-4.97083E-03 1.19245E-03
Plant Sink (cm)     = 0.00000E+00 6.66553E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR           STORAGE
 29.0054+ 0.0000+ 0.0000 - 0.0085- 0.0976-  0.0012 = 28.8981  Versus  28.9018

Mass Balance = -3.6411E-03 cm;  Time step attempts =41687 and successes =41687
  Evaporation:  Potential =  0.1017 cm, Actual =  0.0085 cm
Transpiration:  Potential =  1.9318 cm, Actual =  0.0976 cm
RHMEAN = 50.1 %;  TMEAN = 285.1 K;  HDRY =  9.4856E+05 cm;  DAYUBC =  3420
------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 288, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =      5.00000    50.00000   122.00000
Water (cm3/cm3)     =      0.11665     0.25581     0.27125
Head (cm)           = 1.82492E+04 1.14167E+03 8.36378E+02
Water Flow (cm)     =-2.83688E-04-5.76335E-03 1.18586E-03
Plant Sink (cm)     = 0.00000E+00 9.84867E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR           STORAGE
 28.9018+ 0.0000+ 0.0000 - 0.0094- 0.1321-  0.0012 = 28.7591  Versus  28.7644

Mass Balance = -5.3654E-03 cm;  Time step attempts =58021 and successes =58021
  Evaporation:  Potential =  0.1502 cm, Actual =  0.0094 cm
Transpiration:  Potential =  2.8544 cm, Actual =  0.1321 cm
RHMEAN = 36.4 %;  TMEAN = 292.3 K;  HDRY =  1.3835E+06 cm;  DAYUBC =  3595
------------------------------------------------------------------------------
```

```
DAILY SUMMARY:  Day = 289, Simulated Time = 24.0000 hr
-------------
Node Number       =       2           12          25
Depth (cm)        =     5.00000     50.00000   122.00000
Water (cm3/cm3)   =     0.11512      0.25460     0.27110
Head (cm)         = 1.99495E+04 1.17138E+03 8.38722E+02
Water Flow (cm)   =-3.71695E-04-6.62410E-03 1.17663E-03
Plant Sink (cm)   = 0.00000E+00 9.83058E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 28.7644+ 0.0000+ 0.0000 - 0.0069- 0.1178-  0.0012 = 28.6385  Versus  28.6388

Mass Balance = -2.9373E-04 cm;  Time step attempts = 3882 and successes = 3882
  Evaporation:  Potential =  0.1500 cm, Actual =  0.0069 cm
Transpiration:  Potential =  2.8491 cm, Actual =  0.1178 cm
RHMEAN = 38.7 %;  TMEAN = 293.7 K;  HDRY =  1.3024E+06 cm;  DAYUBC =  3863

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 290, Simulated Time = 24.0000 hr
-------------
Node Number       =       2           12          25
Depth (cm)        =     5.00000     50.00000   122.00000
Water (cm3/cm3)   =     0.11357      0.25293     0.27097
Head (cm)         = 2.19216E+04 1.21408E+03 8.40882E+02
Water Flow (cm)   =-4.56195E-04-7.62547E-03 1.16757E-03
Plant Sink (cm)   = 0.00000E+00 1.51068E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 28.6388+ 0.0000+ 0.0000 - 0.0078- 0.1602-  0.0012 = 28.4696  Versus  28.4714

Mass Balance = -1.7719E-03 cm;  Time step attempts =15901 and successes =15901
  Evaporation:  Potential =  0.2304 cm, Actual =  0.0078 cm
Transpiration:  Potential =  4.3783 cm, Actual =  0.1602 cm
RHMEAN = 36.7 %;  TMEAN = 294.8 K;  HDRY =  1.3755E+06 cm;  DAYUBC =  4445

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 291, Simulated Time = 24.0000 hr
-------------
Node Number       =       2           12          25
Depth (cm)        =     5.00000     50.00000   122.00000
Water (cm3/cm3)   =     0.11225      0.25145     0.27083
Head (cm)         = 2.38346E+04 1.25389E+03 8.43121E+02
Water Flow (cm)   =-5.26880E-04-8.61613E-03 1.15824E-03
Plant Sink (cm)   = 0.00000E+00 1.35289E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 28.4714+ 0.0000+ 0.0000 - 0.0048- 0.1278-  0.0012 = 28.3377  Versus  28.3379

Mass Balance = -2.5177E-04 cm;  Time step attempts = 3374 and successes = 3374
  Evaporation:  Potential =  0.2064 cm, Actual =  0.0048 cm
Transpiration:  Potential =  3.9210 cm, Actual =  0.1278 cm
RHMEAN = 47.0 %;  TMEAN = 295.4 K;  HDRY =  1.0350E+06 cm;  DAYUBC =  3338

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 292, Simulated Time = 24.0000 hr
```

```
-------------
Node Number       =         2            12            25
Depth (cm)        =      5.00000     50.00000    122.00000
Water (cm3/cm3)   =      0.11114      0.25036      0.27070
Head (cm)         = 2.56280E+04 1.28430E+03 8.45330E+02
Water Flow (cm)   =-5.75965E-04-9.20311E-03 1.14917E-03
Plant Sink (cm)   = 0.00000E+00 9.96196E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 28.3379+ 0.0000+ 0.0000 - 0.0040- 0.0856-  0.0011 = 28.2471  Versus  28.2472

Mass Balance = -8.2016E-05 cm;  Time step attempts = 1325 and successes = 1325
  Evaporation:  Potential =  0.1520 cm, Actual =  0.0040 cm
Transpiration:  Potential =  2.8872 cm, Actual =  0.0856 cm
RHMEAN = 54.7 %;  TMEAN = 289.3 K;  HDRY =  8.2656E+05 cm;  DAYUBC =  1296

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 293, Simulated Time = 24.0000 hr
-------------
Node Number       =         2            12            25
Depth (cm)        =      5.00000     50.00000    122.00000
Water (cm3/cm3)   =      0.10977      0.24953      0.27061
Head (cm)         = 2.81624E+04 1.30830E+03 8.46670E+02
Water Flow (cm)   =-6.20568E-04-9.53629E-03 1.14307E-03
Plant Sink (cm)   = 0.00000E+00 9.01816E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 28.2472+ 0.0000+ 0.0000 - 0.0101- 0.0726-  0.0011 = 28.1634  Versus  28.1698

Mass Balance = -6.4754E-03 cm;  Time step attempts =60631 and successes =60631
  Evaporation:  Potential =  0.1376 cm, Actual =  0.0101 cm
Transpiration:  Potential =  2.6137 cm, Actual =  0.0726 cm
RHMEAN = 36.6 %;  TMEAN = 284.5 K;  HDRY =  1.3781E+06 cm;  DAYUBC =  3317

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 294, Simulated Time = 24.0000 hr
-------------
Node Number       =         2            12            25
Depth (cm)        =      5.00000     50.00000    122.00000
Water (cm3/cm3)   =      0.10819      0.24855      0.27053
Head (cm)         = 3.15323E+04 1.33714E+03 8.48118E+02
Water Flow (cm)   =-6.74380E-04-9.85541E-03 1.13741E-03
Plant Sink (cm)   = 0.00000E+00 1.00334E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 28.1698+ 0.0000+ 0.0000 - 0.0084- 0.0761-  0.0011 = 28.0842  Versus  28.0896

Mass Balance = -5.3787E-03 cm;  Time step attempts =48335 and successes =48335
  Evaporation:  Potential =  0.1530 cm, Actual =  0.0084 cm
Transpiration:  Potential =  2.9079 cm, Actual =  0.0761 cm
RHMEAN = 32.6 %;  TMEAN = 288.7 K;  HDRY =  1.5367E+06 cm;  DAYUBC =  5794

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 295, Simulated Time = 24.0000 hr
-------------
Node Number       =         2            12            25
Depth (cm)        =      5.00000     50.00000    122.00000
```

```
Water (cm3/cm3)     =     0.10687     0.24678     0.27040
Head (cm)           = 3.48647E+04 1.39172E+03 8.50186E+02
Water Flow (cm)     =-7.19018E-04-1.04336E-02 1.12953E-03
Plant Sink (cm)     = 0.00000E+00 1.79210E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 28.0896+ 0.0000+ 0.0000 - 0.0048- 0.1249-  0.0011 = 27.9588  Versus  27.9589

Mass Balance = -1.0872E-04 cm;  Time step attempts = 2144 and successes = 2144
  Evaporation:  Potential =  0.2734 cm, Actual =  0.0048 cm
Transpiration:  Potential =  5.1939 cm, Actual =  0.1249 cm
RHMEAN = 45.0 %;  TMEAN = 294.5 K;  HDRY =  1.0958E+06 cm;  DAYUBC =  2112

----------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 296, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.10562     0.24571     0.27028
Head (cm)           = 3.85027E+04 1.42612E+03 8.52192E+02
Water Flow (cm)     =-7.53387E-04-1.09254E-02 1.12156E-03
Plant Sink (cm)     = 0.00000E+00 1.14635E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 27.9589+ 0.0000+ 0.0000 - 0.0062- 0.0727-  0.0011 = 27.8789  Versus  27.8790

Mass Balance = -1.3161E-04 cm;  Time step attempts = 2554 and successes = 2554
  Evaporation:  Potential =  0.1749 cm, Actual =  0.0062 cm
Transpiration:  Potential =  3.3224 cm, Actual =  0.0727 cm
RHMEAN = 46.0 %;  TMEAN = 285.7 K;  HDRY =  1.0636E+06 cm;  DAYUBC =  2529

----------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 297, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.10429     0.24526     0.27023
Head (cm)           = 4.30030E+04 1.44092E+03 8.53051E+02
Water Flow (cm)     =-7.89158E-04-1.09433E-02 1.11593E-03
Plant Sink (cm)     = 0.00000E+00 6.16332E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 27.8790+ 0.0000+ 0.0000 - 0.0075- 0.0372-  0.0011 = 27.8332  Versus  27.8391

Mass Balance = -5.8899E-03 cm;  Time step attempts =60173 and successes =60173
  Evaporation:  Potential =  0.0940 cm, Actual =  0.0075 cm
Transpiration:  Potential =  1.7863 cm, Actual =  0.0372 cm
RHMEAN = 39.8 %;  TMEAN = 282.6 K;  HDRY =  1.2640E+06 cm;  DAYUBC =  5501

----------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 298, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.10306     0.24441     0.27011
Head (cm)           = 4.79633E+04 1.46937E+03 8.54979E+02
Water Flow (cm)     =-8.28571E-04-1.09409E-02 1.11060E-03
```

```
Plant Sink (cm)    = 0.00000E+00 9.51827E-04 0.00000E+00

 PRESTOR    INFIL   RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR             STORAGE
 27.8391+ 0.0000+ 0.0000 - 0.0058- 0.0552-  0.0011 = 27.7770  Versus  27.7773

Mass Balance = -2.7657E-04 cm;  Time step attempts = 4043 and successes = 4043
  Evaporation:  Potential =  0.1452 cm, Actual =  0.0058 cm
Transpiration:  Potential =  2.7586 cm, Actual =  0.0552 cm
RHMEAN = 45.5 %;  TMEAN = 289.5 K;  HDRY =  1.0806E+06 cm;  DAYUBC =  2158
```

```
DAILY SUMMARY:  Day = 299, Simulated Time = 24.0000 hr
-------------
Node Number        =       2           12           25
Depth (cm)         =     5.00000     50.00000    122.00000
Water (cm3/cm3)    =     0.10197      0.24360      0.27000
Head (cm)          = 5.30388E+04 1.49748E+03 8.56847E+02
Water Flow (cm)    =-8.64676E-04-1.10004E-02 1.10329E-03
Plant Sink (cm)    = 0.00000E+00 9.41257E-04 0.00000E+00

 PRESTOR    INFIL   RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR             STORAGE
 27.7773+ 0.0000+ 0.0000 - 0.0047- 0.0520-  0.0011 = 27.7194  Versus  27.7196

Mass Balance = -2.0981E-04 cm;  Time step attempts = 3213 and successes = 3213
  Evaporation:  Potential =  0.1436 cm, Actual =  0.0047 cm
Transpiration:  Potential =  2.7280 cm, Actual =  0.0520 cm
RHMEAN = 51.0 %;  TMEAN = 292.3 K;  HDRY =  9.2308E+05 cm;  DAYUBC =  3179
```

```
DAILY SUMMARY:  Day = 300, Simulated Time = 24.0000 hr
-------------
Node Number        =       2           12           25
Depth (cm)         =     5.00000     50.00000    122.00000
Water (cm3/cm3)    =     0.10071      0.24308      0.26993
Head (cm)          = 5.99582E+04 1.51574E+03 8.57930E+02
Water Flow (cm)    =-9.06405E-04-1.10123E-02 1.09804E-03
Plant Sink (cm)    = 0.00000E+00 7.30281E-04 0.00000E+00

 PRESTOR    INFIL   RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR             STORAGE
 27.7196+ 0.0000+ 0.0000 - 0.0084- 0.0389-  0.0011 = 27.6712  Versus  27.6758

Mass Balance = -4.6558E-03 cm;  Time step attempts =42691 and successes =42691
  Evaporation:  Potential =  0.1114 cm, Actual =  0.0084 cm
Transpiration:  Potential =  2.1165 cm, Actual =  0.0389 cm
RHMEAN = 39.9 %;  TMEAN = 288.4 K;  HDRY =  1.2610E+06 cm;  DAYUBC =  5174
```

```
DAILY SUMMARY:  Day = 301, Simulated Time = 24.0000 hr
-------------
Node Number        =       2           12           25
Depth (cm)         =     5.00000     50.00000    122.00000
Water (cm3/cm3)    =     0.09936      0.24267      0.26989
Head (cm)          = 6.90130E+04 1.53048E+03 8.58630E+02
Water Flow (cm)    =-9.68214E-04-1.09645E-02 1.09440E-03
Plant Sink (cm)    = 0.00000E+00 5.89476E-04 0.00000E+00

 PRESTOR    INFIL   RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR             STORAGE
```

```
 27.6758+ 0.0000+ 0.0000 - 0.0073- 0.0306-  0.0011 = 27.6369  Versus  27.6431

Mass Balance = -6.1951E-03 cm;  Time step attempts =82872 and successes =82872
  Evaporation:  Potential =  0.0899 cm, Actual =  0.0073 cm
Transpiration:  Potential =  1.7084 cm, Actual =  0.0306 cm
RHMEAN = 36.0 %;  TMEAN = 283.7 K;  HDRY =  1.3987E+06 cm;  DAYUBC =  4324

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 302, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.09797     0.24174     0.26981
Head (cm)          = 8.06190E+04 1.56463E+03 8.60035E+02
Water Flow (cm)    =-1.05086E-03-1.11092E-02 1.09088E-03
Plant Sink (cm)    = 0.00000E+00 1.13703E-03 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 27.6431+ 0.0000+ 0.0000 - 0.0080- 0.0568-  0.0011 = 27.5772  Versus  27.5806

Mass Balance = -3.3569E-03 cm;  Time step attempts =42154 and successes =42154
  Evaporation:  Potential =  0.1734 cm, Actual =  0.0080 cm
Transpiration:  Potential =  3.2954 cm, Actual =  0.0568 cm
RHMEAN = 34.7 %;  TMEAN = 288.4 K;  HDRY =  1.4499E+06 cm;  DAYUBC =  6550

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 303, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.09826     0.24167     0.26972
Head (cm)          = 7.79776E+04 1.56722E+03 8.61540E+02
Water Flow (cm)    =-1.08077E-03-1.10068E-02 1.08501E-03
Plant Sink (cm)    = 0.00000E+00 2.45018E-04 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 27.5806+ 0.0508+ 0.0000 - 0.0093- 0.0118-  0.0011 = 27.6091  Versus  27.6099

Mass Balance = -7.1716E-04 cm;  Time step attempts =18620 and successes =18620
  Evaporation:  Potential =  0.0378 cm, Actual =  0.0093 cm
Transpiration:  Potential =  0.7173 cm, Actual =  0.0118 cm
RHMEAN = 74.1 %;  TMEAN = 287.0 K;  HDRY =  4.1013E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 304, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.09883     0.24181     0.26961
Head (cm)          = 7.31251E+04 1.56202E+03 8.63219E+02
Water Flow (cm)    =-1.03537E-03-1.05862E-02 1.07903E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 27.6099+ 0.0762+ 0.0000 - 0.0000- 0.0000-  0.0011 = 27.6850  Versus  27.6853

Mass Balance = -2.7847E-04 cm;  Time step attempts = 9155 and successes = 9155
```

```
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 93.7 %;  TMEAN = 287.9 K;  HDRY =  8.8625E+04 cm;  DAYUBC =      0

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 305, Simulated Time = 24.0000 hr
-------------
Node Number        =       2         12          25
Depth (cm)         =    5.00000   50.00000   122.00000
Water (cm3/cm3)    =    0.14724    0.24135     0.26954
Head (cm)          = 5.13000E+03 1.57941E+03 8.64434E+02
Water Flow (cm)    = 2.08800E-03-1.03854E-02 1.07419E-03
Plant Sink (cm)    = 9.93257E-03 6.02216E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR          STORAGE
 27.6853+ 0.5080+ 0.0000 - 0.0230- 0.0738-  0.0011 = 28.0955  Versus  28.0979

Mass Balance = -2.4395E-03 cm;  Time step attempts =30684 and successes =30684
  Evaporation:  Potential =  0.0928 cm, Actual =  0.0230 cm
Transpiration:  Potential =  1.7630 cm, Actual =  0.0738 cm
RHMEAN = 72.8 %;  TMEAN = 289.8 K;  HDRY =  4.3424E+05 cm;  DAYUBC =      0

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 306, Simulated Time = 24.0000 hr
-------------
Node Number        =       2         12          25
Depth (cm)         =    5.00000   50.00000   122.00000
Water (cm3/cm3)    =    0.14935    0.24118     0.26944
Head (cm)          = 4.80816E+03 1.58573E+03 8.66186E+02
Water Flow (cm)    = 7.41762E-03-1.02494E-02 1.06805E-03
Plant Sink (cm)    = 1.23933E-02 3.00692E-04 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR          STORAGE
 28.0979+ 0.0000+ 0.0000 - 0.0115- 0.0700-  0.0011 = 28.0153  Versus  28.0153

Mass Balance = -5.7220E-06 cm;  Time step attempts =  949 and successes =  949
  Evaporation:  Potential =  0.0459 cm, Actual =  0.0115 cm
Transpiration:  Potential =  0.8715 cm, Actual =  0.0700 cm
RHMEAN = 71.3 %;  TMEAN = 276.8 K;  HDRY =  4.6274E+05 cm;  DAYUBC =      0

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 307, Simulated Time = 24.0000 hr
-------------
Node Number        =       2         12          25
Depth (cm)         =    5.00000   50.00000   122.00000
Water (cm3/cm3)    =    0.14867    0.24127     0.26936
Head (cm)          = 4.90818E+03 1.58218E+03 8.67578E+02
Water Flow (cm)    = 7.48627E-03-9.97396E-03 1.06231E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR          STORAGE
 28.0153+ 0.0000+ 0.0000 - 0.2472- 0.0000-  0.0011 = 27.7671  Versus  27.7677

Mass Balance = -6.6185E-04 cm;  Time step attempts =26765 and successes =26765
  Evaporation:  Potential =  1.5533 cm, Actual =  0.2472 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 37.5 %;  TMEAN = 277.3 K;  HDRY =  1.3448E+06 cm;  DAYUBC =  3873
```

```
DAILY SUMMARY:  Day = 308, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12           25
Depth (cm)         =     5.00000     50.00000    122.00000
Water (cm3/cm3)    =     0.14568      0.24136      0.26925
Head (cm)          = 5.38948E+03 1.57897E+03 8.69308E+02
Water Flow (cm)    = 6.23778E-03-9.65593E-03 1.05664E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR           STORAGE
 27.7677+ 0.0000+ 0.0000 - 0.0067- 0.0000-  0.0011 = 27.7600  Versus  27.7600

Mass Balance =  0.0000E+00 cm;  Time step attempts =  728 and successes =  728
  Evaporation:  Potential =  1.6158 cm, Actual =  0.0067 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 40.9 %;  TMEAN = 278.4 K;  HDRY =  1.2252E+06 cm;  DAYUBC =   715
```

```
DAILY SUMMARY:  Day = 309, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12           25
Depth (cm)         =     5.00000     50.00000    122.00000
Water (cm3/cm3)    =     0.14324      0.24142      0.26915
Head (cm)          = 5.83461E+03 1.57667E+03 8.71019E+02
Water Flow (cm)    = 5.01525E-03-9.36161E-03 1.05045E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR           STORAGE
 27.7600+ 0.0000+ 0.0000 - 0.0031- 0.0000-  0.0011 = 27.7559  Versus  27.7559

Mass Balance = -3.6240E-05 cm;  Time step attempts =  778 and successes =  778
  Evaporation:  Potential =  2.3534 cm, Actual =  0.0031 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 56.4 %;  TMEAN = 283.2 K;  HDRY =  7.8613E+05 cm;  DAYUBC =   717
```

```
DAILY SUMMARY:  Day = 310, Simulated Time = 24.0000 hr
-------------
Node Number        =        2           12           25
Depth (cm)         =     5.00000     50.00000    122.00000
Water (cm3/cm3)    =     0.14162      0.24145      0.26908
Head (cm)          = 6.16151E+03 1.57554E+03 8.72235E+02
Water Flow (cm)    = 4.13493E-03-9.14702E-03 1.04569E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF    EVAPO    TRANS    DRAIN   NEWSTOR           STORAGE
 27.7559+ 0.0762+ 0.0000 - 0.0673- 0.0000-  0.0010 = 27.7638  Versus  27.7649

Mass Balance = -1.1196E-03 cm;  Time step attempts =37317 and successes =37317
  Evaporation:  Potential =  0.9816 cm, Actual =  0.0673 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 84.4 %;  TMEAN = 286.8 K;  HDRY =  2.3223E+05 cm;  DAYUBC =  2831
```

```
DAILY SUMMARY:  Day = 311, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12           25
Depth (cm)        =     5.00000    50.00000   122.00000
Water (cm3/cm3)   =     0.13962     0.24148     0.26899
Head (cm)         = 6.60267E+03 1.57444E+03 8.73716E+02
Water Flow (cm)   = 3.39921E-03-8.95685E-03 1.04080E-03
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
 27.7649+ 0.0000+ 0.0000 - 0.0178- 0.0000-  0.0010 = 27.7460  Versus  27.7462

Mass Balance = -1.5831E-04 cm;  Time step attempts =30084 and successes =30084
  Evaporation:  Potential =  2.0189 cm, Actual =  0.0178 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 54.9 %;  TMEAN = 284.0 K;  HDRY =  8.2201E+05 cm;  DAYUBC =  4905

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 312, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12           25
Depth (cm)        =     5.00000    50.00000   122.00000
Water (cm3/cm3)   =     0.13762     0.24150     0.26890
Head (cm)         = 7.09191E+03 1.57363E+03 8.75351E+02
Water Flow (cm)   = 2.65439E-03-8.75597E-03 1.03509E-03
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
 27.7462+ 0.0000+ 0.0000 - 0.0076- 0.0000-  0.0010 = 27.7376  Versus  27.7377

Mass Balance = -1.8311E-04 cm;  Time step attempts = 7593 and successes = 7593
  Evaporation:  Potential =  1.5296 cm, Actual =  0.0076 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 48.6 %;  TMEAN = 280.1 K;  HDRY =  9.8922E+05 cm;  DAYUBC =  4085

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 313, Simulated Time = 24.0000 hr
-------------
Node Number       =       2          12           25
Depth (cm)        =     5.00000    50.00000   122.00000
Water (cm3/cm3)   =     0.13600     0.24151     0.26879
Head (cm)         = 7.52765E+03 1.57314E+03 8.77103E+02
Water Flow (cm)   = 2.04472E-03-8.56623E-03 1.02897E-03
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR            STORAGE
 27.7377+ 0.0000+ 0.0000 - 0.0024- 0.0000-  0.0010 = 27.7343  Versus  27.7344

Mass Balance = -7.6294E-06 cm;  Time step attempts =  710 and successes =  710
  Evaporation:  Potential =  3.4551 cm, Actual =  0.0024 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 61.7 %;  TMEAN = 287.9 K;  HDRY =  6.6152E+05 cm;  DAYUBC =   646

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 314, Simulated Time = 24.0000 hr
-------------
```

```
Node Number        =        2          12           25
Depth (cm)         =     5.00000    50.00000    122.00000
Water (cm3/cm3)    =     0.13710     0.24152      0.26872
Head (cm)          = 7.22676E+03 1.57298E+03 8.78460E+02
Water Flow (cm)    = 2.16678E-03-8.41244E-03 1.02376E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 27.7344+ 0.2540+ 0.0000 - 0.2419- 0.0000-  0.0010 = 27.7454  Versus  27.7462

Mass Balance = -7.4959E-04 cm;  Time step attempts =29487 and successes =29487
  Evaporation:  Potential =  2.0295 cm, Actual =  0.2419 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 75.7 %;  TMEAN = 285.4 K;  HDRY =  3.8133E+05 cm;  DAYUBC =  4011
```

```
DAILY SUMMARY:  Day = 315, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12           25
Depth (cm)         =     5.00000    50.00000    122.00000
Water (cm3/cm3)    =     0.14140     0.24152      0.26867
Head (cm)          = 6.20680E+03 1.57296E+03 8.79255E+02
Water Flow (cm)    = 3.34436E-03-8.28620E-03 1.01922E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 27.7462+ 0.3048+ 0.0000 - 0.2869- 0.0000-  0.0010 = 27.7630  Versus  27.7642

Mass Balance = -1.2093E-03 cm;  Time step attempts =97944 and successes =97944
  Evaporation:  Potential =  1.1609 cm, Actual =  0.2869 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 61.6 %;  TMEAN = 273.2 K;  HDRY =  6.6489E+05 cm;  DAYUBC =  1444
```

```
DAILY SUMMARY:  Day = 316, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12           25
Depth (cm)         =     5.00000    50.00000    122.00000
Water (cm3/cm3)    =     0.13907     0.24152      0.26857
Head (cm)          = 6.73278E+03 1.57296E+03 8.80931E+02
Water Flow (cm)    = 2.94791E-03-8.19658E-03 1.01576E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 27.7642+ 0.0000+ 0.0000 - 0.0125- 0.0000-  0.0010 = 27.7508  Versus  27.7509

Mass Balance = -1.3924E-04 cm;  Time step attempts =10092 and successes =10092
  Evaporation:  Potential =  3.2986 cm, Actual =  0.0125 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 36.0 %;  TMEAN = 285.1 K;  HDRY =  1.3987E+06 cm;  DAYUBC =  3959
```

```
DAILY SUMMARY:  Day = 317, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12           25
Depth (cm)         =     5.00000    50.00000    122.00000
Water (cm3/cm3)    =     0.13716     0.24151      0.26847
```

```
Head (cm)          = 7.21223E+03 1.57310E+03 8.82675E+02
Water Flow (cm)    = 2.17262E-03-8.05565E-03 1.00976E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 27.7509+ 0.0000+ 0.0000 - 0.0041- 0.0000-  0.0010 = 27.7458  Versus  27.7459

Mass Balance = -1.5259E-04 cm;  Time step attempts = 2040 and successes = 2040
  Evaporation:  Potential =  1.5335 cm, Actual =  0.0041 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 49.8 %;  TMEAN = 284.8 K;  HDRY =  9.5597E+05 cm;  DAYUBC =  2000

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 318, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.13562     0.24151     0.26837
Head (cm)          = 7.63447E+03 1.57339E+03 8.84486E+02
Water Flow (cm)    = 1.62367E-03-7.92422E-03 1.00369E-03
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 27.7459+ 0.0000+ 0.0000 - 0.0030- 0.0000-  0.0010 = 27.7419  Versus  27.7419

Mass Balance = -7.6294E-06 cm;  Time step attempts =  462 and successes =  462
  Evaporation:  Potential =  1.3060 cm, Actual =  0.0030 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 60.2 %;  TMEAN = 280.9 K;  HDRY =  6.9558E+05 cm;  DAYUBC =   410

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 319, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.13439     0.24150     0.26826
Head (cm)          = 8.00106E+03 1.57377E+03 8.86290E+02
Water Flow (cm)    = 1.23225E-03-7.80079E-03 9.97593E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 27.7419+ 0.0000+ 0.0000 - 0.0016- 0.0000-  0.0010 = 27.7393  Versus  27.7393

Mass Balance = -3.6240E-05 cm;  Time step attempts =  841 and successes =  841
  Evaporation:  Potential =  1.2732 cm, Actual =  0.0016 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 69.3 %;  TMEAN = 281.2 K;  HDRY =  5.0214E+05 cm;  DAYUBC =   772

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 320, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.13315     0.24149     0.26816
Head (cm)          = 8.39800E+03 1.57420E+03 8.88004E+02
Water Flow (cm)    = 9.25614E-04-7.69008E-03 9.91915E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00
```

```
 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 27.7393+ 0.0000+ 0.0000 - 0.0065- 0.0000-  0.0010 = 27.7318  Versus  27.7320

Mass Balance = -1.4496E-04 cm;  Time step attempts =10092 and successes =10092
  Evaporation:  Potential =  1.5129 cm, Actual =  0.0065 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 63.5 %;  TMEAN = 281.8 K;  HDRY =  6.2328E+05 cm;  DAYUBC =  4982

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 321, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.13164     0.24147     0.26806
Head (cm)           = 8.91851E+03 1.57468E+03 8.89728E+02
Water Flow (cm)     = 6.18815E-04-7.58527E-03 9.86207E-04
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 27.7320+ 0.0000+ 0.0000 - 0.0093- 0.0000-  0.0010 = 27.7217  Versus  27.7219

Mass Balance = -1.6975E-04 cm;  Time step attempts =10092 and successes =10092
  Evaporation:  Potential =  1.9849 cm, Actual =  0.0093 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 49.6 %;  TMEAN = 286.8 K;  HDRY =  9.6113E+05 cm;  DAYUBC =  3423

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 322, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.13020     0.24146     0.26796
Head (cm)           = 9.46395E+03 1.57521E+03 8.91516E+02
Water Flow (cm)     = 3.29538E-04-7.48400E-03 9.80357E-04
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 27.7219+ 0.0000+ 0.0000 - 0.0062- 0.0000-  0.0010 = 27.7147  Versus  27.7149

Mass Balance = -1.6594E-04 cm;  Time step attempts = 5094 and successes = 5094
  Evaporation:  Potential =  1.4110 cm, Actual =  0.0062 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 49.5 %;  TMEAN = 283.7 K;  HDRY =  9.6488E+05 cm;  DAYUBC =  5018

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 323, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.12889     0.24144     0.26786
Head (cm)           = 9.99764E+03 1.57579E+03 8.93356E+02
Water Flow (cm)     = 9.93785E-05-7.38619E-03 9.74344E-04
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 27.7149+ 0.0000+ 0.0000 - 0.0050- 0.0000-  0.0010 = 27.7089  Versus  27.7090
```

```
Mass Balance = -1.0872E-04 cm;  Time step attempts = 1431 and successes = 1431
  Evaporation:  Potential =  2.3133 cm, Actual =  0.0050 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 53.3 %;  TMEAN = 289.3 K;  HDRY =  8.6140E+05 cm;  DAYUBC =  1407

-------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 324, Simulated Time = 24.0000 hr
-------------
Node Number       =        2          12          25
Depth (cm)        =     5.00000    50.00000   122.00000
Water (cm3/cm3)   =     0.12748     0.24143     0.26775
Head (cm)         = 1.06295E+04 1.57636E+03 8.95143E+02
Water Flow (cm)   =-9.77258E-05-7.29616E-03 9.68588E-04
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 27.7090+ 0.0000+ 0.0000 - 0.0077- 0.0000-  0.0010 = 27.7003  Versus  27.7005

Mass Balance = -1.7357E-04 cm;  Time step attempts = 7593 and successes = 7593
  Evaporation:  Potential =  1.7271 cm, Actual =  0.0077 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 46.6 %;  TMEAN = 285.9 K;  HDRY =  1.0456E+06 cm;  DAYUBC =  4444

-------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 325, Simulated Time = 24.0000 hr
-------------
Node Number       =        2          12          25
Depth (cm)        =     5.00000    50.00000   122.00000
Water (cm3/cm3)   =     0.12591     0.24141     0.26765
Head (cm)         = 1.14027E+04 1.57695E+03 8.96942E+02
Water Flow (cm)   =-2.89109E-04-7.20960E-03 9.62815E-04
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 27.7005+ 0.0000+ 0.0000 - 0.0088- 0.0000-  0.0010 = 27.6908  Versus  27.6909

Mass Balance = -1.7738E-04 cm;  Time step attempts = 7593 and successes = 7593
  Evaporation:  Potential =  1.3167 cm, Actual =  0.0088 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 38.0 %;  TMEAN = 281.5 K;  HDRY =  1.3255E+06 cm;  DAYUBC =  2887

-------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 326, Simulated Time = 24.0000 hr
-------------
Node Number       =        2          12          25
Depth (cm)        =     5.00000    50.00000   122.00000
Water (cm3/cm3)   =     0.12458     0.24140     0.26754
Head (cm)         = 1.21252E+04 1.57757E+03 8.98825E+02
Water Flow (cm)   =-4.47193E-04-7.12370E-03 9.56808E-04
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 27.6909+ 0.0000+ 0.0000 - 0.0048- 0.0000-  0.0010 = 27.6852  Versus  27.6853

Mass Balance = -1.2016E-04 cm;  Time step attempts = 1593 and successes = 1593
  Evaporation:  Potential =  2.7310 cm, Actual =  0.0048 cm
```

```
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 47.7 %;  TMEAN = 287.9 K;  HDRY =  1.0135E+06 cm;  DAYUBC =  1556
```

```
DAILY SUMMARY:  Day = 327, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.12346     0.24138     0.26744
Head (cm)          = 1.27846E+04 1.57821E+03 9.00747E+02
Water Flow (cm)    =-5.51973E-04-7.04033E-03 9.50766E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR          STORAGE
 27.6853+ 0.0000+ 0.0000 - 0.0041- 0.0000-  0.0010 = 27.6802  Versus  27.6802

Mass Balance = -1.9073E-05 cm;  Time step attempts =  498 and successes =  498
  Evaporation:  Potential =  0.9412 cm, Actual =  0.0041 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 55.1 %;  TMEAN = 277.9 K;  HDRY =  8.1642E+05 cm;  DAYUBC =   463
```

```
DAILY SUMMARY:  Day = 328, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.12218     0.24136     0.26733
Head (cm)          = 1.36133E+04 1.57883E+03 9.02587E+02
Water Flow (cm)    =-6.40362E-04-6.96307E-03 9.45004E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR          STORAGE
 27.6802+ 0.0000+ 0.0000 - 0.0081- 0.0000-  0.0009 = 27.6712  Versus  27.6714

Mass Balance = -1.7929E-04 cm;  Time step attempts = 7593 and successes = 7593
  Evaporation:  Potential =  1.9073 cm, Actual =  0.0081 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 46.6 %;  TMEAN = 280.9 K;  HDRY =  1.0470E+06 cm;  DAYUBC =  3911
```

```
DAILY SUMMARY:  Day = 329, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.12066     0.24135     0.26723
Head (cm)          = 1.46916E+04 1.57943E+03 9.04456E+02
Water Flow (cm)    =-7.36559E-04-6.88826E-03 9.39201E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR          STORAGE
 27.6714+ 0.0000+ 0.0000 - 0.0092- 0.0000-  0.0009 = 27.6612  Versus  27.6614

Mass Balance = -1.6785E-04 cm;  Time step attempts = 5430 and successes = 5430
  Evaporation:  Potential =  2.8999 cm, Actual =  0.0092 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 36.1 %;  TMEAN = 289.3 K;  HDRY =  1.3980E+06 cm;  DAYUBC =  3008
```

```
-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 330, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.11933     0.24133     0.26712
Head (cm)          = 1.57519E+04 1.58006E+03 9.06355E+02
Water Flow (cm)    =-8.19397E-04-6.81372E-03 9.33311E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 27.6614+ 0.0000+ 0.0000 - 0.0057- 0.0000-  0.0009 = 27.6548  Versus  27.6549

Mass Balance = -1.6403E-04 cm;  Time step attempts = 2846 and successes = 2846
  Evaporation:  Potential =  4.0766 cm, Actual =  0.0057 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 43.4 %;  TMEAN = 290.9 K;  HDRY =  1.1438E+06 cm;  DAYUBC =  2842

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 331, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.11806     0.24131     0.26701
Head (cm)          = 1.68673E+04 1.58067E+03 9.08246E+02
Water Flow (cm)    =-8.77380E-04-6.74372E-03 9.27557E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 27.6549+ 0.0000+ 0.0000 - 0.0063- 0.0000-  0.0009 = 27.6477  Versus  27.6479

Mass Balance = -1.6403E-04 cm;  Time step attempts = 4657 and successes = 4657
  Evaporation:  Potential =  2.7729 cm, Actual =  0.0063 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 45.1 %;  TMEAN = 282.0 K;  HDRY =  1.0909E+06 cm;  DAYUBC =  4655

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 332, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.11665     0.24130     0.26691
Head (cm)          = 1.82503E+04 1.58127E+03 9.10123E+02
Water Flow (cm)    =-9.28111E-04-6.67672E-03 9.21871E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 27.6479+ 0.0000+ 0.0000 - 0.0084- 0.0000-  0.0009 = 27.6386  Versus  27.6388

Mass Balance = -2.2507E-04 cm;  Time step attempts = 7964 and successes = 7964
  Evaporation:  Potential =  1.1198 cm, Actual =  0.0084 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 38.4 %;  TMEAN = 272.0 K;  HDRY =  1.3123E+06 cm;  DAYUBC =  3634

-------------------------------------------------------------------------------
```

```
DAILY SUMMARY:  Day = 333, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12           25
Depth (cm)         =     5.00000    50.00000    122.00000
Water (cm3/cm3)    =     0.11537     0.24128      0.26680
Head (cm)          = 1.96541E+04 1.58188E+03 9.12023E+02
Water Flow (cm)    =-9.69603E-04-6.60977E-03 9.16117E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR             STORAGE
 27.6388+ 0.0000+ 0.0000 - 0.0059- 0.0000-   0.0009 = 27.6320  Versus  27.6322

Mass Balance = -1.7929E-04 cm;  Time step attempts = 4639 and successes = 4639
  Evaporation:  Potential =  1.9779 cm, Actual =  0.0059 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 43.9 %;  TMEAN = 279.8 K;  HDRY =  1.1281E+06 cm;  DAYUBC =  4630

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 334, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12           25
Depth (cm)         =     5.00000    50.00000    122.00000
Water (cm3/cm3)    =     0.11400     0.24127      0.26670
Head (cm)          = 2.13350E+04 1.58247E+03 9.13924E+02
Water Flow (cm)    =-1.00074E-03-6.54584E-03 9.10469E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR             STORAGE
 27.6322+ 0.0000+ 0.0000 - 0.0078- 0.0000-   0.0009 = 27.6235  Versus  27.6237

Mass Balance = -1.9073E-04 cm;  Time step attempts = 5683 and successes = 5683
  Evaporation:  Potential =  3.5085 cm, Actual =  0.0078 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 39.7 %;  TMEAN = 287.0 K;  HDRY =  1.2651E+06 cm;  DAYUBC =  4906

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 335, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12           25
Depth (cm)         =     5.00000    50.00000    122.00000
Water (cm3/cm3)    =     0.11295     0.24125      0.26659
Head (cm)          = 2.27801E+04 1.58308E+03 9.15882E+02
Water Flow (cm)    =-1.02132E-03-6.48084E-03 9.04624E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR             STORAGE
 27.6237+ 0.0000+ 0.0000 - 0.0029- 0.0000-   0.0009 = 27.6198  Versus  27.6199

Mass Balance = -6.8665E-05 cm;  Time step attempts = 1349 and successes = 1349
  Evaporation:  Potential =  1.9847 cm, Actual =  0.0029 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 55.1 %;  TMEAN = 287.9 K;  HDRY =  8.1598E+05 cm;  DAYUBC =  1283

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 336, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12           25
```

```
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.11212     0.24123     0.26648
Head (cm)          = 2.40304E+04 1.58371E+03 9.17855E+02
Water Flow (cm)    =-1.02435E-03-6.41803E-03 8.98858E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 27.6199+ 0.0000+ 0.0000 - 0.0034- 0.0000-  0.0009 = 27.6156  Versus  27.6157

Mass Balance = -8.5831E-05 cm;  Time step attempts = 1299 and successes = 1299
  Evaporation:  Potential =  2.1382 cm, Actual =  0.0034 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 61.0 %;  TMEAN = 289.5 K;  HDRY =  6.7695E+05 cm;  DAYUBC =  1279

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 337, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.11104     0.24122     0.26638
Head (cm)          = 2.58106E+04 1.58428E+03 9.19732E+02
Water Flow (cm)    =-1.02845E-03-6.36028E-03 8.93389E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 27.6157+ 0.0000+ 0.0000 - 0.0082- 0.0000-  0.0009 = 27.6065  Versus  27.6068

Mass Balance = -2.4605E-04 cm;  Time step attempts =10665 and successes =10665
  Evaporation:  Potential =  1.9288 cm, Actual =  0.0082 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 50.5 %;  TMEAN = 285.4 K;  HDRY =  9.3602E+05 cm;  DAYUBC =  5626

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 338, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.11003     0.24120     0.26627
Head (cm)          = 2.76499E+04 1.58490E+03 9.21686E+02
Water Flow (cm)    =-1.03444E-03-6.30097E-03 8.87739E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR            STORAGE
 27.6068+ 0.0000+ 0.0000 - 0.0050- 0.0000-  0.0009 = 27.6009  Versus  27.6011

Mass Balance = -1.4305E-04 cm;  Time step attempts = 2295 and successes = 2295
  Evaporation:  Potential =  1.5311 cm, Actual =  0.0050 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 53.6 %;  TMEAN = 282.9 K;  HDRY =  8.5583E+05 cm;  DAYUBC =  2285

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 339, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.10872     0.24119     0.26617
Head (cm)          = 3.03456E+04 1.58547E+03 9.23589E+02
```

```
Water Flow (cm)     =-1.04315E-03-6.24540E-03 8.82280E-04
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 27.6011+ 0.0000+ 0.0000 - 0.0092- 0.0000-  0.0009 = 27.5910  Versus  27.5912

Mass Balance = -2.3079E-04 cm;  Time step attempts = 8417 and successes = 8417
  Evaporation:  Potential =  2.2383 cm, Actual =  0.0092 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 41.2 %;  TMEAN = 280.9 K;  HDRY =  1.2159E+06 cm;  DAYUBC =  4238

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 340, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.10712     0.24117     0.26606
Head (cm)           = 3.41842E+04 1.58602E+03 9.25493E+02
Water Flow (cm)     =-1.05929E-03-6.19086E-03 8.76859E-04
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 27.5912+ 0.0000+ 0.0000 - 0.0101- 0.0000-  0.0009 = 27.5802  Versus  27.5805

Mass Balance = -2.3651E-04 cm;  Time step attempts = 8965 and successes = 8965
  Evaporation:  Potential =  1.6638 cm, Actual =  0.0101 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 28.3 %;  TMEAN = 280.4 K;  HDRY =  1.7290E+06 cm;  DAYUBC =  4050

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 341, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.10594     0.24116     0.26595
Head (cm)           = 3.75156E+04 1.58663E+03 9.27488E+02
Water Flow (cm)     =-1.07324E-03-6.13493E-03 8.71215E-04
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 27.5805+ 0.0000+ 0.0000 - 0.0028- 0.0000-  0.0009 = 27.5768  Versus  27.5768

Mass Balance = -3.0518E-05 cm;  Time step attempts = 1462 and successes = 1462
  Evaporation:  Potential =  0.8185 cm, Actual =  0.0028 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 50.8 %;  TMEAN = 274.0 K;  HDRY =  9.2851E+05 cm;  DAYUBC =  1384

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 342, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.11594     0.24115     0.26586
Head (cm)           = 1.90129E+04 1.58688E+03 9.29307E+02
Water Flow (cm)     =-8.89036E-04-6.08477E-03 8.66081E-04
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00
```

```
 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR             STORAGE
 27.5768+ 0.3302+ 0.0000 - 0.0000- 0.0000-  0.0009 = 27.9061  Versus  27.9068

Mass Balance = -6.8283E-04 cm;  Time step attempts =14102 and successes =14102
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 89.3 %;  TMEAN = 271.5 K;  HDRY =  1.5547E+05 cm;  DAYUBC =      0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 343, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.11928     0.24114     0.26578
Head (cm)           = 1.57946E+04 1.58712E+03 9.30674E+02
Water Flow (cm)     =-4.31798E-04-6.03560E-03 8.61007E-04
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR             STORAGE
 27.9068+ 0.0000+ 0.0000 - 0.2324- 0.0000-  0.0009 = 27.6736  Versus  27.6755

Mass Balance = -1.9836E-03 cm;  Time step attempts =21867 and successes =21867
  Evaporation:  Potential =  0.9295 cm, Actual =  0.2324 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 35.1 %;  TMEAN = 265.4 K;  HDRY =  1.4356E+06 cm;  DAYUBC =      0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 344, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.11816     0.24113     0.26571
Head (cm)           = 1.67777E+04 1.58751E+03 9.31986E+02
Water Flow (cm)     =-4.06408E-04-6.01356E-03 8.58347E-04
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR             STORAGE
 27.6755+ 0.0000+ 0.0000 - 0.0474- 0.0000-  0.0009 = 27.6273  Versus  27.6286

Mass Balance = -1.3275E-03 cm;  Time step attempts =54671 and successes =54671
  Evaporation:  Potential =  1.4724 cm, Actual =  0.0474 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 35.0 %;  TMEAN = 269.5 K;  HDRY =  1.4387E+06 cm;  DAYUBC =   3775

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 345, Simulated Time = 24.0000 hr
-------------
Node Number         =        2          12          25
Depth (cm)          =     5.00000    50.00000   122.00000
Water (cm3/cm3)     =     0.11683     0.24112     0.26561
Head (cm)           = 1.80636E+04 1.58811E+03 9.33922E+02
Water Flow (cm)     =-5.09419E-04-5.96605E-03 8.53312E-04
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR             STORAGE
 27.6286+ 0.0000+ 0.0000 - 0.0044- 0.0000-  0.0009 = 27.6233  Versus  27.6235
```

```
Mass Balance = -1.5640E-04 cm;  Time step attempts = 4330 and successes = 4330
  Evaporation:  Potential =  1.8595 cm, Actual =  0.0044 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 47.6 %;  TMEAN = 278.7 K;  HDRY =  1.0174E+06 cm;  DAYUBC =  4306

------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 346, Simulated Time = 24.0000 hr
-------------
Node Number        =       2           12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.11587     0.24110     0.26550
Head (cm)          = 1.90836E+04 1.58874E+03 9.35940E+02
Water Flow (cm)    =-5.80059E-04-5.91540E-03 8.47882E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR          STORAGE
 27.6235+ 0.0000+ 0.0000 - 0.0000- 0.0000-  0.0008 = 27.6226  Versus  27.6226

Mass Balance =  0.0000E+00 cm;  Time step attempts =   96 and successes =   96
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 91.1 %;  TMEAN = 281.8 K;  HDRY =  1.2774E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 347, Simulated Time = 24.0000 hr
-------------
Node Number        =       2           12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.11449     0.24109     0.26540
Head (cm)          = 2.07145E+04 1.58930E+03 9.37791E+02
Water Flow (cm)    =-6.38071E-04-5.86856E-03 8.42857E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR          STORAGE
 27.6226+ 0.0000+ 0.0000 - 0.0129- 0.0000-  0.0008 = 27.6089  Versus  27.6092

Mass Balance = -2.6703E-04 cm;  Time step attempts =15651 and successes =15651
  Evaporation:  Potential =  2.3058 cm, Actual =  0.0129 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 41.3 %;  TMEAN = 289.3 K;  HDRY =  1.2110E+06 cm;  DAYUBC =  4929

------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 348, Simulated Time = 24.0000 hr
-------------
Node Number        =       2           12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.11346     0.24107     0.26529
Head (cm)          = 2.20645E+04 1.58993E+03 9.39806E+02
Water Flow (cm)    =-6.95798E-04-5.81943E-03 8.37460E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN    NEWSTOR          STORAGE
 27.6092+ 0.0000+ 0.0000 - 0.0008- 0.0000-  0.0008 = 27.6075  Versus  27.6075

Mass Balance = -9.5367E-06 cm;  Time step attempts =  522 and successes =  522
  Evaporation:  Potential =  0.5792 cm, Actual =  0.0008 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
```

```
RHMEAN = 63.1 %;  TMEAN = 282.0 K;  HDRY =  6.3216E+05 cm;  DAYUBC =   417
```

```
DAILY SUMMARY:  Day = 349, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.11280     0.24105     0.26519
Head (cm)          = 2.30084E+04 1.59052E+03 9.41763E+02
Water Flow (cm)    =-7.22825E-04-5.77142E-03 8.32118E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 27.6075+ 0.0000+ 0.0000 - 0.0005- 0.0000-  0.0008 = 27.6062  Versus  27.6063

Mass Balance = -1.5450E-04 cm;  Time step attempts = 2067 and successes = 2067
  Evaporation:  Potential =  0.4713 cm, Actual =  0.0005 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 72.6 %;  TMEAN = 281.8 K;  HDRY =  4.3861E+05 cm;  DAYUBC =  1971
```

```
DAILY SUMMARY:  Day = 350, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.13235     0.24105     0.26509
Head (cm)          = 8.66624E+03 1.59082E+03 9.43605E+02
Water Flow (cm)    = 2.32060E-04-5.72824E-03 8.27369E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 27.6063+ 0.3810+ 0.0000 - 0.0000- 0.0000-  0.0008 = 27.9865  Versus  27.9870

Mass Balance = -5.4359E-04 cm;  Time step attempts =11992 and successes =11992
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 96.4 %;  TMEAN = 279.8 K;  HDRY =  4.9744E+04 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day = 351, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.27739     0.24103     0.26499
Head (cm)          = 4.60456E+02 1.59136E+03 9.45383E+02
Water Flow (cm)    = 1.48358E+00-5.68659E-03 8.22690E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 27.9870+ 2.3214+ 0.9297 - 0.0000- 0.0000-  0.0008 = 30.3077  Versus  30.3050

Mass Balance =  2.6398E-03 cm;  Time step attempts =11843 and successes =11843
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = **** %;  TMEAN = 280.7 K;  HDRY = -2.7776E+00 cm;  DAYUBC =     0
```

```
DAILY SUMMARY:  Day = 352, Simulated Time = 24.0000 hr
-------------
Node Number       =        2          12          25
Depth (cm)        =     5.00000    50.00000   122.00000
Water (cm3/cm3)   =     0.31926     0.24102     0.26490
Head (cm)         = 2.57227E+02 1.59166E+03 9.47155E+02
Water Flow (cm)   = 1.40481E+00-5.64490E-03 8.18023E-04
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 30.3050+ 1.6921+ 0.1875 - 0.0000- 0.0000-  0.0008 = 31.9963  Versus  31.9971

Mass Balance = -7.6675E-04 cm;  Time step attempts = 8680 and successes = 8680
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 95.9 %;  TMEAN = 275.1 K;  HDRY =  5.6942E+04 cm;  DAYUBC =   239

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 353, Simulated Time = 24.0000 hr
-------------
Node Number       =        2          12          25
Depth (cm)        =     5.00000    50.00000   122.00000
Water (cm3/cm3)   =     0.30500     0.24101     0.26480
Head (cm)         = 3.15397E+02 1.59229E+03 9.49096E+02
Water Flow (cm)   = 1.60334E-01-5.60169E-03 8.13120E-04
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 31.9971+ 0.0762+ 0.0000 - 0.0156- 0.0000-  0.0008 = 32.0569  Versus  32.0570

Mass Balance = -1.8311E-04 cm;  Time step attempts = 5845 and successes = 5845
  Evaporation:  Potential =  0.0631 cm, Actual =  0.0156 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 92.6 %;  TMEAN = 272.6 K;  HDRY =  1.0598E+05 cm;  DAYUBC =     0

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 354, Simulated Time = 24.0000 hr
-------------
Node Number       =        2          12          25
Depth (cm)        =     5.00000    50.00000   122.00000
Water (cm3/cm3)   =     0.29692     0.24099     0.26469
Head (cm)         = 3.52744E+02 1.59286E+03 9.51038E+02
Water Flow (cm)   = 1.07308E-01-5.55969E-03 8.08141E-04
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR           STORAGE
 32.0570+ 0.0508+ 0.0000 - 0.0000- 0.0000-  0.0008 = 32.1070  Versus  32.1072

Mass Balance = -1.9073E-04 cm;  Time step attempts = 3482 and successes = 3482
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 87.9 %;  TMEAN = 271.8 K;  HDRY =  1.7666E+05 cm;  DAYUBC =     0

-------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 355, Simulated Time = 24.0000 hr
```

```
-------------
Node Number        =       2          12          25
Depth (cm)         =    5.00000    50.00000   122.00000
Water (cm3/cm3)    =    0.29081     0.24099     0.26459
Head (cm)          = 3.83575E+02 1.59302E+03 9.52999E+02
Water Flow (cm)    = 6.81840E-02-5.51494E-03 8.03162E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 32.1072+ 0.0254+ 0.0000 - 0.0000- 0.0000-  0.0008 = 32.1318  Versus  32.1320

Mass Balance = -1.6022E-04 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 90.0 %;  TMEAN = 272.3 K;  HDRY =  1.4365E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 356, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =    5.00000    50.00000   122.00000
Water (cm3/cm3)    =    0.28744     0.24103     0.26449
Head (cm)          = 4.01566E+02 1.59131E+03 9.54954E+02
Water Flow (cm)    = 7.43123E-02-5.45531E-03 7.98227E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 32.1320+ 0.0508+ 0.0000 - 0.0000- 0.0000-  0.0008 = 32.1820  Versus  32.1822

Mass Balance = -1.8692E-04 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 87.3 %;  TMEAN = 272.3 K;  HDRY =  1.8657E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 357, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =    5.00000    50.00000   122.00000
Water (cm3/cm3)    =    0.28351     0.24121     0.26439
Head (cm)          = 4.23659E+02 1.58451E+03 9.56905E+02
Water Flow (cm)    = 8.21294E-02-5.34415E-03 7.93344E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 32.1822+ 0.1524+ 0.0000 - 0.1003- 0.0000-  0.0008 = 32.2335  Versus  32.2337

Mass Balance = -1.7166E-04 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.4051 cm, Actual =  0.1003 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 77.5 %;  TMEAN = 270.7 K;  HDRY =  3.4848E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------


DAILY SUMMARY:  Day = 358, Simulated Time = 24.0000 hr
-------------
Node Number        =       2          12          25
Depth (cm)         =    5.00000    50.00000   122.00000
```

```
Water (cm3/cm3)     =    0.28942      0.24165      0.26428
Head (cm)           = 3.90878E+02 1.56807E+03 9.58849E+02
Water Flow (cm)     = 2.38007E-01-5.11835E-03 7.88513E-04
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 32.2337+ 0.4826+ 0.0000 - 0.2051- 0.0000-  0.0008 = 32.5104  Versus  32.5105

Mass Balance = -1.0681E-04 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.8286 cm, Actual =  0.2051 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 65.7 %;  TMEAN = 275.7 K;  HDRY =  5.7482E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 359, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =    5.00000    50.00000   122.00000
Water (cm3/cm3)     =    0.28169     0.24250     0.26418
Head (cm)           = 4.34305E+02 1.53659E+03 9.60850E+02
Water Flow (cm)     =-2.16273E-02-4.68699E-03 7.83586E-04
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 32.5105+ 0.0000+ 0.0000 - 0.0738- 0.0000-  0.0008 = 32.4360  Versus  32.4360

Mass Balance =  0.0000E+00 cm;  Time step attempts =   96 and successes =   96
  Evaporation:  Potential =  0.2950 cm, Actual =  0.0738 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 79.7 %;  TMEAN = 272.0 K;  HDRY =  3.1162E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 360, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =    5.00000    50.00000   122.00000
Water (cm3/cm3)     =    0.25969     0.24391     0.26408
Head (cm)           = 5.87381E+02 1.48687E+03 9.62848E+02
Water Flow (cm)     =-1.16332E-01-3.94809E-03 7.78706E-04
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF    EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 32.4360+ 0.0000+ 0.0000 - 0.2880- 0.0000-  0.0008 = 32.1473  Versus  32.1473

Mass Balance = -7.6294E-06 cm;  Time step attempts =  248 and successes =  248
  Evaporation:  Potential =  1.1518 cm, Actual =  0.2880 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 55.7 %;  TMEAN = 279.8 K;  HDRY =  8.0310E+05 cm;  DAYUBC =     0

------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 361, Simulated Time = 24.0000 hr
-------------
Node Number         =       2          12          25
Depth (cm)          =    5.00000    50.00000   122.00000
Water (cm3/cm3)     =    0.25141     0.24582     0.26397
Head (cm)           = 6.60076E+02 1.42241E+03 9.64841E+02
Water Flow (cm)     =-1.06995E-01-2.83347E-03 7.73877E-04
```

```
Plant Sink (cm)     = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR              STORAGE
 32.1473+ 0.0000+ 0.0000 - 0.1604- 0.0000-  0.0008 = 31.9861  Versus  31.9861

Mass Balance = -9.5367E-06 cm;  Time step attempts =  112 and successes =  112
  Evaporation:  Potential =  0.6415 cm, Actual =  0.1604 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 71.4 %;  TMEAN = 274.3 K;  HDRY =  4.6183E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 362, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.24612     0.24805     0.26387
Head (cm)          = 7.12097E+02 1.35233E+03 9.66831E+02
Water Flow (cm)    =-7.75359E-02-1.38640E-03 7.69095E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR              STORAGE
 31.9861+ 0.0000+ 0.0000 - 0.1120- 0.0000-  0.0008 = 31.8733  Versus  31.8733

Mass Balance = -1.9073E-06 cm;  Time step attempts =   96 and successes =   96
  Evaporation:  Potential =  0.4481 cm, Actual =  0.1120 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 72.4 %;  TMEAN = 272.3 K;  HDRY =  4.4205E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 363, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.24886     0.25032     0.26377
Head (cm)          = 6.84517E+02 1.28555E+03 9.68754E+02
Water Flow (cm)    = 4.43335E-02 2.45523E-04 7.64507E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR              STORAGE
 31.8733+ 0.2794+ 0.0000 - 0.2221- 0.0000-  0.0008 = 31.9298  Versus  31.9300

Mass Balance = -1.6785E-04 cm;  Time step attempts = 2248 and successes = 2248
  Evaporation:  Potential =  0.8975 cm, Actual =  0.2221 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 64.3 %;  TMEAN = 274.8 K;  HDRY =  6.0620E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 364, Simulated Time = 24.0000 hr
-------------
Node Number        =        2          12          25
Depth (cm)         =     5.00000    50.00000   122.00000
Water (cm3/cm3)    =     0.24649     0.25245     0.26367
Head (cm)          = 7.08223E+02 1.22686E+03 9.70674E+02
Water Flow (cm)    =-4.28845E-02 1.88333E-03 7.59963E-04
Plant Sink (cm)    = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR    INFIL  RUNOFF     EVAPO    TRANS     DRAIN   NEWSTOR              STORAGE
```

```
 31.9300+ 0.0508+ 0.0000 - 0.1012- 0.0000-  0.0008 = 31.8789  Versus  31.8790

Mass Balance = -1.4114E-04 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.4089 cm, Actual =  0.1012 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 82.5 %;  TMEAN = 278.7 K;  HDRY =  2.6366E+05 cm;  DAYUBC =     0

--------------------------------------------------------------------------------

DAILY SUMMARY:  Day = 365, Simulated Time = 24.0000 hr
-------------
Node Number       =        2          12          25
Depth (cm)        =     5.00000    50.00000   122.00000
Water (cm3/cm3)   =     0.25004     0.25436     0.26358
Head (cm)         = 6.73092E+02 1.17731E+03 9.72596E+02
Water Flow (cm)   =-9.16683E-03 3.38723E-03 7.55458E-04
Plant Sink (cm)   = 0.00000E+00 0.00000E+00 0.00000E+00

 PRESTOR   INFIL  RUNOFF   EVAPO   TRANS    DRAIN   NEWSTOR          STORAGE
 31.8790+ 0.0254+ 0.0000 - 0.0000- 0.0000-  0.0008 = 31.9037  Versus  31.9038

Mass Balance = -1.5259E-04 cm;  Time step attempts = 2096 and successes = 2096
  Evaporation:  Potential =  0.0000 cm, Actual =  0.0000 cm
Transpiration:  Potential =  0.0000 cm, Actual =  0.0000 cm
RHMEAN = 89.9 %;  TMEAN = 279.0 K;  HDRY =  1.4591E+05 cm;  DAYUBC =     0
1
--------------------------------------------------------------------------------
                          UNSAT-H Version 2.03
                           SIMULATION SUMMARY

Title:
East Oak RDF Alternative Final Cover
--------------------------------------------------------------------------------

Transpiration Scheme is:              =    1
Potential Evapotranspiration          =  2.0137E+02     [cm]
Potential Transpiration               =  5.4543E+02     [cm]
Actual Transpiration                  =  6.1286E+01     [cm]
Potential Evaporation                 =  2.6005E+02     [cm]
Actual Evaporation                    =  1.7126E+01     [cm]
Evaporation during Growth             =  4.7035E+00     [cm]
Total Runoff                          =  2.6822E+01     [cm]
Total Infiltration                    =  7.8741E+01     [cm]
Total Drainage at Base of Profile     =  4.5845E-01     [cm]
Total Applied Water                   =  1.0556E+02     [cm]
Actual Rainfall                       =  1.0556E+02     [cm]
Actual Irrigation                     =  0.0000E+00     [cm]
Total Final Moisture Storage          =  3.1904E+01     [cm]
Mass Balance Error                    = -2.6130E-01     [cm]
Total Successful Time Steps           =   4179572
Total Attempted Time Steps            =   4179572
Total Time Step Reductions (DHMAX)    =      5728
Total Changes in Surface Boundary     =    584056
Total Time Actually Simulated         =  3.6500E+02     [days]


Total water flow (cm) across different depths at the end of 3.6500E+02 days:

    DEPTH        FLOW         DEPTH         FLOW         DEPTH         FLOW
   -------    -----------    -------    -----------    -------    -----------
```

EOAK AFC

0.000	6.1614E+01	2.500	6.1615E+01	7.000	4.2165E+01
10.500	3.2408E+01	13.500	2.6003E+01	16.500	2.1134E+01
19.500	1.7381E+01	23.000	1.3954E+01	27.500	1.0542E+01
32.500	7.6654E+00	37.500	5.3261E+00	45.000	2.2187E+00
55.000	3.5769E-01	65.000	3.9035E-01	75.000	4.1225E-01
82.500	4.2651E-01	86.500	4.3329E-01	89.750	4.3717E-01
91.750	4.3947E-01	94.000	4.4186E-01	98.000	4.4565E-01
105.000	4.5044E-01	112.500	4.5349E-01	116.500	4.5555E-01
120.000	4.5732E-01	122.000	4.5845E-01		

APPENDIX I-3

DAILY CLIMATOLOGICAL DATA SUMMARY

REGISTERED PROFESSIONAL ENGINEER
JEFFREY
P.
YOUNG
17831
OKLAHOMA

4-13-07

Includes pages I-3-1 through I-3-12

MESONET CLIMATOLOGICAL DATA SUMMARY — January 1995 — Time Zone: Midnight-Midnight CST
(SPEN) Spencer — Nearest City: 2.0 ENE Spencer — County: Oklahoma
Latitude: 35-32-31 — Longitude: 97-20-27 — Elevation: 1224 feet

DAY	TEMPERATURE (°F) MAX	MIN	AVG	DEWPT	DEG DAYS HDD	CDD	HUMIDITY (%) MAX	MIN	AVG	RAIN (in)	PRESSURE (in) STN	MSL	WIND DIR	SPEED (mph) AVG	MAX	SOLAR (MJ/m2)	4" SOIL TEMPERATURES SOD	BARE	MAX	MIN
1	35	21	26.9	17.6	37	0	86	47	69	0.00	29.10	30.41	N	8.3	23.9	11.68	41.0	39.4	43	37
2	47	24	34.0	19.7	30	0	82	21	59	0.00	29.01	30.32	SW	5.2	11.7	7.82	38.8	37.0	41	34
3	37	17	27.1	19.6	38	0	95	53	74	0.00	29.08	30.40	N	7.0	23.3	5.18	39.0	37.4	39	35
4	30	12	19.9	10.6	44	0	85	46	68	0.03	29.20	30.53	NE	4.2	18.1	11.14	35.7	34.3	36	33
5	36	17	26.6	17.3	38	0	85	44	69	0.01	28.79	30.10	SSE	9.9	30.7	5.67	34.9	33.0	34	32
6	42	19	34.1	28.5	35	0	94	65	80	0.04	28.41	29.71	NNW	13.2	36.4	2.88	37.5	36.1	39	33
7	42	15	27.5	14.9	37	0	86	37	61	0.00	28.79	30.10	S	6.6	24.0	11.88	35.8	34.5	38	33
8	46	31	39.0	26.4	26	0	78	45	61	0.00	28.73	30.03	NW	9.4	26.3	10.93	37.8	37.9	44	35
9	65	27	44.7	31.1	19	0	88	32	63	0.00	28.78	30.09	SE	6.2	18.4	11.82	39.0	39.8	46	35
10	60	42	51.0	41.6	14	0	91	46	72	0.00	28.56	29.86	SSE	7.2	21.7	11.67	43.2	45.0	50	42
11	74	40	56.5	34.3	8	0	94	18	51	0.00	28.40	29.69	SSW	9.4	24.9	11.94	44.2	45.7	51	41
12	63	46	52.0	35.5	11	0	82	33	55	0.00	28.43	29.72	NNW	6.8	20.7	7.90	46.3	47.9	51	45
13	55	41	46.8	36.7	17	0	87	45	69	0.00	28.52	29.81	NNW	11.4	31.5	8.82	46.1	46.9	50	45
14	55	31	41.5	30.0	22	0	93	35	67	0.00	28.65	29.95	NNW	6.6	18.1	12.10	44.0	44.6	49	41
15	64	31	49.2	27.1	18	0	87	21	46	0.00	28.60	29.90	S	10.0	30.1	12.43	43.2	44.2	49	40
16	62	50	55.4	40.7	9	0	88	42	59	0.30	28.39	29.68	S	16.2	39.6	6.48	46.3	47.7	50	46
17	60	35	44.9	28.2	18	0	84	30	54	0.00	28.57	29.87	NNE	6.2	27.4	12.25	46.7	46.6	52	42
18	39	26	36.0	26.9	32	0	91	51	70	0.01	28.68	29.98	NE	6.4	20.9	2.20	42.5	40.3	43	37
19	51	25	37.2	24.1	27	0	92	28	63	0.00	28.76	30.06	NW	7.9	27.2	13.17	40.6	38.9	45	35
20	57	27	40.7	25.8	23	0	79	34	57	0.00	28.81	30.12	NW	5.2	14.5	12.66	40.0	39.7	47	35
21	43	29	35.7	24.1	29	0	94	38	65	0.00	28.85	30.16	N	5.8	19.8	10.26	40.5	40.1	45	37
22	33	22	29.4	27.1	37	0	97	67	91	0.07	28.84	30.15	NE	6.2	15.4	7.48	39.0	37.1	40	36
23	40	21	29.6	22.0	35	0	95	47	75	0.19	28.93	30.24	SSW	6.0	14.3	13.71	38.6	35.8	36	35
24	55	32	42.4	26.2	22	0	68	36	54	0.41	28.90	30.21	SW	8.7	23.1	12.54	39.0	37.3	42	35
25	60	40	47.7	31.8	15	0	75	34	55	0.00	28.89	30.20	SSW	6.9	17.1	13.07	42.0	42.5	51	37
26	54	44	48.6	47.2	16	0	98	76	95	0.39	28.70	30.00	SSE	8.2	21.1	1.39	44.0	44.4	48	42
27	63	43	53.0	44.3	12	0	98	48	74	0.04	28.33	29.62	WNW	13.2	29.6	12.86	47.8	49.1	54	45
28	43	33	38.3	34.0	27	0	94	73	84	0.01	28.64	29.94	NNW	13.2	28.8	2.20	44.5	42.9	47	39
29	36	31	33.3	29.5	32	0	96	71	86	0.07	28.91	30.23	N	9.3	23.3	1.91	40.5	37.7	39	36
30	53	23	38.1	26.1	27	0	94	35	65	0.00	28.88	30.19	W	6.7	18.8	14.41	40.8	39.5	48	35
31	62	34	46.7	26.9	17	0	72	20	49	0.00	28.67	29.97	SW	7.6	17.7	12.08	42.1	41.3	48	36
	50	30	39.8	28.3	<-- Monthly Averages -->						28.74	30.04	NNW	8.2	39.6	9.44	41.3	40.8	45	38

Temperature - Highest: 74
Lowest: 12

Degree Days - Total HDD: 770
Total CDD: 0

Rainfall: Monthly Total: 1.57 in.
Greatest 24 Hr: 0.41 in.

Humidity - Highest: 98
Lowest: 18

Number of Days With:

Tmax ≥ 90:	0	Rainfall ≥ 0.01 inch:	12
Tmax ≤ 32:	1	Rainfall ≥ 0.10 inch:	4
Tmin ≤ 32:	20	Avg Wind Speed ≥ 10 mph:	5
Tmin ≤ 0:	0	Max Wind Speed ≥ 30 mph:	5

* Denotes incomplete record

Postscript generated on Thursday, January 08, 2004 at 22:01

MESONET CLIMATOLOGICAL DATA SUMMARY
(SPEN) Spencer
Latitude: 35-32-31

February 1995
Nearest City: 2.0 ENE Spencer
Longitude: 97-20-27

Time Zone: Midnight-Midnight CST
County: Oklahoma
Elevation: 1224 feet

DAY	TEMPERATURE (°F) MAX	MIN	AVG	DEWPT	DEG DAYS HDD	CDD	HUMIDITY (%) MAX	MIN	AVG	RAIN (in)	PRESSURE (in) STN	MSL	WIND DIR	SPEED (mph) AVG	MAX	SOLAR (MJ/m2)	4" SOIL TEMPERATURES SOD	BARE	MAX	MIN
1	73	37	54.8	34.3	10	0	79	21	50	0.00	28.60	29.91	WSW	7.4	27.1	14.35	44.7	44.6	53	38
2	79	46	60.9	37.5	2	0	78	17	46	0.00	28.59	29.89	SW	6.9	24.7	14.58	47.8	48.7	57	42
3	56	38	48.4	34.1	18	0	74	37	59	0.00	28.89	30.20	NNW	12.6	34.7	11.79	47.5	47.0	52	44
4	65	26	46.2	28.2	19	0	95	21	56	0.00	28.88	30.19	SW	7.2	28.0	14.78	44.7	44.2	51	38
5	53	33	41.7	26.0	22	0	78	38	54	0.00	28.93	30.24	N	7.6	24.9	15.10	44.8	45.7	52	40
6	58	39	46.6	27.5	16	0	61	28	48	0.00	28.79	30.10	WSW	7.5	22.9	11.33	44.9	46.0	52	42
7	47	24	38.8	18.1	29	0	74	27	44	0.00	28.97	30.28	NNW	9.0	32.6	13.91	44.5	45.9	51	42
8	49	20	34.0	13.6	31	0	84	21	48	0.00	29.05	30.37	SE	4.8	14.8	15.83	40.8	42.1	50	36
9	60	39	47.2	23.7	15	0	66	30	40	0.00	28.63	29.93	S	10.5	29.1	15.60	43.7	45.9	53	41
10	57	36	45.0	27.7	19	0	97	24	56	0.00	28.50	29.79	NE	8.2	25.9	15.07	44.6	46.9	54	43
11	36	23	31.7	9.9	36	0	63	26	40	0.00	28.79	30.10	NE	10.5	24.6	8.81	41.5	43.4	46	40
12	26	19	22.6	6.7	43	0	67	39	50	0.00	28.92	30.24	E	7.3	17.3	3.20	36.9	37.5	40	36
13	33	26	29.4	14.7	36	0	67	45	54	0.00	28.88	30.19	ESE	5.5	14.4	3.85	37.1	37.3	39	36
14	46	31	34.6	32.4	27	0	98	67	92	0.02	28.57	29.87	S	9.4	30.1	2.30	38.6	37.9	40	37
15	56	28	40.6	33.6	23	0	98	51	77	0.00	28.58	29.88	N	12.2	31.3	7.41	42.4	42.8	45	39
16	43	26	31.9	18.7	30	0	75	34	59	0.01	28.89	30.20	N	6.1	17.6	4.96	38.8	37.4	40	36
17	58	22	40.5	18.2	25	0	86	15	48	0.00	29.03	30.35	SSW	4.2	12.2	17.71	39.4	39.6	49	33
18	62	37	49.0	25.8	15	0	56	25	41	0.00	28.84	30.15	SSW	10.3	26.0	13.40	42.0	43.1	50	37
19	65	35	49.7	29.9	15	0	86	22	50	0.00	28.91	30.22	NNW	7.2	19.6	17.31	45.0	47.2	56	41
20	75	38	56.6	28.9	9	0	67	17	37	0.00	28.89	30.20	N	7.8	22.8	17.58	46.5	49.4	59	42
21	72	40	56.3	24.4	9	0	53	14	31	0.00	28.91	30.22	SSW	6.3	18.7	17.69	47.9	51.1	59	44
22	78	51	63.0	34.1	1	0	51	21	35	0.00	28.63	29.94	SSW	13.9	34.3	13.28	49.9	53.6	59	49
23	73	47	59.3	34.6	5	0	82	18	45	0.00	28.77	30.08	NE	9.5	27.1	18.01	52.0	55.5	62	50
24	66	37	51.8	20.4	14	0	52	15	32	0.00	29.04	30.35	ENE	7.4	20.6	18.28	50.2	53.4	60	47
25	72	47	58.3	40.8	5	0	83	38	53	0.00	28.77	30.08	SSW	13.0	30.8	16.59	51.5	54.7	61	49
26	76	56	62.4	55.0	0	1	90	49	78	0.00	28.56	29.86	SSW	12.1	31.1	10.91	54.7	57.1	62	54
27	63	40	52.9	49.8	14	0	96	69	89	0.00	28.67	29.97	N	7.8	22.5	5.33	54.4	56.1	58	53
28	40	29	33.6	28.9	31	0	94	73	83	0.00	28.97	30.28	NNE	12.2	27.1	3.05	47.5	47.9	52	44
	58	35	46.0	27.8	<- Monthly Averages ->						28.80	30.11	SSW	8.7	34.7	12.21	45.2	46.5	52	42

Temperature - Highest: 79
Lowest: 19

Degree Days - Total HDD: 518
Total CDD: 1

Rainfall: Monthly Total: 0.03 in.
Greatest 24 Hr: 0.02 in.

Humidity - Highest: 98
Lowest: 14

Number of Days With:
Tmax ≥ 90: 0
Tmax ≤ 32: 1
Tmin ≤ 32: 11
Tmin ≤ 0: 0
Rainfall ≥ 0.01 inch: 2
Rainfall ≥ 0.10 inch: 0
Avg Wind Speed ≥ 10 mph: 9
Max Wind Speed ≥ 30 mph: 7

* Denotes incomplete record
Postscript generated on Thursday, January 08, 2004 at 22:01

MESONET CLIMATOLOGICAL DATA SUMMARY
(SPEN) Spencer
Latitude: 35-32-31

March 1995
Nearest City: 2.0 ENE Spencer
Longitude: 97-20-27

Time Zone: Midnight-Midnight CST
County: Oklahoma
Elevation: 1224 feet

DAY	TEMPERATURE (°F) MAX	MIN	AVG	DEWPT	DEG DAYS HDD	CDD	HUMIDITY (%) MAX	MIN	AVG	RAIN (in)	PRESSURE (in) STN	MSL	WIND DIR	SPEED (mph) AVG	MAX	SOLAR (MJ/m2)	4" SOIL TEMPERATURES SOD	BARE	MAX	MIN
1	29	21	23.9	18.1	40	0	91	57	79	0.00	29.09	30.41	NE	10.1	23.1	3.29	41.8	41.4	44	40
2	24	21	21.9	19.5	43	0	93	88	90	0.00	29.08	30.40	NE	6.7	18.0	4.89	40.5	38.4	40	38
3	33	21	27.4	24.1	38	0	93	74	88	0.25	28.97	30.28	NNE	3.5	9.4	10.03	40.7	39.7	44	37
4	41	31	36.6	35.4	29	0	97	90	95	0.14	28.69	30.00	SE	6.8	21.9	2.81	41.1	40.0	41	38
5	43	39	41.2	38.0	24	0	98	75	89	0.01	28.65	29.95	N	4.3	14.5	3.33	43.1	42.6	45	41
6	60	28	46.7	43.6	21	0	96	81	89	0.61	28.47	29.76	SSE	10.0	40.5	4.57	45.3	45.2	50	42
7	28	15	21.3	16.3	44	0	93	66	81	0.01	28.93	30.25	NNW	14.5	34.0	19.62	41.5	39.7	44	37
8	44	14	27.3	12.4	36	0	82	28	57	0.05	29.16	30.48	SE	6.0	18.9	21.02	39.5	38.4	47	34
9	61	28	44.5	18.3	20	0	61	18	38	0.00	29.00	30.32	S	11.8	31.3	21.33	42.4	40.8	49	35
10	66	40	52.6	26.5	12	0	54	23	38	0.00	28.88	30.19	S	14.2	35.4	20.98	45.9	44.1	51	38
11	67	49	56.4	44.1	7	0	77	45	64	0.00	28.74	30.05	S	16.6	38.6	13.39	48.4	48.3	54	43
12	65	59	61.9	55.9	3	0	93	69	81	0.41	28.62	29.92	S	15.6	34.7	5.50	52.1	53.6	56	51
13	60	55	56.2	55.0	8	0	97	91	96	1.56	28.60	29.90	SSE	4.9	25.9	3.01	53.5	54.3	56	53
14	64	54	57.2	54.0	6	0	97	68	90	0.27	28.70	30.00	ENE	8.1	22.0	8.87	54.6	55.5	60	53
15	72*	55*	61.0*	50.6*	1*	0*	97*	38*	72*	0.06*	28.79*	30.09*	NE *	7.1*	21.4*	12.20*	56.3*	57.1*	63*	54*
16	77*	46*	61.7*	43.0*	4*	0*	95*	25*	56*	0.00*	28.78*	30.08*	NW *	4.4*	17.4*	20.63*	56.6	57.3	66	49
17	79*	47*	62.1*	42.4*	2*	0*	93*	22*	54*	0.00*	28.83*	30.14*	WNW*	3.6*	13.2*	20.04	57.1	57.7	67	49
18	80	50	66.4	44.2	0	0	77	30	47	0.00	28.73	30.03	SW	8.4	25.5	20.85	58.1	57.8	66	50
19	86	60	71.3	46.7	0	8	59	21	43	0.00	28.41	29.70	SSW	14.6	38.0	20.28	60.2	59.5	66	53
20	72	52	61.7	40.4	3	0	73	27	48	0.00	28.54	29.84	NW	7.1	18.4	21.08	60.0	61.2	70	53
21	85*	53*	69.6*	45.6*	0*	4*	83*	27*	44*	0.00*	28.42*	29.72*	S *	14.1*	35.0*	21.95*	59.8	63.2	74	53
22	91	63	76.2	43.6	0	12	84	11	39	0.00	28.31	29.60	WSW	12.6	36.2	21.07	63.1	68.8	79	61
23	76	50	62.9	36.1	2	0	57	21	38	0.00	28.61	29.91	NE	6.6	20.3	22.70	60.5	65.8	75	57
24	79	52	64.0	45.2	0	1	62	35	51	0.00	28.51	29.81	SE	10.6	28.4	20.60	59.9	65.0	74	57
25	71	60	62.7	54.3	0	0	91	55	75	0.15	28.45	29.74	SE	10.8	28.1	6.21	60.0	63.4	67	61
26	69	43	59.5	42.5	9	0	93	23	58	0.02	28.59	29.89	NW	10.8	26.5	18.20	60.0	60.9	67	55
27	61	36	48.3	30.3	16	0	81	29	52	0.00	28.86	30.17	NW	7.6	21.8	23.40	55.8	57.0	68	47
28	49	38	43.5	32.1	21	0	88	43	65	0.00	28.94	30.25	NNE	7.5	22.8	7.75	51.1	52.2	55	49
29	52	41	45.2	35.5	18	0	88	50	70	0.00	28.90	30.21	NNE	6.2	17.1	12.03	51.5	52.9	60	48
30	53	34	43.6	27.5	21	0	82	30	56	0.00	28.88	30.19	NE	6.1	18.4	12.34	50.2	52.0	58	46
31	60	40	48.3	36.0	15	0	88	40	64	0.00	28.82	30.12	NNE	5.0	16.1	21.44	53.7	56.9	68	49
	61*	42*	51.0*	37.3*	<- Monthly Averages ->						28.74*	30.05*	NE *	8.9*	40.5*	14.36*	51.7*	52.6*	59*	48*

Temperature - Highest: 91*
Lowest: 14*

Degree Days - Total HDD: 443*
Total CDD: 26*

Rainfall: Monthly Total: 3.54 in.
Greatest 24 Hr: 1.56 in.

Humidity - Highest: 98*
Lowest: 11*

Number of Days With:

Tmax ≥ 90:	1*	Rainfall ≥ 0.01 inch:	12*
Tmax ≤ 32:	3*	Rainfall ≥ 0.10 inch:	7*
Tmin ≤ 32:	8*	Avg Wind Speed ≥ 10 mph:	12*
Tmin ≤ 0:	0*	Max Wind Speed ≥ 30 mph:	9*

* Denotes incomplete record

Postscript generated on Thursday, January 08, 2004 at 22:01

MESONET CLIMATOLOGICAL DATA SUMMARY — April 1995 — Time Zone: Midnight-Midnight CST

(SPEN) Spencer — Nearest City: 2.0 ENE Spencer — County: Oklahoma

Latitude: 35-32-31 — Longitude: 97-20-27 — Elevation: 1224 feet

DAY	TEMP (°F) MAX	MIN	AVG	DEWPT	DEG DAYS HDD	CDD	HUMIDITY (%) MAX	MIN	AVG	RAIN (in)	PRESSURE (in) STN	MSL	WIND DIR	SPEED (mph) AVG	MAX	SOLAR (MJ/m2)	4" SOIL TEMPERATURES SOD	BARE	MAX	MIN
1	72	45	58.5	34.3	6	0	79	19	45	0.00	28.72	30.02	NW	8.0	21.7	24.49	56.0	59.7	71	50
2	77	51	64.3	33.4	1	0	53	17	34	0.00	28.68	29.98	SW	11.5	28.2	24.72	58.5	62.9	73	54
3	61	49	57.7	50.7	10	0	97	46	79	0.16	28.68	29.98	S	6.5	29.0	4.57	57.2	59.5	63	55
4	69	46	55.0	44.5	8	0	98	39	72	0.01	28.78	30.09	ENE	5.5	18.4	18.93	57.5	58.8	69	52
5	72*	46*	57.7*	45.0*	6*	0*	90*	41*	64*	0.00*	28.62*	29.92*	SSE*	8.1*	21.5*	19.30*	58.4	60.8	71	52
6	74	53	61.0	51.2	1	0	91	45	72	0.00	28.55	29.85	S	7.3	19.4	20.90	61.3	64.2	75	57
7	81*	56*	67.7*	56.0*	0*	4*	94*	41*	69*	0.00*	28.46*	29.75*	S *	12.3*	30.4*	20.14*	63.3*	66.5*	76*	59*
8	89	63	74.8	56.7	0	11	81	23	58	0.00	28.27	29.55	SSW	14.7	28.8	25.35	66.5	70.6	80	62
9	72	52	63.4	53.5	3	0	88	53	71	0.00	28.19	29.47	NW	9.8	31.0	21.25	66.8	71.0	79	65
10	63	39	47.0	43.3	14	0	97	68	87	1.14	28.33	29.62	NW	9.8	31.6	1.11	57.8	57.6	67	49
11	57	30	42.9	25.8	22	0	80	30	53	0.00	28.59	29.89	WNW	11.1	29.3	25.20	53.6	49.8	58	42
12	70	35	52.1	29.4	13	0	75	22	44	0.00	28.82	30.13	WNW	6.9	23.3	26.41	55.3	52.5	63	43
13	78	39	61.3	34.6	6	0	80	22	39	0.00	28.86	30.17	S	6.7	21.1	25.79	58.0	57.3	69	46
14	84	58	69.7	45.8	0	6	61	24	44	0.00	28.48	29.78	S	16.6	36.3	23.38	61.2	64.4	75	56
15	77	60	69.1	56.1	0	4	86	50	64	0.00	28.46	29.75	ESE	8.1	30.4	18.83	63.2	68.0	76	61
16	81	59	72.4	65.2	0	5	92	58	79	0.00	28.47	29.77	S	10.6	28.3	14.01	66.1	70.1	77	66
17	69	54	60.6	58.9	3	0	98	85	94	1.12	28.39	29.68	N	6.8	24.9	1.53	62.2	63.4	68	61
18	67	48	58.4	39.9	8	0	95	35	52	0.00	28.48	29.78	WNW	9.3	30.1	27.47	62.4	60.9	68	54
19	65	42	52.1	45.0	12	0	97	45	79	0.28	28.50	29.79	ENE	7.2	32.9	14.97	58.5	56.3	63	50
20	71	50	59.1	47.7	5	0	97	41	69	0.00	28.36	29.65	WSW	7.9	20.3	27.03	61.9	60.5	70	52
21	69*	46*	56.1*	44.1*	8*	0*	90*	44*	66*	0.01*	28.54*	29.84*	ENE*	8.8*	24.7*	26.60*	62.2	60.1	70	52
22	48	42	44.2	41.8	20	0	96	79	91	1.91	28.74	30.05	NE	10.4	30.7	1.67	54.4	50.9	57	49
23	60	41	47.7	40.4	15	0	95	48	78	0.05	28.73	30.04	N	8.6	23.5	14.60	54.2	52.2	59	47
24	67	40	52.0	40.4	12	0	93	33	68	0.01	28.76	30.07	SW	6.9	27.1	17.92	54.6	53.2	61	45
25	72	46	60.3	43.0	6	0	84	36	56	0.00	28.67	29.97	S	11.6	31.0	25.79	58.4	56.0	65	48
26	72	44	58.1	46.8	7	0	81	53	66	0.00	28.55	29.85	S	17.2	41.8	16.82	59.4	57.3	64	52
27	64	38	50.8	34.5	14	0	92	29	58	0.00	28.84	30.15	NE	6.0	20.6	25.96	58.2	56.1	67	46
28	72	45	59.3	47.1	6	0	82	46	65	0.00	28.62	29.92	SE	8.3	23.0	14.00	58.5	59.1	67	52
29	74	56	63.4	56.3	0	0	95	51	79	0.13	28.49	29.79	NNE	7.5	25.1	17.93	62.6	63.5	72	59
30	63	54	58.0	54.6	7	0	97	71	89	0.32	28.54	29.84	E	6.0	20.5	7.82	60.9	60.5	64	58
	70*	48*	58.5*	45.5*	<- Monthly Averages ->						28.57*	29.87*	S *	9.2*	41.8*	18.48*	59.6*	60.1*	69*	53*

Temperature - Highest: 89*
Lowest: 30*

Degree Days - Total HDD: 211*
Total CDD: 30*

Rainfall: Monthly Total: 5.14 in.
Greatest 24 Hr: 1.91 in.

Humidity - Highest: 98*
Lowest: 17*

Number of Days With:

Tmax ≥ 90:	0*	Rainfall ≥ 0.01 inch:	11*
Tmax ≤ 32:	0*	Rainfall ≥ 0.10 inch:	7*
Tmin ≤ 32:	1*	Avg Wind Speed ≥ 10 mph:	9*
Tmin ≤ 0:	0*	Max Wind Speed ≥ 30 mph:	10*

* Denotes incomplete record

Postscript generated on Thursday, January 08, 2004 at 22:02

MESONET CLIMATOLOGICAL DATA SUMMARY — May 1995 — Time Zone: Midnight-Midnight CST
(SPEN) Spencer — Nearest City: 2.0 ENE Spencer — County: Oklahoma
Latitude: 35-32-31 — Longitude: 97-20-27 — Elevation: 1224 feet

DAY	TEMPERATURE (°F) MAX	MIN	AVG	DEWPT	DEG DAYS HDD	CDD	HUMIDITY (%) MAX	MIN	AVG	RAIN (in)	PRESSURE (in) STN	MSL	WIND DIR	SPEED (mph) AVG	MAX	SOLAR (MJ/m2)	4" SOIL TEMPERATURES SOD	BARE	MAX	MIN
1	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00	28.64	29.94	NNW	9.3	27.1	12.14	60.1	58.5	63	55
2	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.01	28.67	29.97	SSE	5.3	16.5	15.24	57.4	55.2	62	49
3	62	52	56.8	53.0	8	0	94	79	87	0.07	28.51	29.80	SSE	7.1	27.4	3.80	57.5	56.1	59	54
4	70*	50*	58.9*	48.6*	5*	0*	97*	42*	72*	0.01*	28.77*	30.07*	NNW*	7.0*	20.0*	27.47*	62.8*	61.9*	72*	54*
5	67	46	56.0	49.8	9	0	94	52	81	0.52	28.81	30.12	E	6.5	20.7	15.66	60.9	60.1	68	54
6	72	56	62.4	58.6	1	0	98	67	88	1.20	28.60	29.90	SSE	8.4	24.6	10.22	61.9	61.4	68	58
7	69	59	64.4	60.5	1	0	94	66	87	1.89	28.42	29.72	SSE	9.2	44.4	2.72	62.7	62.5	64	60
8	74	58	64.9	48.6	0	1	89	27	60	0.00	28.26	29.55	SSE	14.0	38.6	24.79	65.0	62.5	68	58
9	77	53	65.5	48.2	0	0	80	32	56	0.00	28.39	29.68	W	9.0	28.3	27.22	66.6	63.8	73	56
10	66	49	58.3	44.2	8	0	92	49	61	0.00	28.61	29.91	NW	8.3	25.4	24.04	66.0	62.9	71	55
11	73	47	60.5	48.9	5	0	94	42	68	0.00	28.60	29.90	SE	3.9	13.2	24.30	65.0	63.7	74	55
12	74	56	65.7	58.7	0	0	87	65	79	0.00	28.26	29.55	SSE	12.1	35.7	13.24	65.2	64.0	69	59
13	90	72	79.0	57.0	0	16	87	21	52	0.00	28.21	29.49	SSE	8.8	31.8	28.94	72.1	75.9	89	67
14	75	63	69.5	58.3	0	4	91	45	69	0.00	28.60	29.90	NNE	7.5	22.4	27.07	72.7	77.7	88	71
15	85	60	73.5	63.5	0	8	86	51	72	0.00	28.64	29.94	S	6.5	25.0	22.03	72.4	77.6	87	69
16	79	73	75.2	67.8	0	11	84	70	78	0.00	28.39	29.68	S	11.3	27.3	9.50	72.1	75.4	78	73
17	87	60	75.4	57.5	0	9	87	18	60	0.00	28.20	29.48	SSW	11.9	32.4	17.24	72.3	75.5	84	71
18	68	48	57.4	45.8	7	0	91	42	67	0.00	28.52	29.82	WNW	9.9	28.2	16.21	68.0	70.5	77	66
19	76	41	60.4	43.9	7	0	98	27	60	0.00	28.71	30.02	SE	3.1	14.5	29.32	68.1	71.7	85	59
20	79	55	67.3	50.2	0	2	75	34	56	0.00	28.68	29.98	S	6.1	16.5	27.69	71.1	75.1	86	65
21	82	61	68.9	56.0	0	6	88	36	66	0.02	28.68	29.98	SSE	4.5	14.7	23.23	72.5	77.0	88	69
22	84	62	73.1	57.6	0	8	81	41	60	0.00	28.63	29.93	SSE	9.6	41.9	26.51	74.3	78.5	89	70
23	75	61	70.5	63.6	0	3	93	59	80	0.32	28.55	29.85	S	12.4	51.1	6.24	72.0	74.5	78	69
24	60	54	56.5	54.8	8	0	95	91	94	0.50	28.70	30.00	NNW	6.3	23.8	3.47	66.0	64.6	69	62
25	58	54	56.8	54.4	9	0	95	86	92	0.21	28.80	30.10	N	5.8	20.6	4.87	63.8	62.0	64	60
26	75	58	66.1	62.9	0	2	98	67	90	2.23	28.64	29.94	ESE	7.0	19.5	14.91	66.2	65.8	74	60
27	80	62	69.9	60.0	0	6	94	45	73	0.14	28.44	29.73	SSW	10.6	36.4	23.35	70.3	70.2	77	64
28	76	58	66.6	50.9	0	2	80	43	58	0.00	28.70	30.00	NNW	6.8	18.4	28.08	70.7	70.1	79	62
29	68	54	61.5	52.3	4	0	88	58	72	0.00	28.83	30.13	NE	5.5	15.8	16.28	67.9	66.9	72	62
30	70	61	64.5	60.0	0	0	95	76	85	0.00	28.74	30.05	ENE	4.3	12.9	7.67	67.4	66.8	70	64
31	80	60	69.1	60.1	0	5	98	43	76	1.05	28.61	29.92	W	4.3	22.2	25.12	70.9	72.3	81	64
	74*	57*	65.3*	55.0*	<- Monthly Averages ->						28.57*	29.87*	SSE*	7.8*	51.1*	18.02*	67.2*	67.8*	75*	62*

Temperature - Highest: 90*
Lowest: 41*

Degree Days - Total HDD: 71*
Total CDD: 82*

Rainfall: Monthly Total: 8.17 in.
Greatest 24 Hr: 2.23 in.

Humidity - Highest: 98*
Lowest: 18*

Number of Days With:

Tmax ≥ 90: 1* — Rainfall ≥ 0.01 inch: 13*
Tmax ≤ 32: 2* — Rainfall ≥ 0.10 inch: 9*
Tmin ≤ 32: 2* — Avg Wind Speed ≥ 10 mph: 6*
Tmin ≤ 0: 2* — Max Wind Speed ≥ 30 mph: 8*

* Denotes incomplete record

Postscript generated on Thursday, January 08, 2004 at 22:02

MESONET CLIMATOLOGICAL DATA SUMMARY
(SPEN) Spencer
Latitude: 35-32-31

June 1995
Nearest City: 2.0 ENE Spencer
Longitude: 97-20-27

Time Zone: Midnight-Midnight CST
County: Oklahoma
Elevation: 1224 feet

DAY	TEMPERATURE (°F) MAX	MIN	AVG	DEWPT	DEG DAYS HDD	CDD	HUMIDITY (%) MAX	MIN	AVG	RAIN (in)	PRESSURE (in) STN	MSL	WIND DIR	SPEED (mph) AVG	MAX	SOLAR (MJ/m2)	4" SOIL TEMPERATURES SOD	BARE	MAX	MIN
1	81*	58*	69.2*	61.1*	0*	5*	95*	49*	77*	0.03*	28.59*	29.89*	SSE*	4.0*	13.3*	25.91	72.8*	74.2*	83*	65*
2	87	63	70.8	61.7	0	10	92	47	74	0.15	28.58	29.88	S	7.1	28.1	18.83	72.8	72.4	81	67
3	78	64	71.1	65.3	0	6	94	70	83	0.57	28.62	29.92	ESE	7.2	21.5	16.86	72.3	72.0	78	67
4	79	61	68.2	62.4	0	5	95	57	83	1.72	28.67	29.97	SSE	7.4	42.2	14.86	71.9	71.6	77	67
5	80	58	68.5	62.2	0	4	95	60	82	0.07	28.50	29.79	SSE	6.8	23.1	22.10	72.1	70.9	79	64
6	85	65	76.0	68.3	0	10	95	62	78	0.29	28.30	29.59	S	8.6	25.3	23.31	74.8	74.5	81	68
7	90	74	81.1	72.6	0	17	90	63	76	0.00	28.36	29.65	SSW	11.2	28.9	26.62	78.3	78.3	85	72
8	86	70	77.2	71.1	0	13	90	67	82	0.00	28.50	29.80	S	8.2	28.2	13.47	77.3	76.9	83	74
9	81	63	69.2	66.5	0	7	95	68	91	3.93	28.63	29.93	E	9.2	45.0	5.13	71.8	71.1	74	68
10	72	60	65.2	62.1	0	1	95	78	90	0.48	28.71	30.02	NNE	6.3	24.9	5.39	70.8	69.8	72	66
11	72	54	63.1	52.3	2	0	95	43	71	0.13	28.83	30.14	N	6.9	21.7	28.45	70.9	70.0	78	63
12	79	51	65.7	50.8	0	0	94	34	63	0.00	28.82	30.12	SW	4.8	13.8	28.59	70.4	70.4	80	61
13	82	60	71.7	54.6	0	6	72	42	56	0.00	28.73	30.03	S	7.3	18.9	29.35	72.6	71.5	80	63
14	87	65	75.7	60.5	0	11	77	46	61	0.00	28.64	29.94	S	10.6	29.8	29.36	74.8	73.5	82	66
15	86	68	75.5	60.1	0	12	75	43	60	0.00	28.68	29.99	S	10.9	25.5	29.46	75.8	77.9	90	68
16	84	68	75.2	62.0	0	11	81	47	65	0.00	28.81	30.12	S	9.0	23.8	29.18	76.2	81.0	92	71
17	84	66	74.1	61.3	0	10	85	44	66	0.00	28.88	30.19	SSE	6.3	18.7	27.51	76.7	82.2	93	73
18	84	64	73.6	59.0	0	9	83	37	63	0.00	28.86	30.17	SE	5.8	18.9	28.09	76.7	82.2	93	73
19	86	65	74.8	60.8	0	10	85	40	64	0.00	28.78	30.09	SSE	5.8	14.4	26.37	77.3	82.9	93	74
20	87	67	76.2	60.9	0	12	78	39	61	0.00	28.68	29.99	SSE	5.8	13.5	25.72	78.2	83.7	94	75
21	88	68	77.7	61.5	0	13	78	40	59	0.00	28.64	29.94	SSE	5.2	12.7	27.72	79.5	85.2	96	76
22	89	68	78.5	62.9	0	13	80	39	61	0.00	28.64	29.94	SSE	5.1	13.8	25.41	79.9	85.9	95	77
23	90	62	74.1	63.1	0	11	93	38	70	0.00	28.66	29.96	SSE	5.7	31.2	22.31	79.5	84.8	92	78
24	84	62	71.6	61.5	0	8	94	45	72	0.00	28.60	29.90	NW	7.6	23.7	23.75	78.8	83.2	93	76
25	83	61	71.2	56.2	0	7	86	36	62	0.00	28.60	29.90	NNW	8.6	22.1	29.09	79.7	84.3	94	76
26	86	57	71.8	54.0	0	7	87	31	57	0.00	28.64	29.94	NNW	5.4	19.1	29.90	79.2	84.2	95	74
27	87	63	75.3	59.9	0	10	83	38	61	0.00	28.62	29.92	SSW	4.8	14.5	23.93	79.3	84.5	94	77
28	91	67	79.0	64.1	0	14	83	38	63	0.00	28.59	29.89	SE	6.0	14.8	28.39	81.5	86.5	97	77
29	80	65	72.2	65.4	0	8	94	56	80	0.26	28.68	29.99	N	6.8	37.3	13.92	79.2	83.0	88	78
30	75	62	66.6	59.6	0	4	93	48	80	0.12	28.80	30.11	NE	6.0	20.7	14.33	74.4	74.6	79	71
	83*	63*	72.7*	61.5*	<- Monthly Averages ->						28.65*	29.96*	SSE*	7.0*	45.0*	23.11	75.9*	78.1*	86*	71*

Temperature - Highest: 91*
Lowest: 51*

Degree Days - Total HDD: 2*
Total CDD: 254*

Rainfall: Monthly Total: 7.75 in.
Greatest 24 Hr: 3.93 in.

Humidity - Highest: 95*
Lowest: 31*

Number of Days With:

Tmax ≥ 90:	3*	Rainfall ≥ 0.01 inch:	11*
Tmax ≤ 32:	0*	Rainfall ≥ 0.10 inch:	9*
Tmin ≤ 32:	0*	Avg Wind Speed ≥ 10 mph:	3*
Tmin ≤ 0:	0*	Max Wind Speed ≥ 30 mph:	4*

* Denotes incomplete record

Postscript generated on Thursday, January 08, 2004 at 22:02

MESONET CLIMATOLOGICAL DATA SUMMARY — July 1995 — Time Zone: Midnight-Midnight CST
(SPEN) Spencer — Nearest City: 2.0 ENE Spencer — County: Oklahoma
Latitude: 35-32-31 — Longitude: 97-20-27 — Elevation: 1224 feet

DAY	TEMPERATURE (°F) MAX	MIN	AVG	DEWPT	DEG DAYS HDD	CDD	HUMIDITY (%) MAX	MIN	AVG	RAIN (in)	PRESSURE (in) STN	MSL	WIND DIR	SPEED (mph) AVG	MAX	SOLAR (MJ/m2)	4" SOIL TEMPERATURES SOD	BARE	MAX	MIN
1	78	57	68.1	53.4	0	3	87	39	62	0.00	28.78	30.09	ENE	5.0	15.1	29.34	74.7	76.3	89	65
2	81	61	70.2	62.5	0	6	92	61	77	0.13	28.63	29.93	SE	6.6	19.8	16.10	74.2	76.0	82	72
3	91	68	80.0	66.0	0	14	89	48	64	0.00	28.36	29.65	S	11.8	31.1	26.73	77.6	80.7	92	70
4	92	70	81.6	61.8	0	16	81	26	54	0.00	28.34	29.63	S	12.6	36.0	28.85	81.0	85.8	96	78
5	92	62	77.5	57.2	0	12	89	23	54	0.00	28.63	29.93	W	4.8	18.9	29.63	80.9	86.5	98	76
6	96	68	81.7	64.4	0	17	91	25	59	0.00	28.81	30.12	SW	6.1	16.3	29.42	82.7	88.7	100	79
7	96	72	83.6	63.5	0	19	83	28	54	0.00	28.82	30.13	SW	9.4	24.1	30.01	84.4	89.8	100	81
8	97	73	85.3	63.0	0	20	71	34	49	0.00	28.74	30.05	SSW	9.3	24.4	29.43	85.2	90.6	101	81
9	96	75	84.5	65.5	0	21	82	35	55	0.00	28.70	30.00	E	5.6	18.9	28.96	86.2	92.2	103	83
10	98	68	83.8	67.2	0	18	94	30	61	0.00	28.70	30.00	ESE	4.7	12.3	29.15	85.8	92.0	103	82
11	102	76	87.8	64.7	0	24	72	23	49	0.00	28.67	29.98	SSW	7.1	17.5	29.20	87.2	93.0	103	84
12	100	76	87.0	65.5	0	23	69	28	51	0.00	28.67	29.97	SSW	7.1	15.9	28.79	87.8	93.3	103	85
13	96	76	85.0	68.8	0	21	81	38	60	0.00	28.68	29.98	S	6.4	16.5	27.48	88.0	93.4	103	86
14	93	73	82.8	69.3	0	18	88	44	66	0.00	28.70	30.00	SSE	6.8	17.1	27.26	87.4	92.3	101	85
15	94	72	81.0	66.3	0	18	83	33	63	0.00	28.70	30.01	S	6.0	16.7	25.95	86.9	91.4	100	84
16	94	70	81.1	66.6	0	17	88	39	64	0.00	28.70	30.00	S	4.9	14.3	26.06	86.6	91.3	101	83
17	88	70	77.8	68.0	0	14	93	50	73	0.00	28.71	30.01	ENE	4.3	14.8	16.83	83.9	88.6	94	84
18	93	69	79.9	65.8	0	16	94	35	66	0.00	28.69	29.99	E	5.0	16.2	27.64	85.1	89.7	100	81
19	90	70	79.2	67.8	0	15	88	46	70	0.00	28.65	29.96	SSE	7.0	18.7	22.88	85.1	89.7	97	83
20	88	71	78.4	70.0	0	15	93	47	77	0.01	28.61	29.91	ESE	5.0	21.8	16.15	83.6	87.4	94	83
21	95	70	82.2	70.2	0	18	95	44	70	0.00	28.61	29.91	SSE	6.2	18.4	26.46	85.5	89.5	100	81
22	95	69	80.7	68.9	0	17	93	40	70	0.16	28.56	29.86	S	7.2	26.7	23.49	85.1	89.0	99	81
23	91	67	79.2	65.0	0	14	92	39	64	1.06	28.54	29.84	S	8.1	56.3	22.44	83.3	86.5	97	79
24	89	64	75.3	66.4	0	12	95	48	76	0.59	28.61	29.91	SSE	5.5	33.1	26.67	80.3	82.3	91	74
25	93	70	81.8	69.0	0	16	94	43	68	0.00	28.60	29.90	S	7.3	37.3	27.82	82.4	82.1	89	76
26	93	69	81.5	68.1	0	16	83	53	65	0.00	28.59	29.89	S	9.7	31.0	27.88	82.4	84.5	96	74
27	98	76	86.2	69.3	0	22	81	35	60	0.00	28.53	29.83	SSW	9.3	25.7	28.60	83.8	89.6	101	80
28	95	76	85.8	69.0	0	20	91	41	58	0.00	28.61	29.92	ENE	6.3	17.8	28.37	85.1	91.9	103	82
29	91	74	81.3	70.7	0	17	93	51	71	0.00	28.72	30.03	E	6.8	20.9	26.43	85.5	91.4	100	84
30	90	71	79.5	68.7	0	16	92	47	71	0.00	28.74	30.04	ESE	5.5	16.4	23.00	84.5	89.7	98	83
31	83	71	76.5	69.4	0	12	90	60	79	0.04	28.67	29.97	E	5.5	17.9	14.75	82.2	86.1	92	82
	93	70	80.8	66.2	<- Monthly Averages ->						28.65	29.95	S	6.9	56.3	25.86	83.7	88.1	98	80

Temperature - Highest: 102 Lowest: 57	Degree Days - Total HDD: 0 Total CDD: 507	Number of Days With: Tmax ≥ 90: 25 — Rainfall ≥ 0.01 inch: 6 Tmax ≤ 32: 0 — Rainfall ≥ 0.10 inch: 4 Tmin ≤ 32: 0 — Avg Wind Speed ≥ 10 mph: 2 Tmin ≤ 0: 0 — Max Wind Speed ≥ 30 mph: 6
Rainfall: Monthly Total: 1.99 in. Greatest 24 Hr: 1.06 in.	Humidity - Highest: 95 Lowest: 23	

* Denotes incomplete record

Postscript generated on Thursday, January 08, 2004 at 22:02

MESONET CLIMATOLOGICAL DATA SUMMARY
(SPEN) Spencer
Latitude: 35-32-31

August 1995
Nearest City: 2.0 ENE Spencer
Longitude: 97-20-27

Time Zone: Midnight-Midnight CST
County: Oklahoma
Elevation: 1224 feet

DAY	TEMPERATURE (°F) MAX	MIN	AVG	DEWPT	DEG DAYS HDD	CDD	HUMIDITY (%) MAX	MIN	AVG	RAIN (in)	PRESSURE (in) STN	MSL	WIND SPEED (mph) DIR	AVG	MAX	SOLAR (MJ/m2)	4" SOIL TEMPERATURES SOD	BARE	MAX	MIN
1	81	72	74.4	71.0	0	11	96	71	90	3.49	28.66	29.96	ENE	5.6	18.4	11.27	79.7	81.0	86	78
2	84	72	75.5	71.6	0	13	99	65	88	0.07	28.64	29.94	SE	5.8	19.8	15.18	78.8	79.4	85	76
3	85	72	76.5	71.4	0	13	94	61	85	0.03	28.66	29.96	SE	4.4	13.8	13.43	79.0	79.2	85	75
4	87	72	77.5	71.3	0	14	94	58	82	0.00	28.65	29.95	NE	3.6	13.3	17.53	80.1	80.7	88	76
5	89	70	78.9	70.3	0	14	98	53	77	0.00	28.57	29.87	SE	2.8	9.4	22.36	80.3	81.8	89	75
6	93	70	81.6	70.7	0	16	95	47	72	0.51	28.56	29.86	SSW	7.7	22.2	25.52	81.5	81.8	89	75
7	92	76	83.4	70.1	0	19	81	49	65	0.00	28.62	29.92	SSW	9.8	21.7	27.08	82.7	82.4	90	76
8	91	75	82.6	72.2	0	18	88	56	71	0.00	28.62	29.92	S	8.0	22.2	23.77	82.7	83.8	92	76
9	91	73	81.5	64.8	0	17	79	36	59	0.00	28.62	29.92	SSW	8.8	22.8	25.60	82.1	86.2	96	78
10	91	68	80.0	64.1	0	15	81	41	60	0.00	28.61	29.91	S	7.3	19.0	27.30	81.0	86.6	97	77
11	92	74	82.4	67.8	0	18	78	44	63	0.00	28.62	29.92	S	7.1	20.9	26.09	82.4	88.6	98	80
12	91	76	82.5	68.8	0	19	81	46	65	0.00	28.64	29.94	S	8.0	21.4	25.51	83.3	89.5	98	82
13	91	76	83.0	69.2	0	19	80	48	64	0.00	28.59	29.89	SSW	9.0	23.7	26.36	84.0	90.2	99	82
14	93	76	83.0	70.7	0	19	82	50	68	0.00	28.57	29.86	S	8.0	20.6	24.54	84.7	90.7	100	83
15	88*	73*	79.8*	70.5*	0*	16*	86*	50*	74*	0.01*	28.58*	29.88*	S *	7.7*	21.4*	20.26*	83.5	88.9	95	83
16	93	76	82.4	68.8	0	19	81	41	65	0.00	28.60	29.90	S	8.5	20.1	19.72	83.2	88.2	95	82
17	94	75	83.0	66.6	0	20	78	38	59	0.00	28.61	29.91	S	8.2	20.6	25.87	84.0	89.5	99	81
18	94	74	83.4	67.3	0	19	78	42	60	0.00	28.63	29.94	SSW	7.3	17.6	26.07	84.5	90.5	100	82
19	96	70	82.2	67.6	0	18	87	36	64	0.00	28.73	30.03	SSW	3.7	22.2	24.95	84.3	90.8	100	82
20	96	70	82.1	70.6	0	18	93	43	71	0.00	28.75	30.06	E	3.3	11.2	24.82	84.8	91.5	101	83
21	95	69	81.8	65.8	0	17	95	24	63	0.00	28.78	30.09	ENE	4.2	14.3	26.16	84.6	91.3	101	83
22	93	69	80.2	67.2	0	16	90	42	67	0.00	28.79	30.10	E	4.1	13.5	23.24	83.8	90.1	98	83
23	93	69	79.6	65.8	0	16	90	37	65	0.00	28.75	30.06	ESE	4.6	16.3	23.74	83.3	89.4	98	82
24	95*	66*	78.9*	55.7*	0*	16*	79*	6*	48*	0.00	28.66	29.96	SE	5.0	13.8	26.23	82.1	87.8	97	79
25	94	71	81.6	60.7	0	17	75	37	50	0.00	28.61	29.91	SSE	5.7	14.4	21.84	82.2	88.1	97	80
26	96	72	82.8	66.7	0	19	81	37	60	0.00	28.65	29.95	SSE	3.9	10.8	21.96	83.5	89.5	99	82
27	98	71	83.9	66.4	0	20	88	31	59	0.00	28.68	29.98	ESE	3.7	14.1	22.23	83.7	90.0	99	83
28	99	68	84.1	64.3	0	19	87	28	55	0.00	28.70	30.01	ESE	3.0	10.2	23.27	83.8	90.4	100	82
29	98	72	83.6	64.5	0	20	71	33	54	0.00	28.68	29.99	SSE	5.3	14.5	22.16	83.8	90.0	99	83
30	98	75	84.3	64.7	0	21	73	31	54	0.00	28.65	29.95	SSW	7.0	20.1	23.00	84.2	90.3	99	83
31	97	71	83.0	62.4	0	19	81	29	53	0.00	28.69	29.99	SSW	5.5	17.1	23.49	84.1	90.3	99	83
	92*	72*	81.3*	67.4*	<- Monthly Averages ->						28.65*	29.95*	S *	6.0*	23.7*	22.92*	82.8	87.4	96	80

Temperature - Highest: 99*
Lowest: 66*

Degree Days - Total HDD: 0*
Total CDD: 533*

Rainfall: Monthly Total: 4.11 in.
Greatest 24 Hr: 3.49 in.

Humidity - Highest: 99*
Lowest: 6*

Number of Days With:

Tmax ≥ 90:	25*	Rainfall ≥ 0.01 inch:	5*
Tmax ≤ 32:	0*	Rainfall ≥ 0.10 inch:	2*
Tmin ≤ 32:	0*	Avg Wind Speed ≥ 10 mph:	0*
Tmin ≤ 0:	0*	Max Wind Speed ≥ 30 mph:	0*

* Denotes incomplete record

Postscript generated on Thursday, January 08, 2004 at 22:02

MESONET CLIMATOLOGICAL DATA SUMMARY — September 1995 — Time Zone: Midnight-Midnight CST
(SPEN) Spencer — Nearest City: 2.0 ENE Spencer — County: Oklahoma
Latitude: 35-32-31 — Longitude: 97-20-27 — Elevation: 1224 feet

DAY	TEMPERATURE (°F) MAX	MIN	AVG	DEWPT	DEG DAYS HDD	CDD	HUMIDITY (%) MAX	MIN	AVG	RAIN (in)	PRESSURE (in) STN	MSL	WIND SPEED (mph) DIR	AVG	MAX	SOLAR (MJ/m2)	4" SOIL TEMPERATURES SOD	BARE	MAX	MIN
1	98	69	83.3	63.0	0	18	79	30	53	0.00	28.70	30.01	SE	4.5	13.5	23.54	83.9	90.2	100	82
2	99	73	85.0	62.8	0	21	76	26	50	0.00	28.67	29.98	SSE	6.6	20.8	23.31	84.1	90.6	100	83
3	101	78	87.5	60.1	0	24	60	23	42	0.00	28.64	29.94	SSW	10.4	28.4	17.50	84.1	89.9	96	85
4	101	75	86.4	61.7	0	23	76	28	46	0.00	28.64	29.94	SSW	6.8	17.9	22.84	85.0	91.0	100	84
5	93	67	78.9	64.3	0	15	83	42	63	0.00	28.70	30.00	ESE	7.5	20.0	23.54	83.7	89.2	97	82
6	96	74	83.8	65.9	0	20	68	39	56	0.00	28.63	29.93	SSE	10.6	27.3	20.78	83.5	88.9	97	83
7	82	60	72.9	63.3	0	6	94	51	73	0.17	28.70	30.00	NNE	8.3	27.6	12.95	80.3	83.4	88	77
8	69	57	61.0	53.3	2	0	91	57	76	0.00	28.77	30.07	NNE	5.5	14.4	11.93	73.9	75.7	82	72
9	75	59	65.0	54.7	0	2	85	49	70	0.00	28.79	30.10	NE	4.7	15.2	16.58	74.0	77.1	85	71
10	79	62	67.1	56.9	0	5	86	46	71	0.00	28.85	30.16	E	3.1	13.6	14.40	74.3	77.9	85	73
11	73	65	66.7	61.2	0	4	96	66	83	0.09	28.76	30.06	SSE	5.6	16.3	8.19	73.0	74.9	78	72
12	82	63	71.2	65.0	0	7	96	58	82	1.21	28.70	30.00	S	5.7	21.7	18.37	73.4	75.6	84	69
13	88	65	75.8	63.6	0	12	97	40	69	0.00	28.73	30.04	WSW	4.6	12.5	22.40	75.5	78.0	87	70
14	86	65	75.4	65.8	0	11	96	49	74	0.00	28.82	30.13	ESE	3.6	12.4	15.98	75.4	76.9	83	71
15	73	68	70.3	68.2	0	6	97	85	93	1.04	28.76	30.07	ESE	3.6	12.8	3.26	74.2	74.2	76	72
16	83	68	74.0	71.1	0	11	97	70	91	0.28	28.64	29.95	S	4.3	13.7	10.92	74.8	75.9	82	71
17	82	68	74.4	68.9	0	10	97	59	84	0.00	28.71	30.01	ENE	4.9	16.9	15.23	76.2	77.5	82	74
18	80	68	71.5	68.2	0	9	97	64	90	0.73	28.67	29.97	SSE	5.7	21.5	8.69	74.5	74.6	79	72
19	78	60	69.2	64.5	0	4	96	66	85	0.07	28.66	29.96	N	7.6	22.6	11.92	74.2	74.6	81	70
20	63	56	59.4	54.6	5	0	95	74	84	0.00	28.82	30.13	NNE	5.2	16.2	6.29	69.7	68.3	71	66
21	58	43	47.7	45.2	15	0	95	86	91	0.73	28.96	30.28	NNE	9.1	29.1	1.74	63.8	60.1	66	55
22	59	37	47.1	34.6	17	0	93	34	65	0.00	29.02	30.34	NE	5.3	18.2	22.52	60.6	58.8	69	51
23	68	40	53.1	37.3	11	0	77	35	57	0.00	28.83	30.14	SSE	5.9	15.5	22.48	59.8	59.5	70	51
24	63	47	54.1	47.1	10	0	93	49	78	0.12	28.81	30.11	SE	3.8	15.4	7.20	60.4	59.5	64	56
25	61	50	54.8	52.6	9	0	97	75	93	0.37	28.75	30.05	S	2.4	8.6	4.89	61.1	60.6	64	58
26	72	48	58.3	52.8	5	0	98	51	84	0.01	28.68	29.98	SSW	5.2	14.2	20.66	61.9	63.3	74	55
27	77	54	65.5	60.9	0	0	95	68	86	0.04	28.66	29.96	SE	5.7	17.5	9.57	64.5	65.8	72	61
28	86	66	75.3	67.5	0	11	92	59	77	0.00	28.61	29.91	SSE	9.8	22.8	17.89	68.8	71.7	79	65
29	87	72	77.6	65.7	0	14	84	49	68	0.00	28.50	29.80	S	13.0	35.4	17.77	71.3	73.6	80	70
30	82	57	73.0	59.2	0	5	83	44	63	0.00	28.56	29.85	S	11.6	33.1	17.05	71.2	72.5	80	67
	80	61	69.5	59.3	<-- Monthly Averages -->						28.72	30.03	SSE	6.4	35.4	15.01	73.0	75.0	82	70

Temperature - Highest: 101
Lowest: 37

Degree Days - Total HDD: 75
Total CDD: 239

Rainfall: Monthly Total: 4.86 in.
Greatest 24 Hr: 1.21 in.

Humidity - Highest: 98
Lowest: 23

Number of Days With:

Tmax ≥ 90:	6	Rainfall ≥ 0.01 inch:	12
Tmax ≤ 32:	0	Rainfall ≥ 0.10 inch:	8
Tmin ≤ 32:	0	Avg Wind Speed ≥ 10 mph:	4
Tmin ≤ 0:	0	Max Wind Speed ≥ 30 mph:	2

* Denotes incomplete record

Postscript generated on Thursday, January 08, 2004 at 22:02

MESONET CLIMATOLOGICAL DATA SUMMARY
(SPEN) Spencer
Latitude: 35-32-31

October 1995
Nearest City: 2.0 ENE Spencer
Longitude: 97-20-27

Time Zone: Midnight-Midnight CST
County: Oklahoma
Elevation: 1224 feet

DAY	TEMPERATURE (°F) MAX	MIN	AVG	DEWPT	DEG DAYS HDD	CDD	HUMIDITY (%) MAX	MIN	AVG	RAIN (in)	PRESSURE (in) STN	MSL	WIND DIR	SPEED (mph) AVG	MAX	SOLAR (MJ/m2)	4" SOIL TEMPERATURES SOD	BARE	MAX	MIN
1	79	46	62.9	47.6	2	0	95	30	62	0.00	28.72	30.02	SE	3.9	16.0	21.10	66.6	68.2	79	60
2	62	54	57.9	55.0	7	0	97	72	90	1.12	28.61	29.91	NNW	4.9	25.5	3.10	63.7	63.6	66	62
3	74	51	61.5	50.1	2	0	97	36	71	0.01	28.61	29.91	NNE	4.8	16.5	20.44	64.0	65.4	75	58
4	80*	53*	65.7*	49.7*	0*	1*	82*	30*	59*	0.00*	28.33*	29.62*	SSE*	9.3*	31.9*	20.19*	63.6	64.3	73	57
5	71	49	60.2	40.4	5	0	77	32	50	0.00	28.46	29.76	WNW	12.5	31.8	20.02	63.4	63.2	71	57
6	67	46	55.4	40.7	9	0	86	38	59	0.00	28.73	30.03	NW	9.2	26.6	20.09	61.0	61.3	71	54
7	74	44	58.0	42.3	6	0	88	29	60	0.00	28.77	30.08	SSE	5.8	16.7	20.04	59.5	62.2	74	53
8	80	52	64.8	48.0	0	1	70	39	56	0.00	28.65	29.95	SSE	9.7	31.6	19.01	61.5	65.3	76	57
9	81	50	66.0	56.5	0	0	97	46	74	0.00	28.68	29.98	ESE	4.0	14.5	17.65	63.3	68.2	79	59
10	84	54	69.4	59.8	0	4	97	45	74	0.00	28.72	30.03	E	3.9	20.1	18.33	64.8	70.6	81	62
11	87	64	73.3	58.5	0	11	85	35	63	0.00	28.81	30.12	S	6.8	16.0	18.32	66.8	72.7	83	65
12	85	65	72.7	55.9	0	10	72	36	57	0.00	28.72	30.02	S	9.2	24.3	18.27	67.6	73.0	82	66
13	75	43	63.4	45.7	6	0	82	33	54	0.00	28.73	30.03	NNW	10.6	33.1	16.52	66.1	71.0	79	66
14	70	37	54.6	34.4	11	0	93	22	51	0.00	28.90	30.22	SSW	5.5	17.9	18.90	60.3	65.7	75	58
15	86	47	66.4	37.6	0	2	63	14	39	0.00	28.77	30.08	SW	6.3	17.0	18.71*	61.4	67.2	78	59
16	86	52	69.0	41.4	0	4	67	18	40	0.00	28.73	30.04	S	6.3	28.6	NA	62.3	68.8	79	61
17	82	60	69.1	41.7	0	6	50	24	38	0.00	28.69	30.00	S	11.7	32.0	17.68	63.6	69.1	77	63
18	83	61	70.4	49.5	0	7	56	39	48	0.00	28.67	29.97	S	11.9	27.8	17.14	64.8	69.9	78	64
19	75	47	65.4	43.7	4	0	73	18	48	0.00	28.73	30.04	NNW	13.2	33.2	12.91	65.3	69.1	75	65
20	67	38	52.1	25.4	13	0	69	17	38	0.00	28.93	30.24	NW	8.0	27.0	18.18	60.9	63.7	72	57
21	78	42	61.0	29.0	5	0	58	13	32	0.00	28.56	29.86	SSW	7.6	24.1	17.42	59.8	63.2	73	56
22	82	59	70.5	46.9	0	6	65	31	44	0.00	28.32	29.61	S	17.4	39.5	16.81	63.1	67.0	75	61
23	71	38	56.1	33.1	10	0	78	25	44	0.00	28.71	30.01	WNW	13.4	38.5	17.08	63.2	66.9	73	60
24	68	30	50.4	24.4	16	0	86	12	44	0.00	28.94	30.25	SSE	5.0	16.8	17.38	57.8	60.4	69	53
25	73	50	60.7	39.1	3	0	83	31	47	0.00	28.70	30.00	SSE	8.9	24.1	16.09	60.6	64.4	73	60
26	84	49	64.7	46.8	0	2	89	15	58	0.00	28.31	29.60	SSW	8.8	31.5	15.86	61.9	65.4	74	59
27	72	47	57.8	33.8	6	0	82	18	45	0.00	28.46	29.76	NW	6.1	25.1	14.28	60.4	63.6	71	58
28	68	34	51.8	23.7	14	0	80	14	38	0.00	28.81	30.12	SE	4.3	12.3	16.41	57.6	60.6	69	54
29	73	46	59.9	30.2	6	0	47	21	34	0.00	28.77	30.08	S	10.8	30.9	13.83	58.4	60.7	68	55
30	60	54	57.1	48.4	8	0	96	41	75	0.02	28.74	30.04	S	9.3	24.7	3.69	60.0	60.8	62	60
31	62	55	58.2	56.6	7	0	97	88	94	0.03	28.65	29.96	SSE	7.5	19.8	3.08	60.6	60.6	62	59
	76*	49*	62.1*	43.1*	<- Monthly Averages ->						28.68*	29.98*	S *	8.3*	39.5*	16.26*	62.4	65.7	74	59

Temperature - Highest: 87* Lowest: 30*	Degree Days - Total HDD: 139* Total CDD: 53*	Number of Days With: Tmax ≥ 90: 0* Rainfall ≥ 0.01 inch: 4* Tmax ≤ 32: 0* Rainfall ≥ 0.10 inch: 1*
Rainfall: Monthly Total: 1.18 in. Greatest 24 Hr: 1.12 in.	Humidity - Highest: 97* Lowest: 12*	Tmin ≤ 32: 1* Avg Wind Speed ≥ 10 mph: 8* Tmin ≤ 0: 0* Max Wind Speed ≥ 30 mph: 10*

* Denotes incomplete record

Postscript generated on Thursday, January 08, 2004 at 22:03

MESONET CLIMATOLOGICAL DATA SUMMARY
(SPEN) Spencer
Latitude: 35-32-31

November 1995
Nearest City: 2.0 ENE Spencer
Longitude: 97-20-27

Time Zone: Midnight-Midnight CST
County: Oklahoma
Elevation: 1224 feet

DAY	TEMPERATURE (°F) MAX	MIN	AVG	DEWPT	DEG DAYS HDD	CDD	HUMIDITY (%) MAX	MIN	AVG	RAIN (in)	PRESSURE (in) STN	MSL	WIND SPEED (mph) DIR	AVG	MAX	SOLAR (MJ/m2)	4" SOIL TEMPERATURES SOD	BARE	MAX	MIN
1	79	45	61.1	52.7	3	0	97	38	77	0.20	28.49	29.78	SSW	10.2	24.1	13.90	61.8	63.0	70	59
2	45	32	39.0	29.6	27	0	90	51	70	0.00	28.85	30.16	N	10.6	25.1	8.30	55.8	54.6	59	50
3	49	30	38.1	14.5	25	0	66	20	40	0.00	29.06	30.38	NNW	5.3	16.2	15.80	51.1	51.9	61	46
4	57	26	43.2	18.4	23	0	71	21	39	0.00	29.04	30.36	SSW	6.7	25.0	13.12	50.0	50.9	59	43
5	60	40	48.7	34.3	15	0	85	35	59	0.00	28.81	30.12	SSW	11.6	29.6	14.88	52.7	55.1	63	50
6	66	47	56.7	51.6	9	0	96	58	84	0.03	28.45	29.75	S	13.5	30.8	8.52	55.2	56.8	62	54
7	64	39	53.0	35.0	14	0	91	21	56	0.00	28.75	30.05	NNW	8.6	23.7	14.71	55.7	58.2	66	53
8	60	29	44.0	25.4	21	0	84	24	52	0.00	28.94	30.25	S	5.9	18.3	14.56	52.2	53.4	61	47
9	70	47	60.1	44.7	6	0	75	45	57	0.00	28.45	29.75	S	18.8	41.9	14.09	54.9	56.8	64	51
10	82	26	55.7	46.1	11	0	95	33	73	0.10	28.38	29.67	SSW	17.6	39.7	12.61	58.1	60.3	69	49
11	43	21	31.0	19.7	33	0	94	39	65	0.12	29.00	30.31	NNW	8.2	27.3	14.58	49.4	46.7	54	41
12	69	38	52.0	25.9	11	0	54	22	38	0.00	28.64	29.94	SSW	11.7	29.1	13.96	49.7	48.7	58	42
13	64	42	51.8	33.8	12	0	79	36	52	0.00	28.76	30.06	N	6.5	17.6	10.14	51.7	52.6	59	47
14	63	29	47.8	32.3	19	0	95	33	59	0.00	28.82	30.13	SW	6.5	20.2	13.01	50.4	51.4	59	44
15	58	35	49.5	36.5	18	0	91	44	63	0.00	28.84	30.15	N	8.2	23.3	13.06	51.5	53.4	61	49
16	64	31	48.6	35.1	18	0	95	34	64	0.00	28.87	30.18	S	8.5	23.7	13.27	49.8	51.2	59	45
17	69	44	54.5	36.9	8	0	65	35	52	0.00	28.84	30.15	SSW	7.2	19.7	12.93	52.1	54.5	62	50
18	69	33	51.0	31.8	14	0	96	22	55	0.00	28.85	30.16	SSE	4.5	15.2	13.64	49.9	52.4	61	46
19	74	48	59.6	43.0	4	0	82	38	55	0.00	28.77	30.07	SSW	8.7	24.0	13.12	52.7	55.1	63	50
20	67	43	53.2	33.9	10	0	95	16	56	0.00	28.94	30.25	NE	5.8	18.9	12.59	52.4	55.1	62	50
21	63	31	48.3	21.5	18	0	80	16	40	0.00	28.97	30.28	SSE	4.1	15.9	12.17	50.4	52.5	60	47
22	71	46	56.9	37.7	7	0	68	30	50	0.00	28.62	29.92	S	11.5	29.1	10.30	52.7	54.3	61	50
23	50	31	41.2	24.9	24	0	75	38	53	0.00	28.92	30.23	N	5.9	18.4	8.89	51.1	51.2	55	48
24	65	27	47.4	25.7	19	0	82	26	46	0.00	28.92	30.24	S	8.6	26.5	12.58	49.0	49.4	56	43
25	77	45	59.3	32.5	4	0	61	17	39	0.00	28.73	30.04	S	8.9	23.3	12.31	52.3	54.0	61	48
26	76	52	63.4	40.1	1	0	67	25	44	0.00	28.31	29.60	S	15.2	37.4	10.75	54.7	56.5	61	52
27	67	29	43.3	26.7	17	0	68	25	53	0.00	28.56	29.86	N	13.8	32.6	10.71	53.4	54.5	58	49
28	39	21	28.4	6.6	35	0	69	20	42	0.00	28.89	30.20	N	5.8	17.3	12.11	47.4	46.7	52	43
29	61	27	43.1	22.4	21	0	58	30	44	0.00	28.79	30.09	SSW	9.3	21.8	12.02	47.1	46.5	53	41
30	72	42	54.8	31.5	8	0	70	18	45	0.00	28.65	29.95	SSW	13.0	29.3	12.51	50.2	50.8	57	46
	64	36	49.5	31.7	<- Monthly Averages ->						28.76	30.07	SSW	9.4	41.9	12.50	52.2	53.3	60	48

Temperature - Highest: 82
Lowest: 21

Rainfall: Monthly Total: 0.45 in.
Greatest 24 Hr: 0.20 in.

Degree Days - Total HDD: 456
Total CDD: 0

Humidity - Highest: 97
Lowest: 16

Number of Days With:
Tmax ≥ 90: 0
Tmax ≤ 32: 0
Tmin ≤ 32: 14
Tmin ≤ 0: 0
Rainfall ≥ 0.01 inch: 4
Rainfall ≥ 0.10 inch: 3
Avg Wind Speed ≥ 10 mph: 11
Max Wind Speed ≥ 30 mph: 5

* Denotes incomplete record

Postscript generated on Thursday, January 08, 2004 at 22:03

MESONET CLIMATOLOGICAL DATA SUMMARY (SPEN) Spencer
Latitude: 35-32-31

December 1995
Nearest City: 2.0 ENE Spencer
Longitude: 97-20-27

Time Zone: Midnight-Midnight CST
County: Oklahoma
Elevation: 1224 feet

DAY	TEMPERATURE (°F) MAX	MIN	AVG	DEWPT	DEG DAYS HDD	CDD	HUMIDITY (%) MAX	MIN	AVG	RAIN (in)	PRESSURE (in) STN	MSL	WIND DIR	SPEED (mph) AVG	MAX	SOLAR (MJ/m2)	4" SOIL TEMPERATURES SOD	BARE	MAX	MIN
1	72	45	57.4	41.6	6	0	82	35	57	0.00	28.59	29.89	SSW	8.2	23.3	12.01	52.3	53.6	60	49
2	74	49	59.1	47.2	3	0	97	34	68	0.00	28.48	29.78	S	10.1	30.1	11.58	53.9	55.5	62	52
3	66	42	50.8	35.1	11	0	93	29	59	0.00	28.77	30.07	NE	7.9	23.3	12.05	51.9	53.0	59	49
4	65	34	50.0	32.5	16	0	85	20	54	0.00	28.68	29.98	S	8.4	28.1	8.77	50.8	50.9	56	46
5	56	36	47.7	22.6	19	0	97	14	48	0.00	28.74	30.05	NE	10.1	33.8	11.43	51.4	51.8	57	49
6	59	31	44.2	12.6	20	0	39	20	28	0.00	28.76	30.07	NE	6.1	17.2	9.96	50.3	50.8	57	48
7	46	21	34.4	16.4	31	0	69	34	48	0.00	28.86	30.17	SE	4.8	15.2	10.21	47.5	46.7	51	42
8	44	14	33.2	26.1	36	0	94	44	76	0.13	28.78	30.09	N	9.1	35.2	2.51	47.0	44.8	48	38
9	26	10	16.3	-6.1	47	0	63	21	37	0.00	29.27	30.59	NNE	6.9	22.2	11.76	39.5	36.1	41	34
10	41	10	27.5	0.5	40	0	65	15	33	0.00	29.13	30.45	S	9.5	26.9	12.23	37.7	34.9	40	32
11	55	29	40.5	22.6	23	0	87	35	50	0.00	28.80	30.11	S	9.9	25.1	11.67	41.0	39.6	47	35
12	54	41	47.4	44.9	17	0	98	74	91	0.00	28.64	29.95	SSE	6.2	15.7	2.83	44.6	43.8	48	41
13	75*	47*	58.8*	36.1*	4*	0*	98*	15*	52*	0.00*	28.45*	29.74*	SSW*	9.0*	23.1*	7.11	47.7*	48.2*	53*	44*
14	61	35	49.2	35.4	17	0	94	39	61	0.00	28.61	29.91	NNE	3.3	8.6	8.06	47.4	47.5	52	43
15	57	38	45.5	38.7	17	0	94	56	78	0.00	28.77	30.08	NNW	5.9	19.7	5.29	46.9	46.2	50	44
16	49	39	44.6	43.0	21	0	98	80	94	0.15	28.74	30.05	ENE	5.0	14.1	1.70	47.2	46.0	48	44
17	49	42	46.2	45.5	20	0	98	96	97	1.28	28.60	29.90	NE	6.5	20.4	1.48	48.6	48.0	49	46
18	42	29	35.4	34.4	30	0	98	93	96	0.74	28.57	29.87	N	11.9	29.0	0.58	45.4	42.3	46	38
19	33	29	31.0	29.0	34	0	97	85	92	0.03	28.76	30.07	NNW	11.9	29.1	4.70	42.2	36.9	38	36
20	31	28	29.8	26.2	35	0	90	82	86	0.02	28.89	30.21	NNE	4.1	14.7	2.77	42.0	37.4	39	37
21	33	28	30.5	27.8	34	0	94	83	90	0.01	28.82	30.12	S	2.9	13.5	2.02	41.2	37.2	39	36
22	33	28	30.6	27.0	35	0	96	74	86	0.02	28.96	30.27	NNW	6.3	17.0	2.45	40.9	37.2	39	35
23	37	18	27.4	21.1	37	0	93	55	78	0.06	29.02	30.33	WNW	3.6	11.5	11.54	38.9	36.4	41	35
24	48	25	34.1	25.6	29	0	89	47	73	0.19	28.94	30.25	SW	5.8	17.3	11.64	38.6	37.6	44	35
25	39	21	29.0	24.2	35	0	95	58	83	0.00	28.99	30.31	NNW	5.1	15.6	8.01	37.9	36.5	41	35
26	60	28	40.6	28.4	21	0	90	31	66	0.00	28.89	30.20	WSW	5.8	14.6	11.32	38.6	38.1	45	35
27	44	24	32.3	25.3	31	0	95	45	77	0.00	28.99	30.31	NNE	6.0	17.8	10.49	38.1	37.6	42	35
28	42	19	29.9	22.3	34	0	94	47	75	0.00	29.04	30.35	SE	3.5	19.4	10.85	37.5	37.0	42	35
29	44	26	34.1	23.6	30	0	92	45	67	0.11	28.88	30.19	SSE	8.7	21.5	8.62	38.1	36.8	40	35
30	50	34	40.5	36.8	23	0	97	68	87	0.02	28.63	29.93	S	7.8	25.4	6.88	40.9	40.6	45	38
31	46	39	42.0	39.6	23	0	98	78	92	0.01	28.38	29.67	ENE	3.9	15.0	3.58	43.0	43.4	46	41
	49*	30*	39.4*	28.6*	<- Monthly Averages ->						28.79*	30.10*	S *	6.9*	35.2*	7.62	44.2*	43.0*	47*	40*

Temperature - Highest: 75*
Lowest: 10*

Degree Days - Total HDD: 780*
Total CDD: 0*

Rainfall: Monthly Total: 2.77 in.
Greatest 24 Hr: 1.28 in.

Humidity - Highest: 98*
Lowest: 14*

Number of Days With:
Tmax ≥ 90: 0*
Tmax ≤ 32: 2*
Tmin ≤ 32: 18*
Tmin ≤ 0: 0*
Rainfall ≥ 0.01 inch: 13*
Rainfall ≥ 0.10 inch: 6*
Avg Wind Speed ≥ 10 mph: 4*
Max Wind Speed ≥ 30 mph: 3*

* Denotes incomplete record

Postscript generated on Thursday, January 08, 2004 at 22:03

APPENDIX I-4

ALTERNATIVE FINAL COVER QUALITY ASSURANCE/QUALITY CONTROL PLAN

REGISTERED PROFESSIONAL ENGINEER
JEFFREY
P.
YOUNG
17831
OKLAHOMA

8-13-07

Includes pages I-4-1 through I-4-9

CONTENTS

TABLE

1 INTRODUCTION

1.1 Purpose

This Quality Assurance/Quality Control (QA/QC) Plan has been prepared to provide the Owner, Design Engineer, Construction Quality Assurance Professional of Record, and the Contractor the means to govern the construction quality of the Evapotranspiration (ET) monolithic soil final cover system for the East Oak Recycling and Disposal Facility. This plan has been prepared consistent with OAC 252:515 and the plan addresses the soil components of the alternative final cover system.

This QA/QC Plan is divided into the following parts:

- Section 1 – Introduction
- Section 2 – Construction Quality Assurance for Earthwork
- Section 3 – Documentation

1.2 Definitions

Whenever the terms listed below are used, the intent and meaning shall be interpreted as indicated.

ASTM

American Society for Testing and Materials.

Construction Quality Assurance (CQA)

A planned system of activities that provides the Owner and permitting agency assurance that the facility was constructed as specified in the design (EPA, 1986). Construction quality assurance includes observations and evaluations of materials, and workmanship necessary to determine and document the quality of the constructed facility. Construction quality assurance (CQA) refers to measures taken by the CQA organization to assess if the installer or contractor is in compliance with the plans and specifications for a project.

Construction Quality Assurance Professional of Record (POR)

The POR is an authorized representative of the Owner and has overall responsibility for construction quality assurance and confirming that the facility was constructed in general accordance with plans and specifications approved by the permitting agency. The POR must be registered as a Professional Engineer in Oklahoma and experienced in geotechnical testing and its interpretations. Experience and education should include geotechnical engineering, engineering geology, soil mechanics, geotechnical laboratory testing, construction quality assurance, and quality control testing, and hydrogeology. The POR must show competency and experience in certifying like installations, and be approved by the permitting agency, and be presently employed by or practicing as a geotechnical engineer in a recognized geotechnical/environmental engineering organization. The credentials of the POR must meet or exceed the minimum requirements of the permitting agency.

The POR may also be known in applicable regulations and guidelines as the CQA Engineer, Resident Project Representative, or the Geotechnical Professional (GP).

Construction Quality Assurance (CQA) Monitors

These are representatives of the POR who work under direct supervision of the POR. The CQA monitor is responsible for quality assurance monitoring and performing onsite tests and observations. The CQA monitor is on site full-time during construction and reports directly to the POR. Field observations, testing, or other activities associated with CQA may be performed by the CQA monitor(s) on behalf of the POR.

Contract Documents

These are the official set of documents issued by the Owner. The documents include bidding requirements, contract forms, contract conditions, specifications, contract drawings, addenda, and contract modifications.

Contract Specifications

These are the qualitative requirements for products, materials, and workmanship upon which the contract is based.

Contractor

This is the person or persons, firm, partnership, corporation, or any combination, private or public, who, as an independent contractor, has entered into a contract with the Owner, and who is referred to throughout the contract documents by singular number and masculine gender.

Design Engineer

These individuals or firms are responsible for the design and preparation of the project construction drawings and specifications. Also referred to as "designer" or "engineer."

Earthwork

This is a construction activity involving the use of soil materials as defined in the construction specifications and Section 2 of this plan.

Nonconformance

This is a deficiency in characteristic, documentation, or procedure that renders the quality of an item or activity unacceptable or indeterminate. Examples of non-conformances include, but are not limited to, physical defects, test failures, and inadequate documentation.

Operator

This is the organization that operates the disposal unit (Waste Management of Oklahoma, Inc.).

Operator's Representative

This is the person that is an official representative of the operator responsible for planning, organizing, and controlling the design and construction activities.

Quality Assurance

This is a planned and systematic pattern of procedures and documentation to ensure that items of work or services meet the requirements of the contract documents. Quality assurance includes quality control. Quality assurance will be performed by the POR and CQA monitor.

Quality Control

These actions provide a means to measure and regulate the characteristics of an item or service to comply with the requirements of the contract documents. Quality control will be performed by the contractor.

Final Cover Certification Report (FCCR)

Construction report for the final cover prepared and sealed by the POR and submitted to the ODEQ.

2 CONSTRUCTION QUALITY ASSURANCE FOR EARTHWORK

2.1 Introduction

This section of the QA/QC Plan addresses the construction of the soil components of the cover system and outlines the program to be implemented with regard to materials selection and evaluation, laboratory test requirements, field test requirements and treatment of problems.

The scope of earthwork and related construction quality assurance includes the following elements:

- Foundation Layer Preparation
- Vegetative Support Layer
- Vegetation Layer

2.2 Earthwork Construction

The following paragraphs describe general construction procedures to be used for various earthwork components of the final cover system.

2.2.1 Foundation Layer

After the landfill reaches the permitted grade in each area to receive final cover, operational cover soils will be placed according to the facility operation plan. Twelve inches (min) of soil will be placed by the owner over the completed waste fill prior to installing the final cover system.

The contractor will re-work the cover soils (or foundation layer) to provide a smooth, uniformly graded surface upon completion. The foundation layer soil shall be free of rocks and any irreducible material greater than 2 inches in diameter.

QA/QC for preparation of the foundation layer will be performed under the supervision of the CQA personnel. QA/QC procedures to be performed during preparation of the foundation layer will include observation of the final grading of the foundation layer. Upon completion of foundation layer grading activities, the POR will determine that the foundation layer has been prepared to provide a uniform surface. Visual examination of the foundation layer preparation by the CQA monitor will generally be sufficient to evaluate its suitability as a foundation for the overlying vegetative support layer soils.

The CQA monitor will approve the prepared foundation layer prior to the placement of the vegetative support layer. Approval will be based on a review of test information, if applicable, and CQA monitoring of the foundation layer preparation.

Surveying will be performed to verify that the completed foundation layer is a minimum 12 inches thick. The foundation layer will be probed on a 100-foot grid to verify that a minimum 12-inch-thick soil layer is present at each location. This survey will only verify that a minimum 12-inch-thick soil layer is in place, not the total thickness of the foundation layer. As an option to the foundation layer thickness verification, the vegetation support layer may be installed as a 36-inch-thick, single-lift soil layer installed per the Section 2.2.2 requirements.

2.2.2 Vegetation Support Layer

The vegetation support layer will consist of a minimum 24-inch-thick soil layer (measured perpendicular to the foundation layer surface) that will extend along the top and sideslopes of the landfill. The vegetation layer material will consist of relatively homogeneous clay, silty clay, sandy clay, or clayey sand. Material used for the vegetation support layer shall classify as CL, CH, ML, SM, or SC according to the Unified Soil Classification System (USCS). The soil will be free of debris and rocks greater than one inch in diameter. The vegetation support layer material should be placed in one 24-inch lift. The material will be compacted by "tracking-in" the material by 2 to 4 passes of the low pressure earth moving equipment. The earth moving equipment used to place this layer will exert a ground pressure of 16 psi or less.

The vegetation support layer will be placed as single lift and compacted to a density that is between 75 and 85 percent of the maximum dry density determined by standard Proctor (ASTM D 698) at a moisture content less than the optimum moisture content.

Overcompacted vegetative support layer soil will be disked or ripped (or any other method approved by the POR) and recompacted to a density that is between 75 and 85 percent of the maximum dry density. If a density test fails (i.e., density is less than 75 percent or more than 85 percent of the maximum dry density), additional tests may be performed to delineate the overcompacted or undercompacted area. The area to be re-worked will encompass the area between passing density tests.

The testing and survey requirements for the vegetation support layer are listed in Table 2-1. Sufficient testing of the borrow area soils will be completed, as needed, to verify that the soils to be used will be classified as CL, CH, ML, SM, or SC according to the USCS.

The vegetation support layer construction will be conducted in a systematic and timely fashion. Delays will be avoided in completion of the vegetation support layer and construction of the overlying vegetation layer.

Placement of the vegetative support layer will cease during rainfall events to prevent overcompaction. Before proceeding with the construction after a rainfall event greater than 0.5 inches, the contractor will complete at a minimum, a 10-foot by 10-foot test pad (which will be part of the approved final cover system after testing is completed) to verify that overcompaction will not occur as construction continues. Test pad results will be reported in the Final Cover Construction Report. Compaction requirements will be verified by a minimum of 2 field density tests for the test pad area.

2.2.3 Vegetation Layer

The soil vegetation layer will be placed over the vegetation support layer. This layer consists of soil capable of supporting vegetative growth. The soil is placed in one lift (12-inch minimum thickness) over the entire surface of the final cover and is compacted in place with a dozer (ground pressure of 16 psi or less). The surface of the soil cover should be graded to achieve the desired final grades and disked parallel to the proposed contours, in preparation for seeding and to prevent excessive loss due to heavy rainfall.

The soil cover should be placed under the continuous observation of QA/QC personnel to determine that the minimum thickness is applied and that no damage occurs to other structures (e.g., gas system components) installed in the final cover.

Placement of the vegetation layer will cease during rainfall events to prevent overcompaction of the vegetation layer. This layer will not be reworked after a rainfall event until the CQA monitor confirms that the soil can be effectively disked. To prevent erosion, the CQA monitor will ensure that the procedures detailed in Section 3 of the Vegetation Plan (Appendix I-5) are followed.

Surveying will be performed to observe that the finished vegetation support layer has been constructed to a minimum thickness of 12 inches (refer to the Table 2-1 for additional information). Waste Management of Oklahoma, Inc., will notify the ODEQ of the source of the soil for this layer at least two weeks prior to construction.

2.2.4 Establishment of Vegetation

Vegetation will be established consistent with the specifications listed in the ODEQ Vegetation Plan (refer to Appendix I-5). Final approval of the ET final cover system will occur after Waste Management of Oklahoma, Inc., submits documentation to the ODEQ that demonstrates that vegetation has been established over at least 95 percent of the cover system with no bare areas larger than 1 square foot.

2.3 Survey and Final Topography

Upon completion of the installation of the final cover, a final topographic survey of the cover is to be completed by a qualified land surveyor. The final topographic map should be included in the final cover certification report and should include all final contours, location of gas vents, gas monitoring wells, groundwater monitoring wells, drainage structures, fences and gates, access roads and all other pertinent site features.

A cover thickness drawing showing thicknesses for each layer (i.e., foundation, vegetation support layer and vegetation layer) and thickness of each layer at each of the survey measurement grid points will be provided. Coordinates defining the perimeter of the final cover will be called out on one of the final drawings.

2.4 Construction Testing

2.4.1 Standard Operating Procedures

CQA monitors will perform field and laboratory tests in accordance with applicable standards specified in the project technical specifications. Standard operating procedures for soil testing will be prepared that describe test procedures and methods used by site testing personnel for the following ASTM test methods. In some instances the standard operating procedure will be prepared or modified by the POR during construction.

The following test standards apply as called out in this manual and in the technical specifications:

Standard	Test Description
ASTM D 698	Moisture-density relations of soils and soil-aggregate mixtures, using 5-½ lb hammer and 12-inch drop
ASTM D 2922	Density of soil and soil-aggregate in place by nuclear methods (shallow depth)
ASTM D 2487	Classification of soils for engineering purposes
ASTM D 2488	Description and identification of soils (visual-manual procedure)

2.4.2 Test Frequencies

The test frequencies for soil infiltration layer are listed in the following table. Additional testing must be conducted whenever work or materials are suspect, marginal, or of poor quality. Additional testing may also be performed to provide additional data for engineering evaluation. The minimum number of tests is interpreted to mean minimum number of passing tests, and any tests that do not meet the requirements will not contribute to the total number of tests performed to satisfy the minimum test frequency.

Table 2-1
Recommended Tests and Observations
for the Vegetation Support Layer

Parameter	Frequency	Test Method
Moisture density relationship (includes Atterberg Limits, No. 200 sieve, and permeability)	1 for each soil type	ASTM D 698
Soil Classification	1 per soil type	ASTM D 2487 and 2488
Field Density and Moisture	3 tests per acre	ASTM D 2922 and ASTM D 2216 or ASTM D 3017
Thickness Verification[1]	A 100-foot grid will be established by a registered Oklahoma surveyor.	Top of foundation layer, top of vegetation support layer, and top of vegetation layer will be surveyed to verify thickness of vegetation layer and vegetation support layer.

[1] Refer to Section 2.2.1 for additional foundation layer survey requirements.

2.5 Reporting

The POR on behalf of the Owner shall submit to the Oklahoma DEQ a Final Cover Certification Report (FCCR) for approval of each final cover area. Section 3 describes the documentation requirements.

3 DOCUMENTATION

The quality assurance/quality control plan depends on thorough monitoring and documentation of all construction activities. Therefore, the POR and CQA monitor will document that all quality assurance requirements have been addressed and satisfied. Documentation will consist of daily recordkeeping, testing and installation reports, nonconformance reports (if necessary), progress reports, photographic records, design and specification revisions, to be included in the Final Cover Certification Report (FCCR). Standard report forms will be provided by the POR prior to construction.

3.1 Preparation of FCCR

The POR, on behalf of the Owner, shall submit to the Oklahoma DEQ an FCCR for approval of each final cover area. The construction methods and test procedures documented in the FCCR will be consistent with this QA/QC Plan.

At a minimum, the FCCR will contain the following:

- A summary of all construction activities
- A summary of all laboratory and field test results
- Sampling and testing location drawings
- A description of significant construction problems and the resolution of these problems
- As-built record drawings
- A statement of compliance with the construction contract documents and design intent, signed, and stamped by a professional engineer(s) registered in the state of Oklahoma.

The as-built record drawings will accurately cite the constructed location of all work items. All surveying and base maps required for the development of the record drawings will be prepared by the surveyor. The POR must review and verify that as-builts are correct. As-builts will be included in the FCCR.

It is understood that the final cover will not be approved until the vegetation layer meets the specifications listed in Section 2.2.4.

APPENDIX I-5

VEGETATION PLAN

Includes pages I-5-1 through I-5-7

CONTENTS

LIST OF TABLES

1 INTRODUCTION

The purpose of this vegetation plan is to set forth the procedures to be used in establishing interim and permanent vegetation at the East Oak Recycling and Disposal Facility located in Oklahoma County, Oklahoma. The site operates under Oklahoma Department of Environmental Quality (ODEQ) permit number 3555036.

This Vegetation Plan was developed using the ODEQ regulations pursuant to OAC 252:515-19-54.

2 VEGETATION PLAN – INTERIM

2.1 Seeding Area

This section has been developed to address the seeding of portions of the site that (1) have not received final cover and (2) will remain undisturbed for more than 90 days. Figure I-5-7 has been developed to show the approximate areas of the site that have established vegetation. ~~Portions of the south and west slope have established vegetation. As seen on Figure I-5-7, n~~No area without vegetation is expected to be undisturbed for 90 days.

~~As shown on Figure I-5-7, waste filling and regrading activities will likely occur on the eastern side slope, the valley area between Mosley Road Landfill and the currently constructed Eat Oak Recycling and Disposal Facility, and top deck in the unshaded areas until these areas reach final grade.~~

2.2 Interim Vegetation Establishment

Table 2-1 lists typical seeding mixtures that will be used for the site during each season. Also included is Table 2-2, which lists Limitations on Noxious Weed Seeds. Similar mixtures and application rates may also be used. It is understood that a variety of application rates and types of seed mixtures will produce adequate vegetative cover. The seeding mixture listed in Table 2-1 is only provided for a reference. The seed may be applied to the landfill slopes by various typical application methods such as hydromulch or seed drilling. Fertilizer will be applied to the seeded area, as needed. However, the following typical application method will be used.

- Additional soil will be added to the sideslopes, as needed, and the soil will be processed using a disc to prepare the soil for seeding.
- Fertilizer will be applied using a commercial spreader at a rate of approximately 150 pounds per acre (lb/acre) and the soil will be simultaneously disked using a disc-harrow. The fertilizer rate may vary, however, an initial rate of 10 (nitrogen) -20 (phosphate) -10 (potassium) may be used.
- The seed mixture will then be applied using a commercial spreader and the area simultaneously disked using a disc harrow.

- After discing the seeded area, hay will be mulched at a rate of approximately 3 bales (1,000 lbs each) per acre. To further minimize erosion potential and facilitate moisture retention, the hay will then be "crimped" using a roller to integrate the hay into the soil.

Maintenance of the interim vegetation will consist of protection, replanting, maintaining existing grades, and repair of erosion damage. Protection will include limiting site traffic or other uses immediately after seeding is completed.

In addition, water and fertilizer will be applied to the seeded areas to facilitate the establishment of vegetation during the months of May through September. Areas that have recently been seeded will be watered until vegetation is established. Typically, water will be applied to these areas on a weekly basis. Water will be obtained from an on-site source (i.e., pond). Both a primary and secondary water source will be identified so that water will be available, as needed. Typical water sources may include local contractors and area municipalities. Fertilizer will be applied at least every two months, or as needed to establish vegetation. The typical nutrient mixture will be 10-20-10, unless site-specific soil tests are performed which indicate a need for a different nutrient mixture. Manufactures recommendations regarding the application of fertilizer will be followed.

After vegetation is established in an area it will be inspected on a monthly basis during the active life of the site. The vegetation cover will be capable of self-regeneration and will require no maintenance. If bare spots develop, then the area will be re-seeded and maintained (e.g., watered and fertilized) as noted above until the vegetation is re-established.

2.3 Dust Control Plan

The main source of dust created at the site is from the site entrance road. Water will be applied to the entrance road on a daily basis or as needed to control dust. Other areas of the site will also be watered, as needed, to control dust. The site manager will routinely inspect the site to identify and control sources of dust.

Table 2-1
Typical Seeding Mixtures[1]

Spring/Summer Planting Season
(Optimal Time for Planting-April 1 through May 30)

Spring Seeding Mixture	Minimum Percent Pure Live Seed Required	Pounds Per Live Seeds Required Per Acre
Common Bermuda Grass	85	12
Blue Stem	65	4
Side Oats Grama	65	6
Rye	85	4
	Total	**26**

Fall/Winter Planting Season
(Optimal Time for Planting-September 1 through February 15)

Fall Seeding Mixture	Minimum Percent Pure Live Seed Required	Pounds Per Live Seeds Required Per Acre
Winter Wheat	75	40
Fescue or Rye	85	15
	Total	**55**

[1] The mixtures shown in Table 2-1 are for reference purposes only. Other mixtures may also be used.

Table 2-2

Oklahoma Department of Agriculture, Food, and Forestry OAC 35:30-25-4. Limitations on Noxious Weed Seeds[1]

Noxious Weed Seed	Limitations of Noxious Weed Seed (Number of Seeds per Pound)
Bindweed, Field (Convolvulus arvensis)	Prohibited
Yerba De Tajo (Eclipta alba)	Prohibited
Red Horned Poppy (Claucium corniculatum)	Prohibited
Knapweed, Russian (Centaurea picris)	Prohibited
Musk Thistle (Carduus nutans L.)	Prohibited
Nutgrass (Cyperus rotundus)	Prohibited
Scotch Thistle (Onoprodum acanthium)	Prohibited
Serrated Tussock (Nassella trichotoma)	Prohibited
Sicklepod (cassia obtusifolia)	Prohibited
Thistle, Canada (Cirsium arvense)	Prohibited
Whitetop or Hoary Cress (Cardaria draba)	Prohibited
Wild Oat [Avena fatus, Avena sterilis, and other wild noncultivated Avena spp., (In Wheat Only)]	Prohibited
Cockebur (Xanthium spp.)	3 per lb.
Jointed Goatgrass (Aegilops cylindrica)	5 per lb.
Moonflower or Giant Morningglory (Calonyction muricatum)	5 per lb.
Ballonvine (Cardiospermum halicacbum)	9 per lb.
Sericea Lespedeza (Lespedeza Cuneata)	9 per lb.
Wild Oat (Avena fatua, Avena sterilis, and other wild noncultivated Avena spp., Except in Wheat)	9 per lb.
Wild Buckwheat (Polygonum convolvulus)	18 per lb.
Onion, Wild or Garlic (Allium spp.)	18 per lb.
Wild Morningglory (Ipomoea spp.)	27 per lb.
Bindweed, Hedge (Convolvulus sepium)	27 per lb.
Johnsongrass (Sorghum halepense) (Except: Johnsongrass will be permitted in Yellow bluestem, Caucasian bluestem, and chaffy grasses not to exceed 300 per lb.)	45 per lb.
Quackgrass (Agrophyron repens)	45 per lb.
Blueweed, Texas (Helianthus ciliaris)	45 per lb.
Wild Mustard (Brassica spp.)	45 per lb.
Corncockle (Agrostemma githago)	45 per lb.
Plantain, Bracted (Plantago aristata)	45 per lb.
Giant Foxtail (Setaria faberi)	54 per lb.
Dodder (Cuscuta spp.)	90 per lb.
Darnel (Lolium temulentum)	90 per lb.
Dock (Rumex spp.)	90 per lb.
Horsenettle (Solanum carolinense)	90 per lb.
Nightshade, Purple (Solanum elaeagnifolium)	90 per lb.
Plantain, Buckhorn (Plantago lanceolata)	90 per lb.
Sorrel, Sheep or Red (Rumex acetosella)	90 per lb.
Cheat or Chess (Bromus secalinus)	200 per lb.
Sum total noxious weeds (Subject to above limitations) (Except in Yellow bluestem, Caucasian bluestem, and chaffy grasses, the sum total noxious weeds shall not exceed 500 per lb.)	200 per lb.

[1] It is unlawful to sell, offer for sale, or expose for sale any agricultural or vegetable seed in Oklahoma if the noxious weed seed per pound is in excess of the following limitations.

3 VEGETATION PLAN – FINAL COVER AREAS

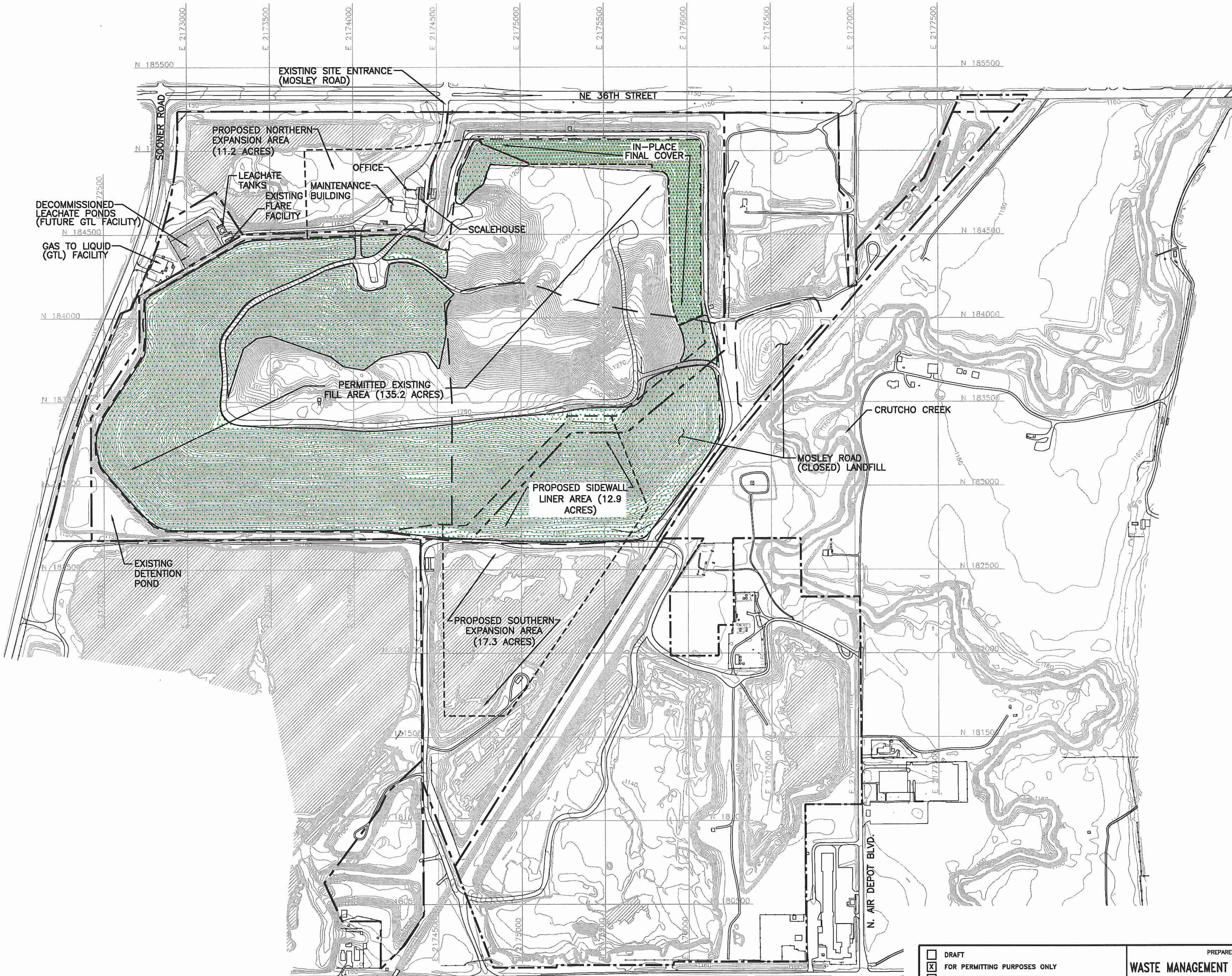
This section has been developed to address the establishment of vegetation on the portions of the landfill, which have received final cover. Permanent vegetation will be established in disposal areas that have reached final grades and completed the installation of a final cover system.

Permanent vegetation will be established using the typical seeding mixtures and application methods discussed in Section 2. Currently the west side slope and the south side slope are near final cover grades and vegetation has been established on these areas. For future areas that will receive final cover, the initial seeding event will occur as follows:

- For final cover that is constructed in the winter, the initial seeding event will consist of a Fall/Winter seed mix, followed by permanent vegetation using a Spring/Summer seeding mixture.
- For final cover that is constructed in the spring, the initial seeding event will consist of a Spring/Summer seed mix, followed by permanent vegetation using a Fall/Winter seeding mixture.

This plan has been developed to be consistent with OAC 252:515-19-54 (i.e., permanent vegetation will be established during the first growing season after closure).

Maintenance of the permanent vegetation will typically consist of protection, replanting, maintaining existing grades, repair of erosion damage, and mowing. After the seeds have sprouted, Waste Management of Oklahoma, Inc., will inspect the slopes for areas with no grass or with thin grass. These areas will be reseeded, watered, and fertilized to establish an acceptable permanent vegetation layer. The maintenance procedures listed in Section 2 will be followed. If there are areas where establishing vegetation is unsuccessful an alternative plan will be developed.



N

0 300 600

SCALE IN FEET

LEGEND

—·—·—	PROPERTY BOUNDARY
— - —	EXISTING PERMIT BOUNDARY
—·—·—	PROPOSED PERMIT BOUNDARY
— — —	PERMITTED LIMITS OF WASTE
- - - -	PROPOSED LIMITS OF WASTE
— — —	MOSLEY ROAD LANDFILL LIMITS OF WASTE
N 183000	STATE PLANE GRID COORDINATE
1180	EXISTING CONTOUR
	ESTABLISHED VEGETATION
	IN-PLACE FINAL COVER

LICENSED PROFESSIONAL ENGINEER
JONATHAN V. QUEEN
24456
OKLAHOMA

5/31/16

NOTES:

1. EXISTING CONTOURS AND ELEVATIONS PROVIDED BY DALLAS AERIAL SURVEYS, INC. FROM AERIAL PHOTOGRAPHY FLOWN JANUARY 19, 2014.
2. PERMIT BOUNDARY WAS REPRODUCED FROM LEGAL DESCRIPTION PREPARED BY LEMKE LAND SURVEYING, INC.
3. PERMITTED LIMITS OF WASTE AND MOSLEY ROAD LANDFILL (CLOSED LANDFILL) LIMITS OF WASTE PROVIDED BY WASTE MANAGEMENT OF OKLAHOMA, INC.
4. IN-PLACE FINAL COVER AREA REPRODUCED FROM LEMKE LAND SURVEYING, INC. VERIFICATION SURVEY DATED JULY 2013 (FINAL COVER AREA 1).

☐ DRAFT
☒ FOR PERMITTING PURPOSES ONLY
☐ ISSUED FOR CONSTRUCTION

DATE: 04/2016
FILE: 0086-356-11
CAD: 2-SITE PLAN.DWG

DRAWN BY: RDM
DESIGN BY: RJS
REVIEWED BY: JVQ

PREPARED FOR
WASTE MANAGEMENT OF OKLAHOMA, INC.

REVISIONS

NO.	DATE	DESCRIPTION
1	05/2016	UPDATED SITE PLAN

Weaver Consultants Group
CA 3804 PE-06/30/2017

TIER III PERMIT MODIFICATION INTERIM VEGETATION AREA

EAST OAK RDF
OKLAHOMA COUNTY, OKLAHOMA

WWW.WCGRP.COM

FIGURE I-5-7

O:\0086\356\EXPANSION-2007\APPENDIX I\AFC\FIGURE I-5-7 REV.dwg, rmorris, 1:2

EAST OAK RECYCLING AND DISPOSAL FACILITY
OKLAHOMA COUNTY, OKLAHOMA
ODEQ PERMIT NO. 3555036

APPENDIX K

QUALITY ASSURANCE/QUALITY CONTROL PLAN FOR LINER AND LEACHATE COLLECTION SYSTEM INSTALLATION AND TESTING

Prepared for

Waste Management of Oklahoma, Inc.

June 2015

Revised January 2016

LICENSED PROFESSIONAL ENGINEER
JONATHAN V.
QUEEN
24436
OKLAHOMA

1/15/16

Prepared by

Weaver Consultants Group, LLC
CA 3804 PE 6/30/2017
6420 Southwest Boulevard, Suite 206
Fort Worth, TX 76109
817-735-9770

WBC Project No. 0086-356-11-40-08

CONTENTS

CONTENTS

CONTENTS (Continued)

TABLES

1 INTRODUCTION

1.1 Purpose

This Quality Assurance/Quality Control (QA/QC) Plan provides the procedures to govern the construction quality of landfill liners in accordance with OAC 252:515, as promulgated by the Oklahoma Department of Environmental Quality (ODEQ) and the EPA Technical Guidance Document: Quality Assurance and Quality Control for Waste Containment Facilities (EPA/600/R-93182, September 1993). The QA/QC Plan, together with the construction drawings and specifications, addresses the soils and geosynthetics components of the liner and leachate collection system in accordance with OAC 252:515-11 and 252:515-13.

This QA/QC Plan is divided into the following parts:

- Section 1 – Introduction
- Section 2 – Construction Quality Assurance for Earthwork
- Section 3 – Construction Quality Assurance for Geosynthetics
- Section 4 – Construction Quality Assurance for Piping
- Section 5 – Construction Quality Assurance for Drainage Material
- Section 6 – Documentation

1.2 Definitions

Whenever the terms listed below are used, the intent and meaning will be interpreted as indicated.

ASTM

The American Society for Testing and Materials

Construction Quality Assurance (CQA)

A planned system of activities that provides the Operator and permitting agency assurance that the facility was constructed as specified in the design. Construction quality assurance includes observations and evaluations of materials, and workmanship necessary to determine and document the quality of the constructed facility. Construction quality assurance (CQA) refers to measures taken by the CQA organization to assess if the installer or contractor is in compliance with the plans and specifications for a project.

Construction Quality Assurance Professional of Record (POR)

The POR is an authorized representative of the Operator and has overall responsibility for construction quality assurance that confirms that the facility was constructed in accordance with plans and specifications approved by the permitting agency. The POR must be registered as a Professional Engineer in Oklahoma and experienced in geotechnical testing and its interpretations. Experience and education must include geotechnical engineering, engineering geology, soil mechanics, geotechnical laboratory testing, construction quality assurance and quality control testing, and hydrogeology. The POR must show competency and experience in certifying like installations, and be approved by the permitting agency, and be presently employed by or practicing as a geotechnical engineer in a recognized geotechnical/environmental engineering organization. POR or his designated representative will be on-site during all liner system construction.

The POR may also be known in applicable regulations and guidelines as the CQA Engineer, Resident Project Representative, or the Geotechnical Professional (GP).

Construction Quality Assurance (CQA) Monitors

These are representatives of the POR who work under direct supervision of the POR. The CQA monitor is responsible for quality assurance monitoring and performing onsite tests and observations. Field observations, testing, or other activities associated with CQA may be performed by the CQA monitor(s) on behalf of the POR.

Contract Documents

These are the official set of documents issued by the Operator. The documents include bidding requirements, contract forms, contract conditions, specifications, contract drawings, addenda, and contract modifications.

Contract Specifications

These are the qualitative requirements for products, materials, and workmanship upon which the contract is based.

Contractor

This is the person or persons, firm, partnership, corporation, or any combination, private or public, who, as an independent contractor, has entered into a contract with the Operator, and who is referred to throughout the contract documents by singular number and masculine gender.

Design Engineer

These individuals or firms are responsible for the design and preparation of the project construction drawings and specifications. Also referred to as "designer" or "engineer."

Earthwork

This is a construction activity involving the use of soil materials as defined in the construction specifications and Section 2 of this plan.

Film Tear Bond (FTB)

A failure in the geomembrane sheet material on either side of the seam and not within the seam itself.

Geomembrane Liner (GM)

This is a synthetic lining material, also referred to as geomembrane, membrane liner, or sheet. The term Flexible Membrane Liner (FML) is also used for GM.

Geosynthetic Clay Liner (GCL)

This is a composite lining material consisting of bentonite adhered to a covering geosynthetic material.

Geosynthetics Contractor

This individual is also referred to as the "contractor" or "installer" and is the person or firm responsible for geosynthetic construction. This definition applies to any person installing FML, GCL, or geotextile, even if not his primary function.

Independent Testing Laboratory

A laboratory that is independent of ownership or control by the permittee or any party to the construction of the liner system or the manufacturer of the liner system products used.

Liner Installation and Testing Plan (LIT)

Certification report for the liner system, prepared and sealed by the POR, that is submitted to ODEQ for approval.

Manufacturing Quality Assurance (MQA)

A planned system of activities that provides assurance that the raw materials were constructed (manufactured) as specified.

Manufacturing Quality Control (MQC)

A planned system of inspection that is used to directly monitor and control the manufacture of a material.

Municipal Solid Waste Landfill Regulations (MSWLR)

The state regulations for which management of solid waste is regulated. For Oklahoma, it is the Title 252 Department of Environmental Quality Chapter 515 Management of Solid Waste Regulations.

Nonconformance

This is a deficiency in characteristic, documentation, or procedure that renders the quality of an item or activity unacceptable or indeterminate. Examples of non-conformances include, but are not limited to, physical defects, test failures, and inadequate documentation.

Operator

The organization that will operate the disposal unit.

Operator's Representative

The official representative of the operator responsible for planning, organizing, and managing the construction activities.

Organics

Organic matter is material that may be capable of decay (e.g., plant material), the product of decay, or both.

Permittee's Representative

This is the person that is an official representative of the permittee responsible for planning, organizing, and controlling the design and construction activities.

Panel

This is a unit area of the FML which will be seamed in the field.

Quality Assurance (QA)

This is a planned and systematic pattern of procedures and documentation to ensure that items of work or services meet the requirements of the contract documents. Quality assurance includes quality control. Quality assurance will be performed by the POR and CQA monitor.

Quality Control (QC)

These actions provide a means to measure and regulate the characteristics of an item or service to comply with the requirements of the contract documents. Quality control will be performed by the contractor.

1.3 Meetings

To facilitate construction and to define construction goals and activities, coordination between the Design Engineer, Owner, Operator, POR, CQA Monitor, and Contractor is essential. To meet this objective, meetings will be held prior to and throughout the construction process. Per OAC 252:515-11-5, ODEQ shall be notified at least 48 hours in advance of the Pre-construction Meeting and at least two weeks before liner system construction begins. The pre-construction notification will (1) define the area to be constructed and (2) include the names of the contractors and the QA and QC officials. The notification will also include pre-construction test information.

2 CONSTRUCTION QUALITY ASSURANCE FOR EARTHWORK

2.1 Introduction

This section of the Quality Assurance/Quality Control (QA/QC) Plan addresses the construction of the earthwork components of the liner system and outlines the QA/QC Plan program to be implemented with regard to materials selection and evaluation, laboratory test requirements, field test requirements, and treatment of problems.

The landfill is designed to include a Subtitle D composite liner for the undeveloped liner area. The liner system for the undeveloped area will consist of a 2-foot-thick compacted clay liner overlain by a geosynthetic clay liner (GCL) and a 60-mil-thick high density polyethylene (HDPE) Flexible Membrane Liner (FML). Refer to Section 3 of this QA/QC Plan for more information regarding the Construction Quality Assurance for the FML and GCL.

2.2 Earthwork Construction

The following paragraphs describe general construction procedures to be used for various earthwork components within the landfill. The earthwork construction specifications will be developed based on the material and construction procedures outlined in this section of the QA/QC Plan for each specific liner construction.

2.2.1 Subgrade

Subgrade refers to a surface which is exposed after stripping topsoil or excavating to establish the grade directly beneath the composite liner. The subgrade must be constructed to allow for the composite liner to conform to the permitted Top of Liner Plan.

Prior to beginning liner construction, the subgrade area will be stripped to a depth sufficient to remove all loose surface soils or soft zones within the exposed excavation. The upper 6 inches of the subgrade will be compacted to a minimum of 90 percent of the maximum dry density as determined by the Standard Proctor (ASTM D698), unless the subgrade is part of the perimeter berm. Perimeter berm soils shall be compacted to 95 percent of the maximum dry density. The liner subgrade area will be proof rolled with heavy, rubber tired construction equipment to detect unstable areas. Unstable areas will be undercut to firm material and backfilled with suitable compacted general fill. The subgrade will also be scarified prior to placement of the first lift of clay liner.

Subgrade voids and cracks are expected to be minor. However, the subgrade will be re-worked as necessary to provide a foundation suitable for soil liner placement. Visual examination of the subgrade preparation by the CQA monitor will generally be sufficient to evaluate its suitability as a foundation for the subgrade. The CQA monitor may find that physical testing is necessary to evaluate the prepared subgrade or general fill placed in large voids.

The POR will approve the prepared subgrade prior to the placement of soil liner or general fill. Approval will be based on a review of test information, if applicable, and CQA monitoring of the subgrade preparation.

Surveying will be performed to verify that the finished subgrade is to the lines and grades specified in the design with a vertical tolerance of -0.2 feet to +0.0 feet to ensure that the clay liner will achieve a 2-foot minimum thickness.

2.2.2 General Fill

General fill material placed below the floor of the composite liner will be placed in uniform lifts to an elevation of subgrade minus 1 foot and proof-rolled with a heavy, rubber tired construction equipment to detect unstable areas. Unstable areas will be undercut to firm material and backfilled with suitable compacted general fill. The remaining 1 foot will be placed in uniform lifts that do not exceed 9 inches in loose thickness and are compacted to at least 90 percent of the maximum dry density as determined by the Standard Proctor (ASTM D698) at a moisture content equal to or greater than the optimum moisture content.

General fill material placed as part of the perimeter berm will be placed in uniform lifts that do not exceed 9 inches in loose thickness and are compacted to at least 95 percent of the maximum dry density as determined by the Standard Proctor (ASTM D698) at a moisture content equal to or greater than the optimum moisture content.

General fill material will be relatively homogeneous clay, silty clay, sandy clay, or clayey sand. The material shall classified as CL, CH, ML, SM, or SC according to the Unified Soil Classification System (USCS). General fill shall be tested to determine the USCS classification at a frequency of 1 per 50,000 cy. The general fill material interface strength parameters will be verified by the Design Engineer prior to construction by review of existing data or completion of additional testing to verify the assumed strength parameter values utilized in the site slope stability analysis. The analysis was developed using peak strength values and a factor of safety of 1.5 (long-term condition), 1.3 (short-term condition), and 1.15 (seismic condition). If test results differ from assumed values, the analysis will be updated to meet these minimum factor of safety values and the additional analysis will be placed in the Site Operating Record.

2.2.3 Soil Liner

The soil liner will consist of a minimum 2-foot-thick compacted clay liner (measured perpendicular to the subgrade surface) that will extend along the floor and side slopes of the landfill. The soil liner will be constructed in continuous, single, compacted lifts (6 inches thick) parallel to the floor and sideslope subgrades with a permeability of 1×10^{-7} cm/s or less.

2.2.3.1 Soil Liner Material

Adequate clayey soil liner material will be available from landfill excavations, onsite borrow sources and/or offsite borrow sources. The liner soil will be free of debris, rock greater than 1 inch in diameter, vegetative matter, frozen materials, foreign objects, and organics. Laboratory tests will verify that materials are adequate to meet the compacted clay liner requirements prior to liner construction. As necessary, an off-site borrow source can be used for soil liner and protective cover construction. Representative samples from onsite and/or offsite borrow sources will be subject to the minimum pre-construction testing program shown in Table 2-1.

Table 2-1
Pre-Construction Testing Schedule for Soil Liner Material

Test	Method Used	Frequency[4]
Soil Classification	ASTM D2487	1 per 10,000 cy
Particle Size Analysis (including % passing No. 200 Sieve)	ASTM D422 or ASTM D1140	1 per 10,000 cy
Atterberg Limits	ASTM D4318	1 per 10,000 cy
Moisture Content	ASTM D2216 or ASTM D4643	1 per 10,000 cy
Standard Proctor Test or Modified Proctor Test[3]	ASTM D698, if light weight compactor is to be used	1 per 10,000 cy
	ASTM D1557, if heavy weight compactor is to be used	
Hydraulic Conductivity[1]	ASTM D5084[2]	1 per 10,000 cy

1 Conduct this test on remolded sample that is compacted to 95% of the maximum dry density and at the optimum moisture content, as determined from the Standard Proctor test or compacted to 90% and at optimum moisture content for Modified Proctor test. Allow 1% tolerance for both dry density and moisture content. The sample fabricated with lower-bound density and moisture should represent worst case conditions for hydraulic conductivity results.

2 Testing procedures in Appendix VII of the Corps of Engineers Manual EM 1110-2-1906, November 30, 1970, Laboratory Soils Testing, is an alternative method.

3 Soil types or blends proposed for control using alternative moisture-density acceptance criteria shall be tested by both Standard and Modified Proctor methods, along with their corresponding hydraulic conductivity tests.

4 1 per 10,000 cubic yard (cy) or a minimum of 1 test per source or soil type, whichever is greater. Cubic yard to be calculated from in-place volumes of certified liner construction. The calculated number of tests shall be rounded up to the nearest whole number.

The Proctor moisture-density curves shall be developed for each type of soil determined suitable as soil liner material and shall be used during the construction phase as a performance reference for compaction and moisture control. However, if soil types vary substantially and cannot or will not be segregated, representative blends of the soil types anticipated to be utilized for soil liner construction should also be sampled and tested. Separate but equivalent portions of the sample should be used if both Standard and Modified Proctor tests are to be performed for a given soil type or soil blend. Samples should not be oven-dried nor dried back more than two to three percent drier than necessary to obtain the desired test point. The zero air voids line shall be computed and included along with the Proctor curves, indicating the specific gravity value used.

An alternative moisture-density acceptance criteria may be established for a particular soil type or blend using both the Standard and Modified Proctor relationships. In this case, both tests must be run for that soil, and an acceptable range of moisture and density may be defined as shown in Figure 2-1. This approach will allow a rational method for accepting or disapproving compaction results when more than one type of compactor or compaction effort is used or when variations in Proctor relationships make choosing the most appropriate curve difficult. The acceptable moisture-density range shall be determined by the POR.

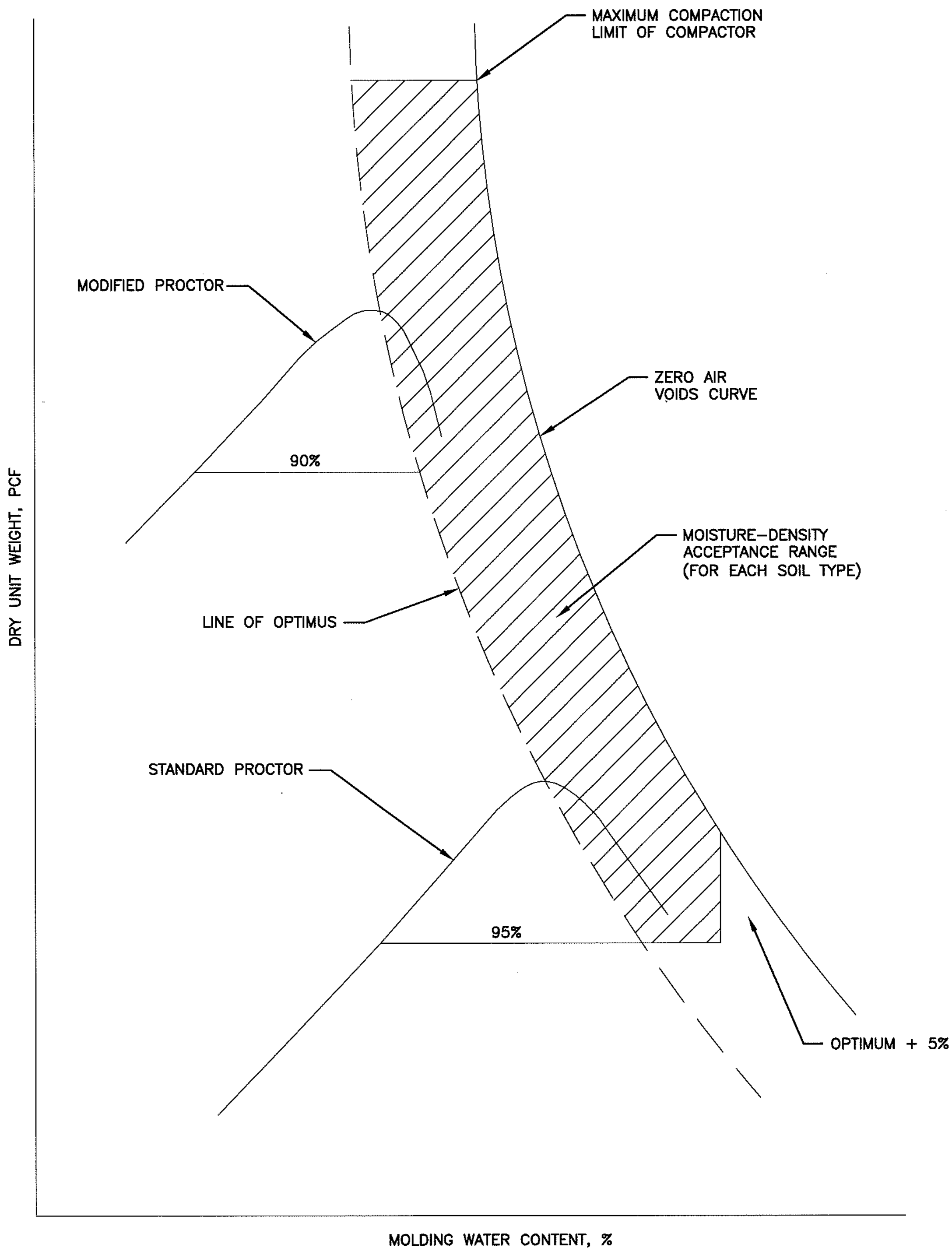
As a general rule, pre-construction tests will be performed at a frequency not less than one test series for every 10,000 cubic yards of soil to be used in soil liner construction, unless soil types are limited and easily distinguished. As soil is usually made available subsequent to excavation during soil liner construction, additional pre-construction samples should be taken and tests performed when soils vary, or when the initial pre-construction test results appear inappropriate or questionable. If and when the same borrow source is utilized for the soil supply of more than one soil liner area, results from previous tests may be used to supplement the pre-construction data.

Soils used in soil liners will have the following minimum values verified by testing in a soil laboratory prior to liner construction.

Table 2-2
Required Soil Liner Material Properties

Test[1]	Specification
Coefficient of Permeability (Remolded Sample)	$1.0\text{x}10^{-7}$ cm/s or less
Plasticity Index	≥ 10
Liquid Limit, percent	≥ 24
Percent Passing No. 200 Mesh Sieve	≥ 30
Percent Retained on #4 Sieve	≤ 20

[1] Testing will be performed in accordance with the test methods included in Section 2.3.



TIER III PERMIT MODIFICATION
ACCEPTABLE ZONE FOR SOIL LINER MOISTURE/DENSITY CONTROL

EAST OAK RDF
OKLAHOMA COUNTY, OKLAHOMA

Weaver Consultants Group
CA 3804 PE–06/30/2015

DRAWN BY: VRS	DATE: 06/2015	FILE: 0086–356–11
REVIEWED BY: JVQ	CAD: FIGURE 2–1.dwg	FIGURE 2–1

2.2.3.2 Liner Construction

The soil liner material will be placed in maximum 9-inch-thick loose lifts to produce compacted lift thickness of approximately 6 inches. The material will be compacted to a minimum of 95 percent of the maximum dry density determined by Standard Proctor (ASTM D698), or 90 percent of the maximum dry density as determined by the Modified Proctor (ASTM D1557) at a moisture content equal to or greater than the optimum moisture content.

The soil liner must be compacted with a pad/tamping-foot (preferable) or prong-foot (sheepsfoot) roller. The lift thickness will be controlled so that there is total penetration through the loose lift under compaction into the top of the previously compacted lift; therefore, the lift thickness must not be greater than the pad or prong length. Use of pad/tamping-foot or prong-foot rollers will provide sufficient roughening of liner lifts surface for bonding between lifts. These procedures are necessary to achieve adequate bonding between lifts and reduce seepage pathways. Adequate cleaning devices must be in place and maintained on the compaction roller so that the prongs or pad feet do not become clogged with clay soils to the point that they cannot achieve full penetration during initial compaction. The footed roller is necessary to achieve this bonding and to reduce the individual clods and achieve a blending of the soil matrix through its kneading action. In addition to the kneading action, weight of the compaction equipment is important. Multiple passes are recommended for a vehicle with front and rear drums. The soil liner will not be compacted with a bulldozer or any track-mobilized equipment unless it is used to pull a pad-footed roller.

Water shall be applied as necessary to the material and worked evenly into the material with the compaction equipment. Water used for the soil liner must be clean and not contaminated by waste or any objectionable material. Collected onsite stormwater may be utilized if it has not come into contact with the solid waste.

Soil liner construction should not be conducted in adverse weather conditions (heavy rain, freezing temperatures, etc.).

The soil liner will be visually inspected to evaluate its integrity during and after construction. CQA testing of the soil liner will also be performed as the soil liner is being constructed. Testing of the soil liner is addressed in Section 2.3. Sections of compacted soil liner which do not pass both the density and moisture requirements will be reworked with additional passes of the compactor until the section in question passes. All field density and moisture test results will be incorporated into the LIT Report.

Hydraulic conductivity samples will be obtained by pushing a sampler through the constructed clay liner. The sample from each test location will be sealed and transported to the laboratory. Two samples may be collected at each sample location and labeled the "A" and "B" sample. The sampling holes (e.g., samples for hydraulic conductivity) will be backfilled with bentonite or a bentonite/clay liner soil material mixture consisting of at least 20 percent bentonite.

If the integrity of the "A" sample appears to have been compromised during the transportation of the sample prior to testing, the "B" sample may be tested. In addition, if an "A" sample hydraulic conductivity test does not comply with the minimum allowable value, the "B" sample collected at the same location may be tested to determine compliance with the hydraulic conductivity requirements if during testing of the "A" sample, the ASTM D5084 or EM 1110-2-1906 procedure was not followed or the permeameter malfunctioned.

The POR will provide a detailed justification of the use of the "B" sample, if applicable, in the LIT Report.

If the "B" sample passes, the area will be considered in compliance. If the "B" sample fails (or sample "A" fails in such a way that there is not an option to use the "B" sample), the test interval will be considered unsatisfactory for the area bounded by passing test locations (but not extending past a satisfactory test location). Additional tests may be taken to further define the unsatisfactory area. The area defined unsatisfactory will be reworked and retested in accordance with this section.

Furthermore, if it is determined that the "B" sample may not be used to replace the "A" sample result, then the test interval will be considered unsatisfactory for the area bounded by passing test locations (but not extending past a satisfactory test location).

Once the exact area is determined, the constructed liner lifts will be removed to the bottom of the lift that did not pass the hydraulic conductivity test, and reconstructed. Reconstructed liner area is subject to testing frequencies listed in Table 2-3. Reconstruction activities, including additional testing and surveying, will be incorporated into the LIT Report.

The finished surface of the final lift of soil liner must be rolled with a smooth, steel-wheeled roller to obtain a hard, uniform, and smooth surface. The surface of the final lift of soil liner will then be inspected by the CQA monitor. All undesired materials will be removed from the liner surface, including removing rocks, cobbles, roots and other foreign objects over 1 inch in diameter, as well as all surface rocks regardless of size. Any voids created by removing undesired materials will be backfilled with liner material to the density specifications outlined for liner construction and tested at the discretion of the CQA monitor.

Surveying will be performed to verify that the finished top of liner grade is to the lines and grades specified in the design with a vertical tolerance of -0.0 feet to +0.2 feet to ensure that the clay liner achieves a 2-foot minimum thickness.

The soil liner will be prevented from losing moisture, protected from desiccation cracking, frost damage or damage from equipment prior to placement of the GCL and FML. Preserving ~~the moisture content of~~ and protecting the installed soil liner will be dependent on the earthwork contractors means and methods, and is subject to POR approval.

2.2.4 Leachate Collection/Protective Cover

The leachate collection layer consists of a 12-inch-thick sand layer with a hydraulic conductivity of $1x10^{-3}$ cm/s or greater. The protective cover material will either be an additional 12-inch-thick sand layer ($k \geq 1x10^{-3}$ cm/s) or a 12-inch-thick layer of tire chips (floor grades only).

The leachate collection/protective cover material will consist of soil materials that have not previously come in contact with solid waste and do not contain materials detrimental to the underlying geosynthetics. The leachate collection/protective cover material will be free of organics, foreign objects, or other deleterious materials. The physical characteristics of the leachate collection/protective cover material will be evaluated through visual observation and laboratory testing during construction. Leachate collection/protective cover (soil) material will be tested for permeability at one test per 100,000 square feet. Additional testing during construction will be at the discretion of the CQA monitor.

The leachate collection/protective cover material will be placed using low ground pressure equipment as outlined in Section 3.6. The leachate collection/protective cover material will be placed by spreading in front of the spreading equipment with a minimum of 12 inches of soil between the spreading equipment and the installed geosynthetics. Under no circumstances will the construction equipment come in direct contact with the installed geosynthetics.

Surveying will be performed to ensure that the leachate collection/protective cover material achieved a 2-foot minimum thickness.

During construction the CQA monitor will:

- Verify that grade control is performed prior to work.
- Verify that underlying geosynthetic installations are not damaged during placement operations or by survey grade controls. Mark damaged geosynthetics and verify that damage is repaired.
- Verify that the cover soil for sideslopes is pushed from the toe up the slope.
- Monitor haul road thickness over geosynthetic installations and verify that equipment hauling and materials placement meet equipment specifications (see Section 3.6).
- The POR will coordinate with the project surveyor to perform a thickness verification survey of the leachate collection/protective cover materials upon completion of placement operations. Verify corrective action measures as determined by the verification survey.

2.2.5 Anchor Trench Backfill

The anchor trench backfill material for geosynthetic anchoring will be placed in uniform lifts which do not exceed 12 inches in loose thickness and will be compacted. Tests may be taken at the discretion of the CQA monitor to evaluate the quality of the backfill. The test results will not be required as part of the LIT Report.

2.3 Construction Testing

2.3.1 Testing Procedures

Testing and evaluation of the soil liner during construction will be in accordance with the ODEQ Municipal Solid Waste Landfill Regulations (MSWLR). The construction methods and test procedures documented in the LIT report (see Section 6) will be consistent with this QA/QC Plan and the MSWLR.

CQA monitors will perform field and laboratory tests in accordance with applicable standards outlined in the specifications. The following test standards apply:

Standard	Test Description
ASTM D698	Moisture-density relations of soils and soil-aggregate mixtures, using 5½-lb rammer and 12-inch drop
ASTM D1557	Moisture-density relations of soils and soil-aggregate mixtures using 10-lb rammer and 18-inch drop
ASTM D422	Particle size analysis of soils
ASTM D6938	Density and waste content of soil and soil aggregate in place by nuclear methods
ASTM D2216	Laboratory determination of water (moisture) content of soil and rock by mass
ASTM D2434	Permeability of granular soils
ASTM D5084	Hydraulic conductivity of saturated porous materials
ASTM D4318	Liquid limit, plastic limit, and plasticity index of soils
ASTM D1140	Amount of material in soils finer than No. 200 sieve
ASTM D2487	Classification of soils for engineering purposes
EM 1110-2-1906	US Army Corps of Engineers permeability test
ASTM D2488	Description and identification of soils (visual-manual procedure)

Standard	Test Description
ASTM D2937	Density of soil in place by the drive-cylinder method
ASTM D2167	Density and unit weight of soil in place by the rubber balloon method
ASTM D1556	Density and unit weight of soil in place by the sand-cone method
ASTM D4643	Determination of water (moisture) content of soil by the microwave oven method
ASTM D1587	Thin-walled tube sampling of soils for geotechnical purposes
ASTM D3042	Insoluble residue in carbonate aggregates

2.3.2 Test Frequencies

OAC 252:515-11-32, 33, 34, 36, & 37 establish the required tests, frequencies, and properties for the earthwork construction quality assurance. The pre-construction testing schedule for soil liner material is listed on Table 2-1. The testing frequencies for the earthwork are listed in Table 2-3 and establish a minimum number of required tests. Additional testing must be conducted whenever work or materials are suspect, marginal, or of poor quality. Additional testing may also be performed to provide additional data for engineering evaluation. Any retests performed as a result of a failing test do not contribute to the total number of tests performed to satisfy the minimum test frequency.

Table 2-3
Minimum Earthwork Construction Testing Frequencies

Test (ASTM No.)	Subgrade	General Fill[2]	Soil Liner Construction	Leachate Collection/ Protective Cover
Moisture/Density of Soil In-Place (D6938)[5]	3 per acre for upper 6 inches only	3 per acre per 6-inch lift[1]	3 per acre per 6-inch lift[4]	N/A
Visual Classification (D2487 and D2488)	N/A	Continual during placement	Continual during placement	Continual during placement
Hydraulic Conductivity (D2434, D5084, or Corps of Engineers EM 1110-2-1906, Appendix VII)	N/A	N/A	2 per acre for top 12 inches of bottom liner; 1 per acre for top 12 inches of sidewall liner with $k \leq 1 x 10^{-7}$ cm/s[6]	Only applicable for 12 inch or 24 inch leachate collection/protective cover material with $k \geq 1 x 10^{-3}$ cm/s. The frequency shall be 1/100,000 sf.
Survey/Thickness Verification[3]	100-foot square grid points with a vertical tolerance of -0.2 feet to 0.0 feet on the top of subgrade (bottom of clay) surface	100-foot square grid points with a vertical tolerance of -0.2 feet to 0.0 feet on the top of general fill (bottom of clay) surface	100-foot square grid points with a vertical tolerance of 0.0 feet to +0.2 feet on the top of soil liner surface, minimum 2 reference points, minimum thickness required	100-foot square grid points with a minimum of 2 reference points, minimum thickness required

1 General fill material placed below the floor of the composite liner will be placed in uniform lifts to an elevation of subgrade minus 1 foot and proof-rolled with a heavy, rubber tired construction equipment to detect unstable areas. Unstable areas will be undercut to firm material and backfilled with suitable compacted general fill. The remaining 1 foot will be placed in uniform lifts that do not exceed 9 inches in loose thickness and are compacted to at least 90 percent of standard Proctor (ASTM D698) at a moisture content equal to or greater than the optimum moisture content.

2 General fill material will be relatively homogeneous clay, silty clay, sandy clay, or clayey sand. The material shall classify as CL, CH, ML, SM, or SC according to the Unified Soil Classification System (USCS). General fill shall be tested at a frequency of 1 per 50,000 cy.

3 Surveying to be completed by a registered Oklahoma surveyor. The thickness verification will be supplemented by additional points deemed necessary by the POR, such as breaks in grade and at the leachate piping and sump locations. The selected grid should be the same for both beginning and finished elevations of the soil liner so that the minimum liner thickness can be verified.

4 A minimum of two tests shall be performed on the bottom and one on sideslope areas.

5 To include the conventional oven drying method (ASTM D2216) performed on every 10 samples.

6 In-situ samples shall be retrieved in accordance with ASTM D1587.

3 CONSTRUCTION QUALITY ASSURANCE FOR GEOSYNTHETICS

3.1 Introduction

This section of the QA/QC Plan addresses the construction of the geosynthetic components of the liner system and outlines the QA/QC Plan program to be implemented with regard to materials selection and evaluation, laboratory test requirements, field test requirements, and treatment of problems.

The overall goal of the geosynthetics quality assurance program is to assure that proper construction techniques and procedures are used and the geosynthetic contractor implements his quality control plan in accordance with this QA/QC Plan. The quality assurance program is intended to identify and define problems that may occur during construction and to observe that these problems are avoided and/or corrected before construction is complete.

3.2 Geosynthetics Quality Assurance

3.2.1 General

The composite liner system provides the primary means for preventing leachate infiltration into groundwater. A GCL and geomembrane are components of the composite liner. Proper geosynthetic installation is a crucial work element, which greatly affects the performance of the composite liner system. Construction quality control for the geosynthetic installation will be performed by the geosynthetic installation contractor. Construction quality assurance for the geosynthetic installation will be performed by the POR to assure the geosynthetics is constructed as specified in the design. Construction must be conducted in accordance with the procedures outlined in this QA/QC Plan. To monitor compliance, a quality assurance program will include the following:

- A review of the manufacturer's quality control testing
- Material conformance testing by an independent third party laboratory
- Field and construction testing
- Construction monitoring

Conformance testing refers to material testing performed by an independent third party laboratory that takes place prior to material installation. Field and construction testing includes testing that occurs during geosynthetics installation.

Quality assurance testing will be conducted in accordance with this QA/QC Plan. Field testing will be observed by the CQA monitor. Documentation must meet the requirements of this QA/QC Plan.

3.3 Geosynthetic Clay Liner (GCL)

The composite liner system consisting of a 2-foot-thick compacted clay liner overlain by a Geosynthetic Clay Liner (GCL). Material properties based on Geosynthetic Research Institute recommendations described in GRI-GCL3 have been included in Table 3-1 – Required Testing for GCL Materials. The GCL used for the alternative liner system will meet or exceed the required properties.

3.3.1 Delivery

The GCL will be labeled and shipped in rolls, which are wrapped individually in relatively impermeable and opaque protective covers. GCL must be rolled by the manufacturer in a fashion to prevent collapse during transit. The GCL rolls must be stored above ground (i.e., wooden pallets) and covered with a waterproof tarpaulin.

A dedicated storage area will be selected at the job site or at an alternate offsite area per owner's direction. The selected area will be level, dry, and well drained. Rolls will be stored in a manner that prevents sliding or rolling from the stacks. Rolls should be stacked no higher than three rolls to protect the integrity of roll cores and ensure safe material handling. Stored GCL materials will be covered with a plastic sheet or tarpaulin until it is installed. The integrity and legibility of the labels will be preserved during storage.

Visual inspection of each GCL roll will be made during unloading to identify any packaging that has been damaged. Rolls with damaged packaging will be marked and set aside for further inspection. The packaging will be repaired, for acceptable GCL rolls, prior to being placed in storage. If necessary, the party responsible for unloading the GCL will contact the manufacturer prior to shipment to ascertain the suitability of the proposed unloading methods and equipment.

3.3.2 Conformance Testing

A reinforced GCL which consists of bentonite encapsulated between two geotextiles, one nonwoven and one woven, which are needle punched together will be used for liner sideslopes. An unreinforced GCL which consists of bentonite encapsulated between two geotextiles, one nonwoven and one woven, will be used for liner floor grades. The GCL materials and its components will be tested in accordance with Table 3-1 by the supplier/GCL manufacturer and a third party independent laboratory and will have the required values listed in Table 3-2. A certificate of analysis for each GCL roll will be submitted as part of the quality control documentation. Manufacturer hydraulic conductivity testing of GCL seams must be performed by using a flow box or other suitable device per adjoining material and type. Hydraulic conductivity value must be equal to or less than the specified hydraulic conductivity value for the GCL ($5x10^{-9}$ cm/s). The manufacturer will provide recommended seaming procedures and supporting test (flow box or other suitable device). The manufacturer will provide documentation showing the GCL seams are no more permeable than the GCL itself at a confining pressure anticipated in the field.

The manufacturer will provide inspection reports demonstrating that needle-punched nonwoven geotextile were inspected using metal detectors for the presence of broken needles and were found to be needle free.

The POR will review the manufacturer's certification (quality control certificate) and verify that the GCL meets the values given in the plan or specifications for those tests listed in Table 3-1. Required quality control documentation will be submitted to the POR prior to shipment of GCL to the site. Requirements for GCL materials are listed in Table 3-2.

Table 3-1
Required Testing for GCL Materials

Responsible Party	Test	Type of Test	Standard Test Method	Frequency of Testing
Supplier or GCL Manufacturer	Bentonite[1]	Free Swell	ASTM D5890	per 50 tons (minimum of 1 test for each construction event)
		Fluid Loss	ASTM D5891	
	Geotextile	Mass/Unit Area	ASTM D5261	per 25,000 sy
GCL Manufacturer	GCL Product	Bentonite Mass/Unit Area	ASTM D5993	per 5,000 sy
		Bentonite Moisture Content	ASTM D5993	
		Tensile Strength	ASTM D6768	per 25,000 sy
		Peel Strength	ASTM D6496	per 5,000 sy
		Permeability[2]	ASTM D5887	per 30,000 sy
		Lap Joint Permeability	Flow box or other suitable device	per GCL adjoining material and lap type[3]
Independent Laboratory (Conformance Testing)	GCL Product	Bentonite Mass/Unit Area	ASTM D5993	per 100,000 sf
		Permeability	ASTM D5887	

[1] Tests to be performed on bentonite before incorporation into GCL.
[2] Report last 20 permeability values, ending on production date of supplied GCL.
[3] May also be done as conformance testing.

Table 3-2
Required Properties for Unreinforced and Reinforced GCL Materials

Property	Required Values [1]	
	Unreinforced GCL	Reinforced GCL
Free Swell (milliliter/2g)	24 (minimum)	24 (minimum)
Fluid Loss (milliliters)	18 (maximum)	18 (maximum)
Geotextile Mass per Unit Area (oz/yd^2)		
• Nonwoven	3.0 (minimum)	5.8 (minimum)
• Woven	3.0 (minimum)	3.0 (minimum)
Bentonite Mass per Unit Area[2] (lb/sf)	0.75 (minimum)	0.75 (minimum)
Bentonite Moisture Content	35 (maximum)	35 (maximum)
Tensile Strength (lb/in)	23 (minimum)	23 (minimum)
Peel Strength[3] (lb/in)	1.0 (minimum)	2.1 (minimum)
GCL Permeability (cm/s)[4]	$5x10^{-9}$ (maximum)	$5x10^{-9}$ (maximum)
Lab Joint Permeability (cm/s)[5,6]	$5x10^{-9}$ (maximum)	$5x10^{-9}$ (maximum)

[1] Manufacturer will demonstrate that the above listed values will be met prior to shipment in accordance with Table 3-1.
[2] Bentonite mass per unit area of GCL must be reported at zero percent moisture content for the finished product.
[3] Value is required for GCL and geotextile.
[4] Permeability is listed for the finished product at a gradient of 1.0.
[5] Minimum overlap is 2 feet. The values listed are minimum dry bentonite amount for 1 foot of overlap. Manufacturer specified value will be used if it is higher.
[6] Manufacturer will provide certification that seams are no more permeable than the GCL material under similar normal stress conditions.

3.3.3 GCL Installation

Installation of GCL will have continuous on-site monitoring during construction by the POR or his designated representative. The installer will provide a panel layout plan, which will be reviewed by the POR prior to any material deployment. The POR must review field conditions and approve revised panel layout plan if the field conditions vary from the original plan layout.

3.3.3.1 Surface Preparation

The surface of subgrade for the GCL installation will be stable. It will be smooth and free of foreign and organic material, sharp objects, exposed soil or aggregate particles greater than 1 inch (or less if recommended by the manufacturer), or other deleterious materials. Standing water or excessive water on the soil liner will not be allowed. Prior to GCL installation, the POR will verify the following:

- The grades below the GCL have been verified and accepted by the GCL contractor.

- All construction stakes and hubs have been removed and the resultant holes have been backfilled.
- Required documentation for constructed layers and soil liner preparation below the GCL have been completed and are acceptable.
- The supporting surface has been rolled to provide a smooth surface and does not contain materials, which could damage the GCL or adjacent layer. The soil liner will be rolled with a smooth-drum compactor. Protrusions extending more than 1 inch (or less if recommended by the manufacturer) from the soil liner surface, as well as all surface rocks, will be removed.

3.3.3.2 Deployment

Equipment used to deploy GCL over soil must not cause excessive rutting of the soil liner. Construction equipment (other than low contact pressure rubber-tired vehicles such as ATVs or golf carts) on the GCL will not be allowed. Deployed GCL panels should contain no folds or excessive slack. Generators, gasoline or solvent cans, tools, or supplies must not be stored directly on GCL and will be placed on scrap FML (rub sheet). Installation personnel must not smoke or wear damaging shoes when working on GCL.

GCL seams will be constructed overlapping their adjacent edges. GCL seams will be constructed per manufacturer's directions. GCL on sideslopes must not be unrolled in a direction perpendicular to the direction of the slope. GCL should be anchored temporarily (e.g., sandbags) at the top of the slope to prevent wrinkles and folds.

Horizontal seams will only be allowed on the slopes under one of the following conditions:

- 2 feet of overlap with horizontal seams being staggered.
- 1 foot of overlap with the underlying panel having a 1-foot runout anchored with 6 inches of either compacted clay liner or subgrade.

The POR or his designated representative will observe the GCL as it is deployed for even bentonite distribution, thin spots, or other panel defects. Defects and the disposition of the defects (panel rejected, patch installed, etc.) will be recorded. Repairs are to be made in accordance with the specifications at the discretion of the POR. The POR will verify that only panels that can be covered on the same day with a FML are deployed and that the GCL panels are not placed during wet, rainy weather or impending rain. In accordance with the construction specifications, the POR will also verify the following:

- Proper GCL deployment techniques.
- Proper overlap during deployment.
- Seams between GCL panels are constructed per manufacturer's recommendations.
- The bentonite does not exceed the specified amount of hydration prior to covering.

- Defects are patched and overlapped properly.
- On sideslopes, the GCL is anchored at the top and then unrolled.
- Observe that no debris is trapped beneath or within the GCL.
- Observe that broken needle pieces do not exist within needle-punched GCL.
- Observe that wind speed is less than 40 miles per hour unless a lower wind speed is recommended by the manufacturer.

The POR will observe the GCL for premature hydration visually and by walking over the GCL to locate soft spots. GCL that has prematurely hydrated according to the specifications will be removed and replaced with new GCL. These observations will be documented in the LIT.

The CQA monitor will verify that GCL (or overlying geosynthetics) are not displaced or damaged while overlying materials are being placed.

3.3.3.3 GCL Anchor Trench

The GCL anchor trench will be left open to allow installation of FML. Temporary anchoring will be provided until the placement of FML by using sand bags as discussed in Section 3.3.3.2. Slightly rounded corners will be provided in anchor trenches where the GCL enters the trench so as to avoid sharp bends in the GCL. No loose soil (e.g., excessive water content) will be allowed to underlie the anchored components of liner system. Backfilling of soil will be in accordance with Section 2.2.5.

3.3.3.4 Patching

Torn or otherwise damaged GCL (with no loss of bentonite from the GCL) must be patched with the same type of GCL. The GCL patch must extend at least 12 inches beyond the damaged area and must be bonded to the main GCL to avoid shifting during backfilling. If the GCL damage includes loss of bentonite, the patch must consist of full GCL extending at least 12 inches beyond the damaged area. Lapping procedures must be the same as specified for original laps of GCL panels.

3.4 Geomembrane

The composite liner system will include a 60-mil HDPE geomembrane. The geomembrane will be smooth on both sides on the liner floor and textured on both sides on the liner sideslopes. Required manufacturer's quality control tests for the geomembrane are included in Table 3-3 and required material properties for the geomembrane are included in Table 3-4.

3.4.1 Delivery

Upon delivery of FML, the CQA monitor will observe that:

- The geomembrane is delivered in rolls and is not folded. Folded geomembrane is not acceptable because the highly crystalline structure of the geomembrane will be damaged if it is folded. Any evidence of folding (other than from the manufacturing process) or other shipping damage is cause for rejection of the material.
- Equipment used to unload and store the rolls or pallets does not damage the geomembrane.
- The geomembrane is stored in an acceptable location in accordance with the manufacturer's specifications and stacked not more than 5 rolls high. The geomembrane is protected from puncture, dirt, grease, water, moisture, mud, mechanical abrasions, excessive heat, or other damage.
- All manufacturing documentation required by the specifications outlined in this QA/QC Plan has been received and reviewed for compliance prior to shipment of FML to the site. This documentation will be included in the LIT Report.
- The geosynthetics receipt log form has been completed for all materials received.

Damaged geomembrane will be rejected and removed from the site or stored at a location separate from accepted geomembrane. Geomembrane that does not have proper manufacturer's documentation must be stored at a separate location until all documentation has been received, reviewed, and accepted.

3.4.2 Conformance Testing

The geomembrane material and its components will be tested accordance with Table 3-3 by the supplier/manufacturer. A certificate of analysis will be submitted as part of the quality control documentation.

A third party independent lab will test the material components. A sample will be obtained for every resin lot of material supplied of geomembrane installed. The material will be sampled at the site by the CQA monitor. The samples will be forwarded to the independent third-party laboratory for the following conformance tests:

- Specific gravity/Density (ASTM D1505 or alternate ASTM D792, Method A if approved by the POR)
- Carbon black content (ASTM D1603)
- Carbon black dispersion (ASTM D5596)
- Thickness (ASTM D5199 for smooth FML and for textured FML use ASTM D5994 or alternate ASTM D1593 if approved by POR)
- Tensile properties (ASTM D638/Type IV, ASTM D6693 may be used upon approval by POR)

The density of the geomembrane must be greater than 0.94 g/cc; the carbon black content must be between 2 percent and 3 percent; and recycled or reclaimed material must not be used in the manufacturing process.

The design engineer may require additional test procedures and will inform the third party laboratory in writing. The POR must review all test results and report any nonconformance to the design engineer prior to product installation. In addition to the conformance thickness tests shown above, field thickness measurements must be taken at maximum 5-foot intervals along the leading edge of each geomembrane panel. For smooth geomembranes, no single measurement will be less than 10 percent below the required nominal thickness for the panel to be accepted (i.e., for 60-mil geomembrane a minimum thickness of 54 mils is required) and the average must be at least 60 mils. Refer to Table 3-4 for a complete listing of the material requirements for both smooth and textured geomembranes that will be used for the Subtitle D composite liner.

Table 3-3
Required Testing for 60-mil-thick Smooth and Textured (Both Sides) HDPE Geomembranes[1]

Test	Type of Test	Standard Test Method	Frequency of Testing (Minimum)
Resin	Specific Gravity/Density	ASTM D792, Method A or ASTM D1505	Every resin lot
	Melt Flow Index	ASTM D1238	Every resin lot
Manufacturer's Quality Control	Thickness	ASTM D5199 (smooth) or ASTM D5994[2] (textured)	Per Roll of Geomembrane
	Specific Gravity/Density	ASTM D1505/D792	Per 200,000 pounds
	Carbon Black Content	ASTM D1603	Per 20,000 pounds
	Carbon Black Dispersion	ASTM D5596	Per 45,000 pounds
	Tensile Properties	ASTM D638 / Type IV (ASTM D6693 may be used as an alternative upon POR's approval)	Per 20,000 pounds
	Tear Resistance	ASTM D1004	Per 45,000 pounds
	Puncture Resistance	ASTM D4833	Per 45,000 pounds
	Stress Crack Resistance	ASTM D5397	Per GRI-GM 10
	Oxidative Induction Time	ASTM D3895 or ASTM D5885	Per 200,000 pounds
	Oven Aging @ 85°C	ASTM D5721	Per each formulation
	Oven Aging @ 85°C Standard OIT (min. avg.) - % retained after 90 days	ASTM D3895	Per each formulation
	UV Resistance[3] High Pressure OIT (min. avg.) – % retained after 1,600 hours	GRI GM11 ASTM D5885	Per each formulation
	Asperity Height	ASTM D7466	Every 2nd roll[4]

[1] All tests will conform to the minimum requirements set forth by GRI testing standard GM13 and will meet manufacturer's standards. Required values for the parameters are listed in Table 3-4.
[2] ASTM D1593 may also be used for thickness of textured geomembrane at the option of the POR.
[3] 20 hours of UV cycle at 75°C followed by 4 hours condensation at 60°C.
[4] Measurement side will be alternated for double-sided textured sheet. This testing is specified for textured geomembrane only.

Sampling Procedure. Samples will be taken across the entire roll width. Unless otherwise specified, samples will be approximately 15 inches long by the roll width. The CQA monitor must mark the machine direction and the manufacturer's roll identification number on the sample. The CQA monitor must also assign a conformance test number to the sample and mark the sample with that number.

3.4.3 Geomembrane Installation

Surface Preparation. Prior to any geomembrane installation, the installed GCL surface will be inspected by the CQA and geosynthetics contractor. ODEQ shall be notified at least 48 hours before installation of the geomembrane. The POR or CQA monitor must observe the following:

- All lines and grades for the GCL have been verified by the surveyor and accepted by the contractor for geosynthetic installation.
- The GCL has been installed in accordance with the specifications outlined in Section 3.3.
- The GCL surface is free of surface irregularities and protrusions.
- The GCL surface does not contain stones or other objects that could damage the geomembrane and underlying GCL. The surface of the GCL will be smooth and free of foreign and organic material, sharp objects, exposed soil, aggregate particles greater than 1 inch (or less if recommended by the geosynthetic manufacturer), surface rocks, or other deleterious material.
- The anchor trench dimensions have been checked, and the trenches are free of sharp objects and stones.
- The geomembrane will not be placed over soil liner or GCL during inclement weather such as rain or high winds.
- The GCL is not prematurely hydrated and no excessive swelling of GCL is present.
- The underlain GCL panel seams are intact.
- There are no rocks, debris, or any other objects on the GCL surface.
- The geosynthetics contractor has certified in writing that the surface on which the geomembrane will be installed is acceptable.

Table 3-4
Minimum Required Properties of 60-mil-thick Smooth and Textured (Both Sides) HDPE Geomembranes

Property	Test Method	Minimum Required Property[8]	
		Smooth	Textured
Thickness, mils Minimum average Lowest individual reading Lowest individual of 8 of 10 readings	ASTM D5199 (smooth) ASTM D5994 (textured)	60 54 NA	57 51 54
Density, g/cc	ASTM D1505/D792	0.940	0.940
Asperity Height, mils	ASTM D7466	NA	10
Tensile Properties[1] 1. Yield Strength, lb/in 2. Break Strength, lb/in 3. Yield Elongation, % 4. Break Elongation, %	ASTM D638 (Type IV Specimen @ 2 in/min) (ASTM D6693 may be used as an alternative upon approval by POR)	126 228 12 700	126 90 12 100
Tear Resistance, lb	ASTM D1004	42	42
Puncture Resistance, lb	ASTM D4833	108	90
Stress Crack Resistance[2], hrs	ASTM D5397	300	300
Carbon Black Content[3], %	ASTM D1603	2.0 – 3.0	2.0 – 3.0
Carbon Black Dispersion[4], Category	ASTM D5596	1 or 2 and 3	1 or 2 and 3
Oxidative Induction Time (OIT)[5] (Minimum Average) Standard OIT, minutes High Pressure OIT, minutes	ASTM D3895 ASTM D5885	100 400	100 400
Oven Aging at 85°C Standard OIT – % retained after 90 days High Pressure OIT – % retained after 90 days	ASTM D5721 ASTM D3895 ASTM D5885	55 80	55 80
UV Resistance[6] High Pressure OIT[7] – % retained after 1600 hrs	GRI GM11 ASTM D5885	50	50
Seam Properties (4 out of 5 specimens, 5th specimen can be as low as 80% per GRI-GM19) 1. Shear Strength, lb/in 2. Peel Strength, lb/in	ASTM D6392	120 91 & FTB (78, Extrusion Weld)	120 91 & FTB (78, Extrusion Weld)

[1] Machine direction (MD) and cross machine direction (XMD) average values will be on the basis of 5 test specimens each direction. Yield elongation is calculated using a gauge length of 1.3 inches; break elongation is calculated using a gauge length of 2.0 inches.
[2] The yield stress used to calculate the applied load for the Single Point Notched Constant Tensile Load (SP-NCTL) test will be the mean value via MQC testing.
[3] Other methods such as ASTM D4218 or microwave methods are acceptable if an appropriate correlation can be established.
[4] Carbon black dispersion for 10 different views in Categories 1 and 2 and 1 in Category 3.
[5] The manufacturer has the option to select either one of the OIT methods listed to evaluate the antioxidant content in the geomembrane.
[6] The condition of the test will be 20 hr UV cycle at 75°C followed by 4 hr. condensation at 60°C.
[7] UV resistance is based on percent retained value regardless of the original HP-OIT value.
[8] Minimum required properties are based on GRI-GM13, except for the seam properties which are based on GRI-GM19.

Panel Placement. Prior to the installation of the geomembrane, the contractor must submit drawings showing the panel layout, indicating panel identification number, both fabricated (if applicable) and field seams, as well as details not conforming to the drawings.

The CQA monitor must maintain an up-to-date panel layout drawing showing panel numbers that are keyed to roll numbers on the placement log. The panel layout drawing will also include seam numbers and destructive test locations.

During panel placement, the POR or CQA monitor must:

- Observe that geomembrane is placed in direct and uniform contact with the underlying soil liner or GCL.
- Record roll numbers, panel numbers, and dimensions on the panel or seam logs. Measure and record thickness of leading edge of each panel at 5-foot maximum intervals. No single thickness measurement can be less than 10 percent below the required nominal thickness.
- Observe the sheet surface as it is deployed and record all panel defects and repair of the defects (panel rejected, patch installed, extradite placed over the defect, etc.) on the repair sheet. All repairs must be made in accordance with the specifications as outlined in Section 3.4.5 and located on a repair drawing.
- Observe that support equipment is not allowed on the geomembrane during handling (see Section 3.6 also).
- Observe that the surface beneath the geomembrane has not deteriorated since previous acceptance.
- Observe that there are no stones, construction debris, or other items beneath the geomembrane that could cause damage to the geomembrane.
- Observe that the geomembrane is not dragged across a surface that could damage the material. If the geomembrane is dragged across an unprotected surface, the geomembrane must be inspected for scratches and repaired or rejected, as necessary.
- Record weather conditions including temperature, wind, and humidity. The geomembrane must not be deployed in the presence of excess moisture (fog, dew, mist, or wind, etc.). In addition, geomembrane will not be placed when the air temperature is less than 32°F or greater than 122°F, or when standing water or frost is on the ground, unless this requirement is waived by the design engineer and ODEQ. Excessive wind is that which can lift and move the geomembrane panels.
- Observe that people working on the geomembrane do not smoke, wear shoes that could damage the liner, or engage in activities that could damage the liner.
- Observe that the method used to deploy the sheet minimizes wrinkles but does not cause bridging and that the sheets are anchored to prevent movement by the wind (the contractor is responsible for any damage to or from windblown geomembrane). Excessive wrinkles will be walked-out or removed at the discretion of the CQA monitor.

- Observe that no more panels are deployed than can be seamed on the same day.
- Observe that there are no horizontal seams on side slopes, and the textured material extends a minimum of approximately 5 feet out past the toe of the slope where textured geomembrane is used.

The CQA monitor must inform both the contractor and the POR of the above conditions.

Field Seaming. The contractor must provide the POR with a seam and panel layout drawing and update this drawing daily as the job proceeds. No panels will be seamed until the panel layout drawing has been accepted by the POR. A seam numbering system must provide a unique number for each seam and be agreed to by the POR and contractor prior to the start of seaming operations. One procedure is to identify the seam by adjacent panels. For example, the seam located between Panels 306 and 401 would be Seam No. 306/401.

Prior to geomembrane welding, each welder and welding apparatus (both wedge and extrusion welders), must be tested, at a minimum, at daily start-up and at midday break, or any break that the seaming machine is stopped more than 30 minutes to determine if the equipment is functioning properly. The LIT Report will include the names for each seamer and the time and the temperatures for each seaming apparatus used each day. One trial weld will be taken prior to the start of work. The trial weld sample must be 3 feet long and 12 inches wide, with the seam centered lengthwise. The minimum number of specimens per trial weld test must be two coupons for shear and two coupons for peel. Both the inner and outer welds of dual track fusion welds must be tested for each peel test coupon (or additional coupons will be required). Trial weld samples must comply with "Passing Criteria for Welds" included in Section 3.4.4 – Construction Testing. The CQA monitor must observe all welding operations, quantitative testing of each trial weld for peel and shear, and recording of the results on the trial weld form. The trial weld be completed under conditions similar to those under which the panels will be welded. Regarding the locus-of-break patterns of the different seaming methods in shear and peel, the following are unacceptable break codes per their description in ASTM D6392 and GRI-GM19:

Hot Wedge: AD and AD-Brk>25%

Extrusion Fillet: AD1, AD2, AD-WLD (unless strength is achieved)

Additionally, there will be no apparent weld separation (i.e., greater than 1/8 inch). The third party strength tests must meet the manufacturer's specifications for the sample sheets, or the percentage of the manufacturer's parent sheet strength as determined by the manufacturer. For dual-track fusion welds, both sides (the inner and outer weld) must meet the minimum requirements for a satisfactory peel test. If, at any time, the CQA monitor believes that an owner or welding apparatus is not functioning properly, a weld test must be performed. If there are wide changes in temperature (±30° Fahrenheit), humidity, or wind speed, the test weld will be repeated. The test weld must be allowed to cool to ambient temperature before testing. If a welded area fails the shear or peel test, the length of the non-passing weld will be identified at a 10-foot interval and the failed area will be patched. Patching will performed by placing additional geomembrane over the failed area or removing the failed area geomembrane weld and patching it with additional geomembrane per POR's direction. Welding for patches must comply with the welding passing criteria requirements outlined in this section.

Construction quality assurance documentation of trial seam procedures will include, at a minimum, the following:

- Documentation that trial seams are performed by each welder and welding apparatus prior to commencement of welding and prior to commencement of the second half of the workday.
- The welder, the welding apparatus number, time, date, ambient air temperature, and welding machine temperatures.

During geomembrane welding operations, the CQA monitor must observe the following:

- The contractor has the number of welding apparatuses and spare parts necessary to perform the work.
- Equipment used for welding will not damage the geomembrane.
- The extrusion welder is purged prior to beginning a weld until all the heat-degraded extradite is removed (extrusion welding only).
- Seam grinding has been completed less than one hour before seam welding, and the upper sheet is beveled (extrusion welding only).
- The ambient temperature, measured 6 inches above the geomembrane surface, is between 32° and 122° Fahrenheit unless more stringent limits are required by the manufacturer.
- The end of old welds, more than five minutes old, are ground to expose new material before restarting a weld (extrusion welding only).
- The contact surfaces of the sheets are clean, free of dust, grease, dirt, debris, and moisture prior to welding.
- The weld is free of dust, rocks, and other debris.
- The seams are overlapped a minimum of 3 inches for extrusion and hot-wedge welding, or in accordance with manufacturer's recommendations, whichever is more stringent. Panels will be overlapped (shingled) in the downgrade direction.
- No solvents or adhesives are present in the seam area.
- The procedure used to temporarily hold the panels together does not damage the panels and does not preclude CQA testing.
- The panels are being welded in accordance with the plans and specifications that will be developed in accordance with this section for each liner construction. Seams will be oriented parallel to the line of maximum slope with no horizontal seams on

side slopes. In corners and odd-shaped geometric locations, the number of field seams will be minimized.

- There is no free moisture in the weld area.
- Measure surface sheet temperature every two hours.
- Observe that at the end of each day or installation segment, all unseamed edges are anchored with sandbags or other approved device. Penetration anchors will not be used to secure the geomembrane.

3.4.4 Construction Testing

Nondestructive Seam Testing. The purpose of nondestructive testing is to detect discontinuities or holes in the seam. It also indicates whether a seam is continuous and non-leaking. Nondestructive tests for geomembrane include vacuum testing and air pressure testing. Nondestructive testing must be performed over the entire length of the seam.

Nondestructive testing is performed entirely by the contractor. The CQA monitor's responsibility is to document the date, time and location of seaming and testing, and to observe and document that testing was performed in compliance with this section and document any seam defects and their repairs.

Nondestructive testing procedures are described below.

- For welds tested by vacuum method, the weld is placed under suction utilizing a vacuum box made of rigid housing with a transparent viewing window, a soft neoprene rubber gasket attached to the open bottom perimeter, a vacuum gauge on the inside, and a valve assembly attached to the vacuum hose connection. The box is placed over a seam section, which has been thoroughly saturated with a soapy water solution (1 oz. soap to 1 gallon water). The rubber gasket on the bottom perimeter of the box must fit snugly against the soaped seam section of the liner, to ensure a leak-tight seal. The vacuum pump is energized, and the vacuum box pressure is reduced to approximately 3 to 5 psi gauge. Any pinholes, porosity or non-bonded areas are detected by the appearance of soap bubbles in the vicinity of the defect. Dwell time must not be less than ten seconds.
- Air pressure testing is used to test double seams with an enclosed air space. Both ends of the air channel will be sealed. The pressure feed device, usually a needle equipped with a pressure gauge, is inserted into the channel. Air is then pumped into the channel to a minimum pressure of 30 psi or ½ psi per mil of geomembrane thickness, whichever is greater. The air chamber must sustain the pressure for five minutes without losing more than 4 psi. Following a passed pressure test, the opposite end of the tested seam must be punctured to release the air. The pressure gauge must return to zero; if not, a blockage is most likely present in the seam channel. Locate the blockage and test the seam on both sides of the blockage. The penetration holes must be sealed after testing.

During nondestructive testing, the CQA monitor must perform the following work:

- Review technical specifications regarding test procedures.
- Observe that equipment operators are fully trained and qualified to perform their work.
- Observe that test equipment meets project specifications that will be developed in accordance with this QA/QC Plan for each liner construction.
- Observe that the entire length of each seam is tested in accordance with the specifications outlined in this section.
- Observe all continuity testing and record results on the appropriate log.
- Observe that all testing is completed in accordance with the specifications outlined in this section.
- Identify the failed areas by marking the area with a waterproof marker compatible with the geomembrane and inform the contractor of any required repairs, then record the repair area on the repair log.
- Observe that all repairs are completed and tested in accordance with the project specifications outlined in this section and Section 3.4.5.
- Record all completed and tested repairs on the repair log and the repair drawing.

Destructive Seam Testing. Destructive seam tests for geomembrane seams will be performed at intervals of at least one test per 500 linear feet. A destructive testing will also be performed for individual repairs (or additional seaming for the failed seams) of more than 10 feet of seaming. The CQA monitor must perform additional tests if he suspects a seam does not meet specification requirements outlined in this section. Reasons for performing additional tests may include, but are not limited to the following:

- Wrinkling in seam area
- Non-uniform weld
- Excess crystallinity
- Suspect seaming equipment or techniques
- Weld contamination
- Insufficient overlap
- Adverse weather conditions
- Possibility of moisture, dust, dirt, debris, and other foreign material in the seam
- Failing tests

There are two types of destructive testing required for the geomembrane installation: peel adhesion (peel) and bonded seam strength (shear) in accordance with ASTM D6392. The purpose of peel and shear tests is to evaluate seam strength and to evaluate long-term performance. Shear strength measures the continuity of tensile strength through the seam and into the parent material. Peel strength determines weld quality. Test welds must be allowed to cool naturally to ambient temperature prior to testing.

The CQA monitor selects locations where seam samples will be cut for laboratory testing. Select these locations as follows:

- A minimum of one random test within each 500 feet of seam length. This is an average frequency for the entire installation; individual samples may be taken at greater or lesser intervals.
- Sample locations will not be disclosed to the contractor prior to completion of the seam.
- A maximum frequency must be agreed to by the contractor, POR, and the Operator at the preconstruction meeting. However, if the number of failed samples exceeds 5 percent of the tested samples, this frequency may be increased at the discretion of the POR. Samples taken as the result of failed tests do not count toward the total number of required tests.

Sampling Procedures. The contractor will remove samples at locations identified by the CQA monitor. The CQA monitor must:

- Observe sample cutting.
- Mark each sample with an identifying number, which contains the seam number and destructive test number.
- Record sample location on the panel layout drawing and destructive seam log.
- Record the sample location, weather conditions, and reason sample was taken (e.g., random sample, visual appearance, result of a previous failure, etc.).

For each destructive test obtain one sample approximately 45 inches long by 12 inches wide, with the weld centered along the length. Cut two 1-inch-wide coupons from each end of the sample. The contractor must test two of these coupons in shear and two in peel (one shear and one peel from each end) using a tensiometer capable of quantitatively measuring the seam strengths. For double wedge welding, both sides of the air channel will be tested in peel. The CQA monitor must observe the tests and record the results on the destructive seam test log. A geomembrane seam sample passes the field testing when the break is Film Tear Bond (FTB) and the seam strength meets the required strength values for peel and shear given previously for trial seams under field seaming and below for third party laboratory testing. As previously discussed, both welds have to pass for dual-track welds. Also, it is recommended that additional samples be obtained as discussed in the following paragraph if there is apparent separation of the weld (i.e., greater than 1/8 inch) during peel testing.

If one or both of the 1-inch specimens fail in either peel or shear, the contractor can, at his discretion: (1) reconstruct the entire seam between passed test locations, or (2) take two additional test samples 10 feet or more in either direction from the point of the failed test and repeat this procedure. For tracking purposes the additional samples will be identified by assigning an identifying letter to the initial destructive test sample number (e.g., DS-6A and B). Only satisfactory tests count toward the required minimum number, and additional tests (i.e., A and B) count as one test, if passing. If the second set of tests pass, the contractor can reconstruct or cap-strip the seam between the two passed test locations. If subsequent tests fail, the sampling and testing procedure is repeated until the length of the poor quality seam is established. Repeated failures indicate that either the seaming equipment or operator is not performing properly, and appropriate corrective action must be taken immediately.

If the field test coupons are satisfactory, divide the remaining sample into three parts: one 12-inch by 12-inch section for the contractor, one 12-inch by 16-inch section for the third party laboratory for testing, and one 12-inch by 12-inch section for the operator to archive. The laboratory sample will be shipped to the third party laboratory for over-night delivery and next day testing.

If the laboratory test fails in either peel or shear, the contractor must either reconstruct the entire seam between passing test locations or recover additional samples at least 10 feet on either side of the failed sample for retesting. Sample size and disposition must be as described in the preceding paragraph. This process is repeated until passed tests bracket the failed seam section. All seams must be bounded by locations from which passing laboratory tests have been taken. Laboratory testing governs seam acceptance. In no case can field testing of repaired seams be used for final acceptance.

Third Party Laboratory Testing. Destructive samples must be shipped to the third party laboratory for seam testing. Testing for each sample will include 5 bonded seam shear strength tests and 5 peel adhesion tests (10 for dual-track welds). For dual-track welds each peel test specimen (coupon) will be tested on both sides of the air channel (i.e., the inner and outer welds). At least four of the five specimens tested in peel and shear will meet the minimum strength requirements. The minimum peel strength and the minimum shear strength values must meet the passing criteria listed below. Additionally, 4 out of 5 of the peel test coupons must have no greater than 25 percent seam separation. For dual-track welds if either weld exhibits greater than 25 percent separation or does not meet the required strength, that coupon is considered out of compliance and two out of compliance coupons cause the weld to fail. The third party laboratory must provide test results within 24 hours, in writing or via telephone, to the CQA monitor. Certified test results are to be provided within 5 days. The CQA monitor must immediately notify the POR in the event of a calibration discrepancy or failed test results.

Passing Criteria for Welds. Passing criteria are established by Geosynthetic Research Institute GRI Test Method GM19 for geomembranes. A passing extrusion or fusion welded seam will be achieved when the following values are tested. The following values listed for shear and peel strengths are for 4 out of 5 test specimens (the 5th specimen can be as low as 80 percent of the listed values). Elongation measurements will be omitted for field testing.

- Shear strength (lb/in) 120
- Shear elongation at break (%) 50
- Peel strength (lb/in) 91 (78, Extrusion Weld) & FTB
- Peel separation (%) 25

A passing extrusion or fusion welded seam will be achieved in peel when:

- Yield strength for 4 of 5 specimens (10 tests for dual-track welds) is not less than the above minimum peel strength value and the average of all 5 specimens is not less than the minimum value.
- No greater than 25 percent of the seam width peels (separates) at any point for 4 of 5 specimens (both inner and outer welds for dual-track welds).

A passing extrusion or fusion weld will be achieved in shear when:

- Yield strength for 4 of 5 specimens is not less than the above minimum shear strength value and the average for all 5 specimens is not less than the minimum value.
- Yield strain for 4 out of 5 specimens is at least 25 percent.
- Break strain for 4 out of 5 specimens is at least 50 percent.

3.4.5 Repairs

Any portion of the geomembrane with a detected flaw, or which fails a nondestructive or destructive test, or where destructive tests were cut, or where nondestructive tests left cuts or holes, must be repaired in accordance with the specific liner construction specifications and consistent with all the applicable parts (e.g., material requirement, installation, testing, etc.) of this section. The CQA monitor must locate and record all repairs on the repair sheet and panel layout drawing. Repair techniques include the following:

- Patching – used to repair large holes, tears, large panel defects, undispersed raw materials, contamination by foreign matter, and destructive sample locations.
- Extrusion – used to repair small defects in the panels and seams. In general, this procedure will be used for defects less than ⅜-inch in the largest dimension.
- Capping – used to repair failed welds or to cover seams where welds or bonded sections cannot be nondestructively tested.
- Removal – used to replace areas with large defects where the preceding methods are not appropriate. Also used to remove excess material (wrinkles, fishmouths, intersections, etc.) from the installed geomembrane. Areas of removal will be patched or capped.

Repair procedures include the following:

- Abrade geomembrane surfaces to be repaired (extrusion welds only) no more than one hour prior to the repair.
- Clean and dry all surfaces at the time of repair.
- Extend patches or caps at least 6 inches beyond the edge of the defect, and round all corners of material to be patched and the patches to a radius of at least 3 inches. Bevel the top edges of patches prior to extrusion welding.
- Testing of repaired seams consistent with Section 3.3.4 – Construction Testing.

3.4.6 Wrinkles

During placement of cover materials over the geomembrane, temperature changes or creep can cause wrinkles to develop in the geomembrane. Any wrinkles which can fold over must be repaired either by cutting out excess material or, if possible, by allowing the liner to contract by temperature reduction. In no case can material be placed over the geomembrane, which could result in the geomembrane folding. The CQA monitor must monitor geomembrane for wrinkles and notify the contractor if wrinkles are being covered by soil. The CQA monitor is then responsible for documenting corrective action to remove the wrinkles.

3.4.7 Folded Material

All folded geomembrane must be removed. Remnant folds evident after deployment of the roll, which are due to manufacturing process, are acceptable.

3.4.8 Geomembrane Anchor Trench

The geomembrane anchor trench will be left open until seaming is completed. Expansion and contraction of the geomembrane will be accounted for in the liner placement. Prior to backfilling, the depth of penetration of the geomembrane into the anchor trench must be verified by the CQA monitor. The anchor trench will be filled in the morning when temperatures are coolest to reduce bridging of the geomembrane.

3.4.9 Geomembrane Acceptance

The contractor retains all ownership and responsibility for the geomembrane until acceptance by the Operator. In the event the contractor is responsible for placing cover over the geomembrane, the contractor retains all ownership and responsibility for the geomembrane until all required documentation is complete, and the cover material is placed. After panels are placed, seamed, tested successfully, and any repairs are made, the completed installation will be walked by the Operator's and contractor's representatives. Any damage or defect found during this inspection will be repaired properly by the installer. The installation will not be accepted until it meets the requirements of both representatives. In addition, the geomembrane will be accepted by the POR only when the following has been completed:

- The installation is finished.
- All seams have been inspected and verified to be acceptable.
- All required laboratory and field tests have been completed and reviewed.
- All required contractor-supplied documentation has been received and reviewed.
- All as-built record drawings have been completed and verified by the POR. The as-built drawings show the true panel dimensions, the location of all seams, trenches, pipes, appurtenances, and repairs.
- Acceptance of the LIT Report by ODEQ.

3.4.10 Bridging

Bridging must be removed.

3.5 Geotextiles

Geotextiles will be used to prevent clogging of drainage materials and as a cushion to protect the geomembrane. The main usage of geotextiles will be enveloping drainage stone used for chimney drains in the leachate collection system (LCS). Geotextiles for the LCS will meet the design requirements set forth in Table 3-5 of this QA/QC Plan.

3.5.1 Delivery

During delivery the CQA monitor must observe the following:

- Equipment used to unload the rolls will not damage the geotextile.
- Rolls are wrapped in impermeable and opaque protection covers.
- Care is used when unloading the rolls.
- All documentation required by this QA/QC Plan and the specifications has been received and reviewed for compliance with this QA/QC Plan.
- Each roll is marked or tagged with the manufacturer's name, project identification, lot number, roll number, and roll dimensions.
- Materials are stored in a location that will protect the rolls from precipitation, mud, dirt, dust, puncture, cutting, or any other damaging or deleterious conditions.

Any damaged rolls must be rejected and removed from the site or stored at a location separate from accepted rolls, designated by the Operator. All rolls which do not have proper manufacturer's documentation must also be stored at a separate location until all documentation has been received and approved.

3.5.2 Testing

The geotextile manufacturer will conduct manufacturer quality control (MQC) testing and certify that the materials delivered to the site comply with project specifications outlined in this QA/QC Plan. The material certification will be reviewed by the POR and approved for the project prior to acceptance of any of the material. The MQC testing will include the following tests with at least one test for each 100,000 square feet of geotextile delivered.

- Grab tensile strength/elongation (ASTM D4632)
- Mass per unit area (ASTM D5261)
- Puncture resistance (ASTM D4833)
- Trapezoidal tear strength (ASTM D4533)
- Permeability (ASTM D4491)
- Apparent opening size (ASTM D4751)

Where optional procedures are noted in the test method, the specification requirements of this QA/QC Plan prevail. The POR will review all test results and report any nonconformance.

Table 3-5
Required Testing and Properties of Geotextile[1]

Responsible Party	Material	Test	Standard	Required Property[2]
Manufacturer	Geotextile	Unit Weight	ASTM D5261	8 oz/sy
		Apparent Opening Size	ASTM D4751	80 sieve
		Grab Strength	ASTM D4632	157 lb
		Tear Strength	ASTM D4533	56 lb
		Puncture Strength	ASTM D4833	56 lb
		Permeability	ASTM D4491	0.2 cm/s

1 The minimum testing frequency will be one test sample per 100,000 square feet.
2 All values listed are minimum except apparent opening size is maximum.

3.5.3 Geotextile Installation

Surface Preparation. Prior to geotextile installation, the CQA monitor must observe the following:

- All lines and grades have been verified by the surveyor.
- The supporting surface does not contain stones that could damage the geotextile or the underlying geomembrane.
- There are no excessively soft areas that could result in damage to the geotextile, or other components of the liner system.

Geotextile Placement. During geotextile placement, the CQA monitor must:

- Observe the geotextile as it is deployed, and record all defects and disposition of the defects (panel rejected, patch installed, etc.). Repairs are to be made in accordance with the specifications outlined in Section 3.5.4.
- Observe that equipment used does not damage the geotextile by handling, equipment transit, leakage of hydrocarbons, or other means.
- Observe that people working on the geotextile do not smoke, wear shoes that could damage the geotextile, or engage in activities that could damage the geotextile.
- Observe that the geotextile is securely anchored in an anchor trench.
- Observe that the geotextiles are anchored to prevent movement by the wind.
- Observe that the panels are overlapped a minimum of six inches.
- Examine the geotextile after installation to ensure that no potentially harmful foreign objects are present.
- Observe that seams (where required) are continuously sewn or thermal bonded in accordance with the manufacturer's recommendations and the project specifications outlined in this QA/QC Plan.

The CQA monitor must inform both the contractor and POR if the above conditions are not met.

3.5.4 Repairs

Repair procedures include:

- Patching – used to repair large holes, tears, large defects, and destructive sample locations.
- Removal – used to replace areas with large defects where the preceding method is not appropriate.

Holes, tears, and defects must be repaired in the following manner. Soil or other material which may have penetrated the defect must be removed completely prior to repair. If located on a slope, the defect must be patched using the same type of geotextile and double-seamed into place. Should any tear, hole, or defect exceed 30 percent of the width of the roll, the roll will be cut off and the defect removed or the roll removed and replaced. If the defect is not located on a slope, the patch must be made using the same type of material seamed into place with a minimum of 24 inches overlap in all directions. Seams will be either thermal bonded or sewn in accordance with the manufacturer's recommendations.

3.6 Equipment on Geosynthetic Materials

Construction equipment on the liner system will be minimized to reduce the potential for liner puncture. The CQA monitor will verify that small equipment such as generators are placed on scrap liner material (rub sheets) above geosynthetic materials in the liner system.

Aggregate drainage layers and/or protective cover will be placed using low ground pressure equipment. The CQA monitor will verify that the geosynthetics are not displaced while the soil layers are being placed.

Unless otherwise specified by the POR, all lifts of protective soil material placed over geosynthetics will conform with the following guidelines.

Equipment Ground Pressure (psi)	Minimum Lift Thickness (in)
<5.0	12
5.1 – 8.0	18
8.1 – 16.0	24
>16.0	36

No equipment will be left running and unattended over the lined area.

3.7 Reporting

The POR will submit to the ODEQ a LIT Report for approval of the earthwork, geosynthetic liner, leachate collection system and protective cover. Section 6 describes the documentation requirements.

4 CONSTRUCTION QUALITY ASSURANCE FOR PIPING

4.1 Introduction

This section describes CQA procedures for the installation of HDPE pipe for the leachate collection system used for the composite liner. This plan stresses careful documentation during the quality assurance process, from the selection of materials through installation.

The goal of the pipe quality assurance program is to assure that proper construction techniques and procedures are used, and that the project is built in accordance with the project construction drawings and specifications that will be developed in accordance with this QA/QC Plan for each liner construction. The following specifications apply to the leachate collection system piping:

- Minimum internal diameter = 5.845 inches for leachate collection pipe and nominal diameter of 18 inches for riser pipe
- Standard dimension ratio = 17
- Perforation hole diameter = minimum 0.5 inches and no greater than 0.5 inches (if slotted pipe is used, standard slot width = 0.125 inches)
- Perforation spacing = two (2) rows drilled at an angle between 45° and 60° from vertical.

The quality assurance program is intended to identify and define problems that may occur during construction and to observe that these problems are corrected before construction is complete. The LIT will document that the constructed facility meets design standards and specifications.

4.2 Pipe and Fittings

4.2.1 General

Construction must be conducted in accordance with the project construction drawings and specifications for each liner constructed. To monitor compliance, a quality assurance program will be implemented that includes: (1) a review of the manufacturer's quality control testing, (2) material conformance testing, and (3) construction monitoring. Conformance testing refers to testing by an independent third party laboratory that will take place prior to material installation on materials delivered to the site.

4.2.2 Delivery

The CQA monitor will observe:

- That upon delivery, the pipe and pipe fittings are in compliance with the requirements of the construction specifications that will be developed in accordance with this QA/QC Plan for each liner construction.
- That a storage location is selected in which the pipe and pipe fittings are protected from excessive heat, cold, construction traffic, hazardous chemicals, and solvents. If the pipe and pipe fittings are stored at a location where other construction materials are present, the CQA monitor will assure that stacking or insertion of the other construction materials onto or into the pipe and pipe fitting is prohibited. The CQA monitor will periodically examine the storage area to observe that the pipe fittings are undamaged, and have been protected.
- That upon transporting pipe and fittings from the storage location to the construction site, the contractor will use pliable straps, slings, or rope to lift the pipe. Steel cables or chains will not be allowed to transport or lift the pipe.
- That the contractor will provide that a pipe greater than 20 feet in length will be lifted with at least two support points. The contractor will not drop, impact, or bump into the pipe, particularly at the pipe ends. Pipe and fitting ends must be cleaned of all dirt, debris, oil, or any other contaminant which may prohibit making a sound joint.

The CQA monitor will document all activities associated with the handling and storage of this material in order to maintain compliance with this portion of the CQA plan.

4.2.3 Conformance Testing

Prior to the installation of pipe, the pipe manufacturer will provide to the Operator and the POR a quality control certificate for each lot or batch of pipe provided. The quality control certificate will be signed by a responsible party employed by the pipe manufacturer, such as the quality control manager. The quality control certificate and documentation will include:

- A description of the pipe delivered to the project, including but not limited to the strength classification, diameter, perforations, and production lot.
- Properties sheet including, at a minimum, all specified properties, measured using test methods indicated in the specifications that will be developed in accordance with this QA/QC Plan for each liner construction, or equivalent.
- A certification that property values given in the properties sheet are minimum values and are guaranteed by the pipe manufacturer.
- A list of quantities and descriptions of materials other than the base resin which comprise the pipe.

- The sampling procedure and results of testing for actual samples manufactured in the same lot as the pipe delivered to the project.

The CQA monitor will observe that:

- The property values certified by the pipe manufacturer meet all of the specifications that will be developed in accordance with this QA/QC Plan for each liner construction.
- The measurements of properties by the pipe manufacturer are properly documented and that the test methods used are acceptable.
- Verification that the quality control certificates have been provided at the specified frequency for all lots or batches of pipe, and that each certificate identifies the pipe lot/batch related to it.
- The certified properties meet the specifications that will be developed in accordance with this QA/QC Plan for each liner construction.

4.2.4 Pipe and Fitting Installation

Surface Preparation. Prior to pipe installation, the CQA monitor must observe the following:

- All lines and grades have been verified by the contractor and project surveyor.
- The pipe trenches are swept clean of any deleterious material which may damage the pipe, geosynthetic or may clog the pipe.
- Pipe perforations for leachate collection system are drilled in the pipe outside of the drainage trench where the pipe is to be laid. The drill cuttings must be completely removed from the pipe prior to being placed in the drainage trench.
- Pipe perforations are to the correct size and spacing according to the project specifications that will be developed in accordance with this QA/QC Plan for each liner construction. Perforations can be either factory installed slots or factory predrilled holes or field drilled holes.

Pipe and Fitting Placement. During pipe and fitting installation, the CQA monitor will:

- Observe all pipe, pipe fittings, and joints as the pipe is being laid. The CQA monitor will observe that pipes and fittings are not broken, cracked, or otherwise damaged or unsatisfactory. Prior to fusing (if fusion welding is utilized), the pipe installer will provide for a fusion surface area which is clean and free of moisture, dust, dirt, debris of any kind, and foreign material.
- If fusion welding is utilized, verify welder credentials and that the procedure is consistent with the pipe manufacturer's recommendations.

- Observe that the pipe and fittings are being constructed in accordance with specifications that will be developed in accordance with this QA/QC Plan for each liner construction and accepted practices.
- Observe that the people and equipment utilized to install the pipe do not damage the pipe or any other component of the liner system.

5 CONSTRUCTION QUALITY ASSURANCE FOR DRAINAGE MATERIAL

5.1 Drainage Aggregate

The drainage aggregates that are placed in the leachate collection trench will have a hydraulic conductivity of at least $1x10^{-2}$ cm/s. The granular drainage material should be tested by the supplier for gradation (ASTM D448) and hydraulic conductivity (ASTM D2434) at the supply source at a minimum of 1 test per 5,000 cubic yards. The material shall be free of organics, foreign objects, or other deleterious materials. The physical characteristics of the material shall be evaluated through visual observation and laboratory testing before construction, and visual observations during construction. The material may be tested during construction at the discretion of the CQA monitor.

5.2 Installation

The drainage aggregate will be placed on top of a geotextile that overlies the geomembrane using low ground pressure equipment as outlined in Section 3.6. The drainage aggregate shall be placed by spreading a minimum of 12 inches of material in front of the spreading equipment. Under no circumstances shall the construction equipment come in direct contact with the installed geosynthetics.

During construction, the CQA monitor will:

- Verify that underlying geosynthetic installations are not damaged during placement operations, or mark damaged geosynthetics and verify that damage is repaired.
- Monitor haul road thickness over geosynthetic installations and verify that equipment hauling and materials placement meet equipment specifications.

6 DOCUMENTATION

Documentation will consist of daily recordkeeping, testing and installation reports, nonconformance reports (if necessary), progress reports, photographic records, design and specification revisions, and a Liner Installation and Testing (LIT) Plan as required by OAC 252:515-11-6.

6.1 Daily Record of Construction Progress

The daily field report will summarize ongoing construction activities and will include the following:

- Date, project name, project number, and location
- Weather
- Summary of daily construction activities
- Equipment list
- Items discussed and names of parties involved in discussions
- A brief description of tests and observations
- Areas of nonconformance and any corrective actions
- Summary of materials received
- Record of site visitors
- Signature of the CQA monitor
- Signature of the POR

6.2 Observation and Test Data Sheets

Observation and test data sheets should include the following information:

- Date, project name, and location
- Test equipment calibrations, if applicable
- A summary of test results identified as passing, failing, or in the event of a failed test, retest.

- Signature of the CQA monitor
- Signature of the POR

6.3 Photographs

Construction activities may be photographed by the CQA monitor. Photographs will include any significant problems encountered and corrective actions taken, as well as document construction progress. The photographer should document the subject of the photograph, either on the back of the picture, or in a photograph log.

6.4 Design and Specification Changes

Design and specification changes may be required during construction. Design and specification changes will only be made with written agreement of the ODEQ, design engineer, owner, and contractor. These changes will be made by change order to the contract.

6.5 LIT Report

The POR will submit an LIT Report documenting the construction of the composite liner and leachate collection systems to the ODEQ for approval.

The POR will provide an engineer's certification that the composite liner and leachate collection systems were constructed in accordance with the approved construction drawings and specifications. QA/QC documentation will be included in the LIT Report.

The LIT Report shall be submitted to the ODEQ within 30 days after completion of each phase of composite liner placement. Consistent with OAC 252:515-11-7, the LIT Report shall be placed in the site operating record, and waste shall not be placed within the new phase of composite liner until ODEQ approves the LIT and provides written authorization to commence disposal .

At a minimum, the LIT Report will contain:

- A summary of construction activities.
- A summary of conformance testing.
- A summary of laboratory and field test results.
- Sampling and testing location drawings.
- A summary of repairs and their locations.

- Changes from the construction drawings and specifications and the justification for these changes.
- As-built record drawings.
- A map that shows locations of system components tied to at least two permanent monuments.
- The results of the initial leachate collection pipe clean-out.
- The method for phased tie-in of leachate collection pipes.
- A statement of compliance with the construction contract documents and design intent, signed and sealed by a professional engineer registered in the State of Oklahoma.