solutions and action

Wisconsin Power and Light Company
Rock River Generating Station
CCR Surface Impoundment Inflow Design Flood Control Plan
154.018.028.006.001
Report issued: May 6, 2026

Hard Hat Services
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Executive Summary

This Inflow Flood Control Plan (Report) for the former Rock River Generating Station (ROR) has been prepared in accordance with the requirements of the United States Environmental Protection Agency rules for Hazardous and Solid Waste Management System – Disposal of CCR from Electric Utilities (40 CFR Parts 257 and 261, also known as CCR Rule).

On May 8, 2024, the EPA issued the Final Legacy Coal Combustion Residual (CCR) Surface Impoundment Rule ("Legacy Surface Impoundment Rule") that established regulations for CCR surface impoundments at inactive facilities (40 C.F.R. § 257.100). The Legacy Surface Impoundment Rule requires that legacy surface impoundments that no longer receive CCR but contain both CCR and liquid on or after October 19, 2015 and that are located at an inactive electric utility, generally comply with the EPA requirements for inactive CCR surface impoundments in accordance with Title 40 of the Code of Federal Regulations, Part 257 Subpart D Hazardous and Solid Waste Management System; Disposal of CCR from Electric Utilities.

This Report assesses the hydrologic and hydraulic capacity requirements for the ROR Final WPDES Settling Pond at the former Rock River Generating Station in Beloit, Wisconsin in accordance with §257.82 of the CCR Rule. For purposes of this Report, a CCR unit is defined as any existing CCR or legacy surface impoundment. Primarily, the Report documents how the inflow design flood control system has been designed and constructed to meet the CCR Rule section §257.82.

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1. INTRODUCTION

The owner or operator of the Coal Combustion Residual (CCR) unit must conduct an initial and periodic inflow design flood control system plan to determine if each CCR unit adequately manages flow into and from each CCR unit during and following the peak discharge of the inflow design flood. The inflow design flood is selected based on the hazard potential classification (§257.73(a)(2)) for each CCR unit.

1.1 CCR Rule Requirements

The CCR Rule requires an initial and periodic inflow design flood control system plan certified by a qualified professional engineer (PE) for all legacy CCR surface impoundments (§257.82(c)(5)).

1.2 Hydrologic and Hydraulic Capacity Applicability

The Wisconsin Power and Light Company (WPL), Rock River Generating Station (ROR) in Beloit, Wisconsin (Figure 1) has one legacy CCR surface impoundment, identified as the Final WPDES Settling Pond. The Final WPDES Settling Pond meets the requirements of §257.82 and is subject to the periodic structural stability assessment requirements of the CCR Rule.

2. FACILITY DESCRIPTION

ROR was located north of town on the western shore of the Rock River in Rock County at 827 W. B. R. Townline Road in Beloit, Wisconsin (Figure 1). ROR was bounded on the north by Townline Road, on the west by property owned by WPL known as Riverside Energy Center (REC), and on the south and east by the Rock River, which is a navigable body of water.

ROR was commissioned in 1954 as a coal-fired power plant. The facility consisted of two units. ROR ended coal combustion when the coal-fired boilers were converted to natural gas in 2000. The facility terminated generation of all electricity in 2012 and was demolished in 2017.

General Facility Information:

Date of Initial Facility Operations:		1954
Historical WPDES Wastewater Permit Number:		WI-0002402-05-0
Historical WPDES General Storm water Permit Number:		WI-S067857-3
Latitude / Longitude:	42°34’54.66”N	89°1’38.80”W
Unit Nameplate Ratings:	Unit 1 (1954) 75 MW - Coal	
	Unit 2 (1955) 75 MW - Coal	
Impoundment WDNR State ID	None	

2.1 ROR Final WPDES Settling Pond Location

The Final WPDES Settling Pond is located south of the Closed Ash Landfill and storm water retention pond. The eastern and southern embankemnts of the Final WPDES Settling Pond are bordered by the Rock River, while the western boundary is bordered by a set of railroad tracks. Figure 1 shows the location of the Final WPDES Settling Pond. As of 2012, the estimated volume of CCR in the surface impoundment was 2,000 cubic yards as identified within the December 2012 Settling Basin Abandonment Plan and Landfill Closure Plan Modification. Closure

construction has been initiated. The CCR has been removed from the Final WPDES Settling Pond as of October 2025.

The adjacent areas of the site comprise several components, including an Ash Disposal Facility (Landfill) Area, a former coal yard, and a Storm Water Management Pond. Storm water from the former coal yard is conveyed through a 36-inch concrete pipe into the Storm Water Management Pond. Similarly and runoff from the Landfill Area is directed into the Storm Water Management Pond through open channel swales. The Storm Water Management Pond is constructed with an embankment height of 8 feet and serves as the primary collection point for site runoff. From there, storm water is discharged via a 24-inch concrete pipe located at elevation 745.8 feet into the Final WPDES Settling Pond. Additionally, surface runoff from the area surrounding the Final WPDES Settling Pond is also directed into the pond.

The Final WPDES Settling Pond is approximately 5.0 acres with embankments approximately 9 feet high relative to pond side and estimated at 20 feet high on the Rock River side based on stream bed information from available Federal Emergency Management Agency (FEMA) Flood Zone Profiles for Rock County, Wisconsin. Storm water exfiltrates into underlying and adjacent soils under normal conditions. However, during high-intensity storm events, excess water could be discharged through an approximate 10-foot wide, 1-foot deep emergency spillway installed on top of the southern embankment during closure construction set at elevation 753 feet.

3. HYDROLOGIC AND HYDRAULIC CAPACITY- §257.82(a)

This Report provides hydrologic and hydraulic capacity information for the inflow design flood control systems which is to:

1. Adequately manage flow into each CCR unit during and following the peak discharge inflow of the specified design flood,
2. Adequately manage flow from each CCR unit to collect and control the peak discharge resulting from the inflow design flood; and,
3. Handle discharge from the CCR unit in accordance with NPDES regulations 40 CFR §257.3-3.

3.1 Hazard Classification and Design Storm

The Final WPDES Settling Pond has been assigned a *Significant Hazard Potential* classification as losses may not principally be limited to the owner's property. Mis-operation or failure will likely not result in loss of life as there are no occupied buildings or residences located in the immediate vicinity of the CCR surface impoundment, and the adjacent spaces are not generally occupied. Failure to the east or south would likely reach a navigable water body where material has the potential to be transported downstream, causing environmental damage (noting that all CCR has been removed as of October 2025). A release to the north would be contained on WPL property and be limited to the storm water retention pond. A release to the west would likely be controlled and contained by the railroad spur, although it is possible for the failure to be redirected south and into the Rock River.

The design flood (or storm) for the ROR Final WPDES Settling Pond is the 1,000-year return event Soil Conversation Service (SCS) Type Midwest and Southeast United States (MSE) 3, 24-hour storm as defined in 40 CFR 257.82(3)(ii). The total rainfall for the event selected from the National

Oceanographic and Atmospheric Administration's probabilistic map for the ROR site coordinates is 10.0 inches for the 1,000-year event, Appendix A.

3.2 Hydrologic and Hydraulic Capacity Methods

The 1,000-year SCS Type MSE 3 storm was routed through the ROR Final WPDES Settling Pond through its discharge structure, see Attachment C. The routing was completed using the program HydroCAD. This program uses the unit hydrograph method to generate a Type MSE 3 distribution rainfall for the drainage area to the ROR Final WPDES Settling Pond. HydroCAD routes the rainfall hydrograph through the discharge structure storing water within the impoundment in accordance with the reservoir capacity of the impoundment. The proportion of runoff to rainfall for the drainage watershed is input based on characteristics of the watershed area. The drainage areas of the watershed include 2.0 acres of ROR Final WPDES Settling Pond surrounding area, 3.7 acres of ROR Final WPDES Settling Pond, 2.5 acres of storm water management pond, 28.0 acres of landfill area, and 9.3 acres of former coal yard, shown in Appendix C.

3.3 Hydrologic and Hydraulic Capacity Input and Assumptions

This section identifies the input and assumptions for the hydrologic and hydraulic capacity calculations. The input for each sub-drainage area of the ROR Final WPDES Settling Pond are:

Sub-Area	Acreage	Weighted Average Curve Number (CN)	Average Slope (%)	Hydraulic Length (ft)
Final WPDES Settling Pond Surrounding Area	2.0	76	9.54	231
Final WPDES Settling Pond	3.7	100	0	0

Storm Water Management Pond	2.5	98	0	0
Landfill Area	28.0	81	2.01	1,342
Former Coal Yard	9.30	77	1.12	803

Based on the inputs and assumptions used to evaluate the impoundment in HydroCAD, storm water routing model results demonstrate that the Final WPDES Settling Pond can safely manage runoff from a 1000-year storm event. The storm water routing model results generated with HydroCAD using these inputs and assumptions are provided in Appendix C.

4. Inflow Design Flood Control System Plan

The 45.5 acres of storm water flow into the ROR Final WPDES Settling Pond will not discharge during peak storm flow. The ROR Final WPDES Settling Pond will store 16.9 acre-feet of water during the event and the maximum water elevation will reach 750 feet. The minimum crest elevation of the embankment is elevation 753 with a resultant freeboard of approximately 3 feet at the peak of the storm flow.

The results of the storm routing through the ROR Final WPDES Settling Pond using HydroCAD are presented in Appendix C.

5. QUALIFIED PROFESSIONAL ENGINEER CERTIFICATION

To meet the requirements of 40 CFR 257.82(c)(5), I Mark W. Loerop hereby certify that I am a licensed professional engineer in the State of Wisconsin; and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in 40 CFR 257.82.

By: _____

Name: MARK LOEROP

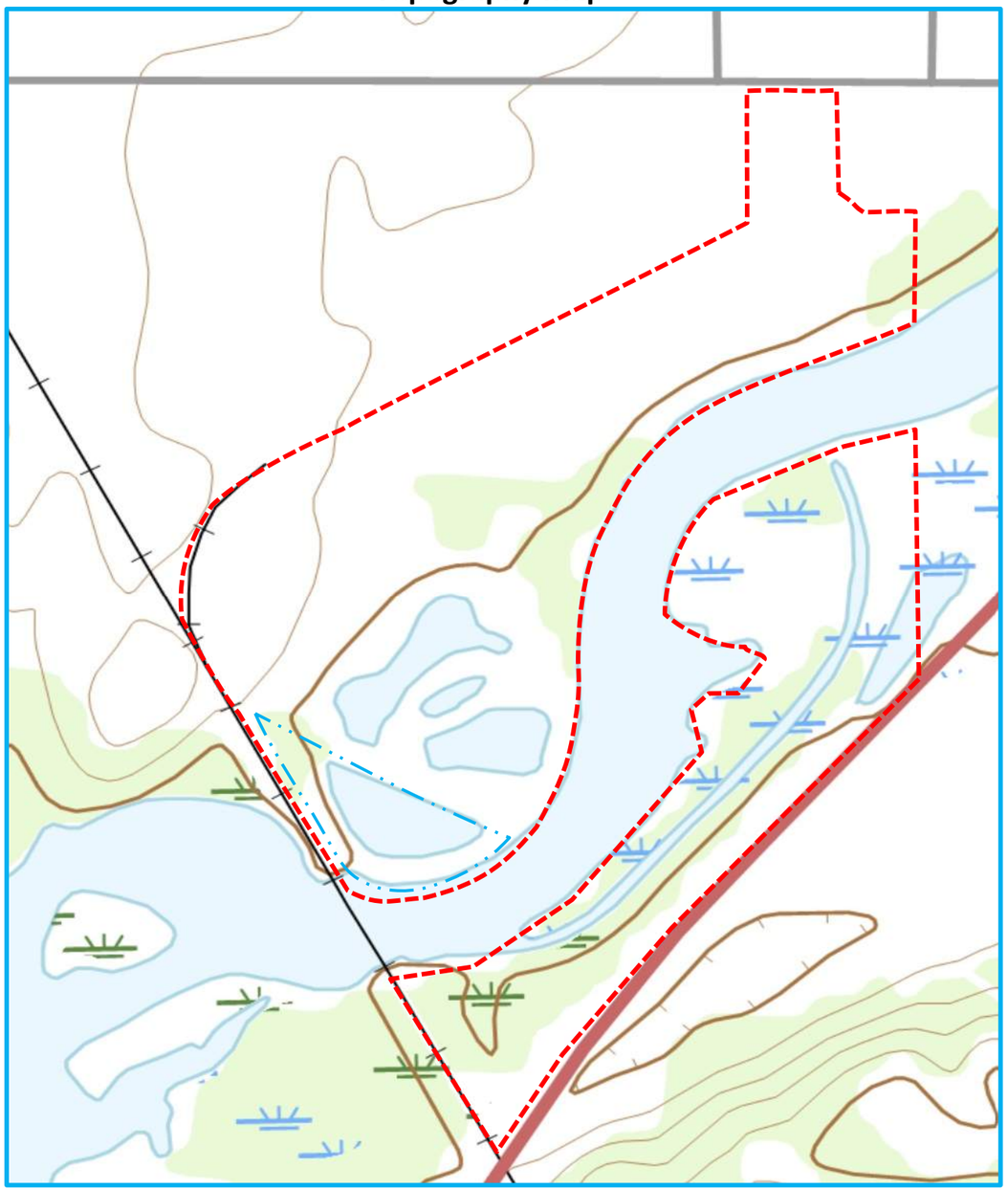
Date: MAY 6, 2026

FIGURES

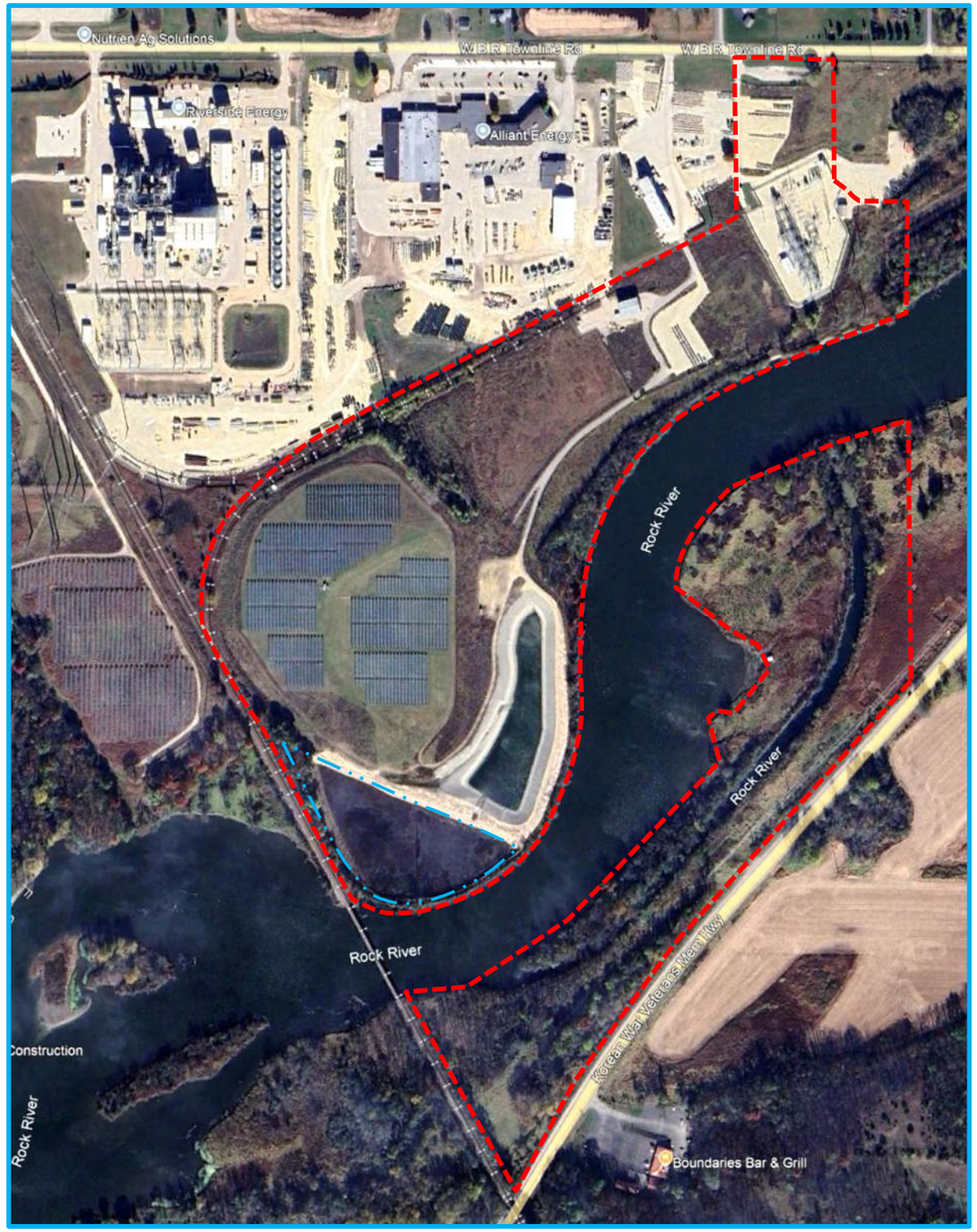
Alliant Energy
Wisconsin Power and Light Company
Rock River Generating Station
Beloit, Wisconsin

Inflow Design Flood Control System Plan

Topography Map



Aerial Photo



Approximate Property Boundary

Final WPDES Settling Pond

hard hat SERVICES

Site Location
Rock River Generating Station
Wisconsin Power and Light Company

Drawing
Figure 1

Date
4/28/2026

APPENDIX A – NOAA Storm Frequency

Alliant Energy
Wisconsin Power and Light Company
Rock River Generating Station
Beloit, Wisconsin

Inflow Design Flood Control System Plan

NOAA Atlas 14, Volume 8, Version 2
Location name: Beloit, Wisconsin, USA*
Latitude: 42.5039°, Longitude: -89.0311°
Elevation: 789 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Deborah Martin, Sandra Pavlovic, Ishani Roy, Michael St. Laurent, Carl Trypaluk, Dale Unruh, Michael Yekta, Geoffery Bonnin

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	**0.355** (0.286-0.452)	**0.416** (0.335-0.531)	**0.518** (0.416-0.662)	**0.604** (0.481-0.774)	**0.724** (0.555-0.956)	**0.818** (0.611-1.09)	**0.913** (0.656-1.25)	**1.01** (0.692-1.42)	**1.14** (0.749-1.64)	**1.25** (0.791-1.81)
10-min	**0.520** (0.419-0.662)	**0.610** (0.491-0.777)	**0.759** (0.609-0.969)	**0.884** (0.705-1.13)	**1.06** (0.813-1.40)	**1.20** (0.894-1.60)	**1.34** (0.960-1.83)	**1.48** (1.01-2.08)	**1.68** (1.10-2.41)	**1.82** (1.16-2.66)
15-min	**0.634** (0.511-0.808)	**0.744** (0.599-0.948)	**0.925** (0.742-1.18)	**1.08** (0.859-1.38)	**1.29** (0.991-1.71)	**1.46** (1.09-1.95)	**1.63** (1.17-2.23)	**1.81** (1.24-2.53)	**2.04** (1.34-2.93)	**2.22** (1.41-3.24)
30-min	**0.911** (0.735-1.16)	**1.07** (0.860-1.36)	**1.33** (1.06-1.70)	**1.55** (1.23-1.98)	**1.86** (1.42-2.45)	**2.10** (1.57-2.81)	**2.35** (1.68-3.21)	**2.60** (1.78-3.65)	**2.95** (1.93-4.24)	**3.22** (2.04-4.68)
60-min	**1.18** (0.949-1.50)	**1.39** (1.12-1.77)	**1.74** (1.39-2.22)	**2.03** (1.62-2.61)	**2.45** (1.88-3.24)	**2.78** (2.07-3.72)	**3.11** (2.23-4.26)	**3.46** (2.36-4.84)	**3.92** (2.57-5.64)	**4.28** (2.72-6.24)
2-hr	**1.44** (1.18-1.81)	**1.71** (1.39-2.14)	**2.15** (1.74-2.70)	**2.52** (2.03-3.18)	**3.04** (2.36-3.97)	**3.45** (2.61-4.56)	**3.87** (2.81-5.23)	**4.31** (2.98-5.96)	**4.90** (3.24-6.95)	**5.35** (3.44-7.70)
3-hr	**1.59** (1.31-1.98)	**1.89** (1.55-2.35)	**2.39** (1.95-2.98)	**2.81** (2.28-3.52)	**3.40** (2.66-4.40)	**3.88** (2.95-5.08)	**4.36** (3.18-5.84)	**4.86** (3.38-6.67)	**5.53** (3.69-7.80)	**6.06** (3.92-8.66)
6-hr	**1.87** (1.56-2.29)	**2.21** (1.84-2.70)	**2.78** (2.30-3.42)	**3.28** (2.70-4.04)	**4.00** (3.17-5.11)	**4.57** (3.53-5.92)	**5.17** (3.83-6.85)	**5.80** (4.09-7.88)	**6.66** (4.49-9.29)	**7.34** (4.79-10.4)
12-hr	**2.17** (1.83-2.62)	**2.53** (2.13-3.05)	**3.16** (2.65-3.82)	**3.72** (3.10-4.52)	**4.54** (3.66-5.76)	**5.23** (4.09-6.70)	**5.95** (4.47-7.80)	**6.72** (4.81-9.05)	**7.81** (5.34-10.8)	**8.68** (5.73-12.1)
24-hr	**2.49** (2.12-2.95)	**2.87** (2.45-3.41)	**3.56** (3.02-4.24)	**4.18** (3.53-5.00)	**5.12** (4.19-6.41)	**5.91** (4.69-7.48)	**6.75** (5.14-8.75)	**7.66** (5.55-10.2)	**8.95** (6.19-12.2)	**10.0** (6.68-13.8)
2-day	**2.83** (2.45-3.30)	**3.26** (2.82-3.81)	**4.03** (3.47-4.72)	**4.72** (4.04-5.56)	**5.77** (4.78-7.11)	**6.65** (5.34-8.28)	**7.58** (5.84-9.68)	**8.60** (6.30-11.3)	**10.0** (7.02-13.5)	**11.2** (7.56-15.2)
3-day	**3.10** (2.70-3.58)	**3.54** (3.08-4.10)	**4.34** (3.76-5.03)	**5.06** (4.36-5.90)	**6.15** (5.13-7.50)	**7.06** (5.71-8.72)	**8.04** (6.24-10.2)	**9.09** (6.71-11.8)	**10.6** (7.46-14.2)	**11.8** (8.03-15.9)
4-day	**3.33** (2.92-3.83)	**3.79** (3.31-4.35)	**4.60** (4.01-5.30)	**5.34** (4.62-6.18)	**6.45** (5.41-7.82)	**7.38** (6.00-9.06)	**8.38** (6.54-10.5)	**9.46** (7.02-12.2)	**11.0** (7.78-14.6)	**12.2** (8.36-16.4)
7-day	**3.94** (3.49-4.46)	**4.43** (3.92-5.03)	**5.30** (4.67-6.03)	**6.08** (5.32-6.95)	**7.25** (6.14-8.65)	**8.22** (6.75-9.94)	**9.25** (7.29-11.5)	**10.4** (7.76-13.2)	**11.9** (8.52-15.7)	**13.2** (9.10-17.5)
10-day	**4.48** (4.00-5.04)	**5.03** (4.48-5.65)	**5.97** (5.30-6.73)	**6.80** (5.99-7.71)	**8.02** (6.83-9.47)	**9.03** (7.46-10.8)	**10.1** (7.98-12.4)	**11.2** (8.44-14.2)	**12.8** (9.18-16.7)	**14.0** (9.74-18.5)
20-day	**6.10** (5.51-6.73)	**6.82** (6.16-7.54)	**8.01** (7.21-8.88)	**9.02** (8.06-10.0)	**10.4** (8.95-12.0)	**11.5** (9.63-13.5)	**12.7** (10.1-15.2)	**13.8** (10.5-17.1)	**15.4** (11.1-19.7)	**16.6** (11.6-21.6)
30-day	**7.53** (6.86-8.23)	**8.41** (7.65-9.20)	**9.82** (8.90-10.8)	**11.0** (9.88-12.1)	**12.5** (10.8-14.2)	**13.7** (11.5-15.9)	**14.9** (12.0-17.7)	**16.0** (12.2-19.6)	**17.5** (12.8-22.2)	**18.6** (13.2-24.1)
45-day	**9.44** (8.68-10.2)	**10.5** (9.66-11.4)	**12.2** (11.2-13.3)	**13.5** (12.3-14.8)	**15.3** (13.2-17.1)	**16.5** (13.9-18.8)	**17.7** (14.3-20.8)	**18.8** (14.5-22.8)	**20.2** (14.8-25.3)	**21.2** (15.1-27.1)
60-day	**11.1** (10.3-12.0)	**12.4** (11.4-13.3)	**14.3** (13.1-15.4)	**15.8** (14.4-17.1)	**17.6** (15.3-19.5)	**18.9** (16.1-21.4)	**20.1** (16.4-23.4)	**21.2** (16.4-25.4)	**22.5** (16.5-27.8)	**23.3** (16.6-29.7)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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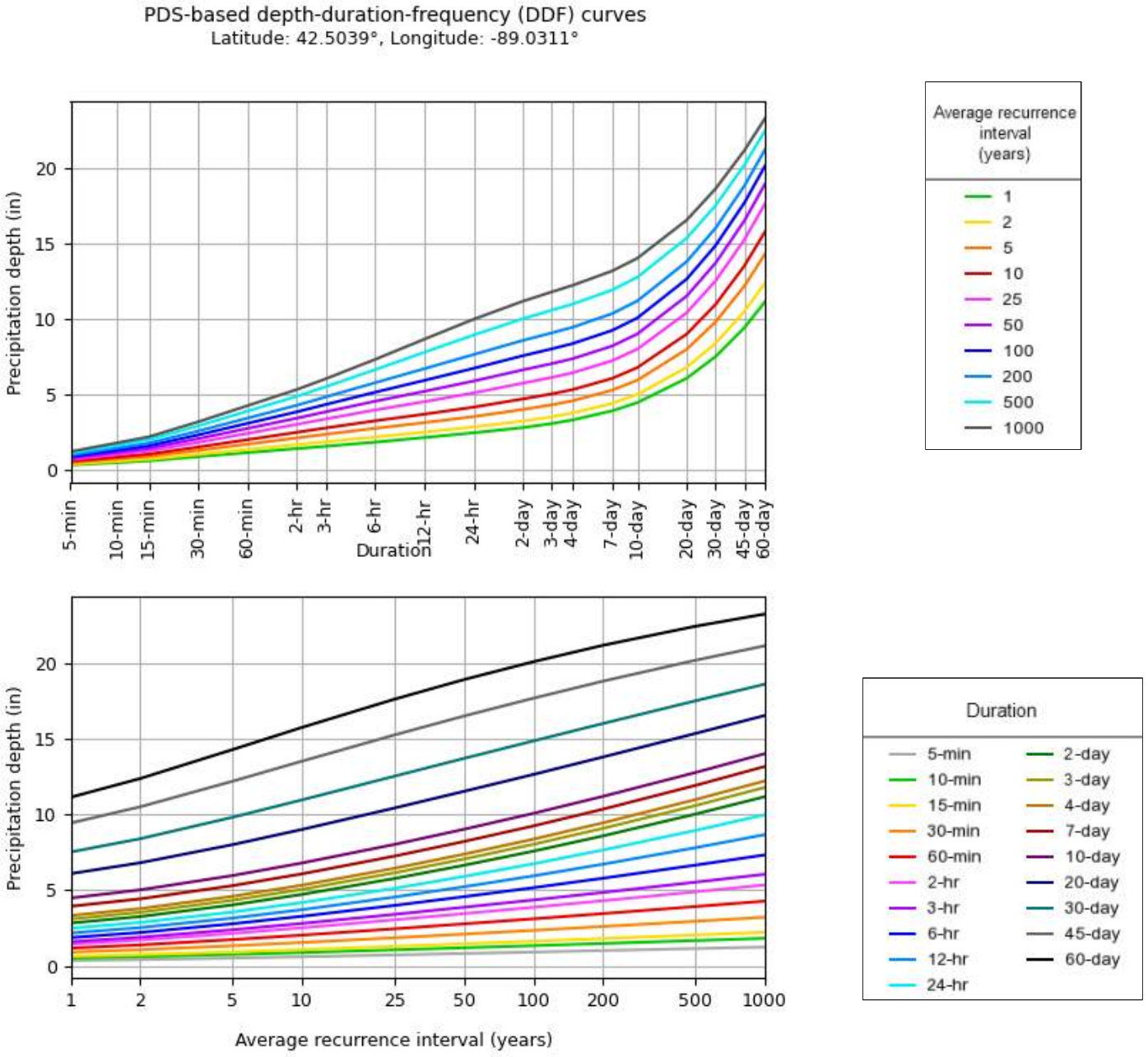
PF graphical



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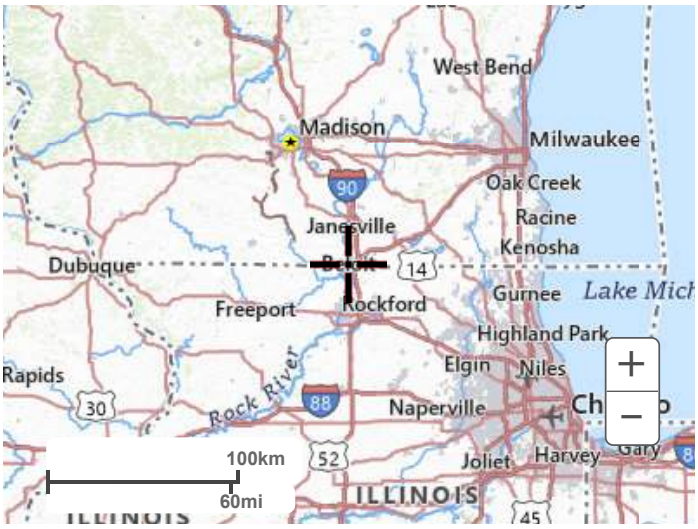
Maps & aerials

Small scale terrain

Large scale terrain

Large scale map

Large scale aerial



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National Oceanic and Atmospheric Administration
National Weather Service
National Water Center
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

Disclaimer

APPENDIX B – Outfall Drawings

Alliant Energy
Wisconsin Power and Light Company
Rock River Generating Station
Beloit, Wisconsin

Inflow Design Flood Control System Plan

CLOSED LANDFILL
(PRIOR TO 2014)

CLOSED LANDFILL
(POST 2014/2015)

APPROXIMATE LOCATION OF ADDITIONAL COVER FILL PLACEMENT FOR DRAINAGE AND RE-ESTABLISHING 30-INCH SOIL COVER THICKNESS

STORM WATER MANAGEMENT POND

PROPOSED INFILTRATION BASIN

NON-CHANNEL EROSION MAT
SEE DETAIL 3/8

BASIN EMERGENCY SPILLWAY
SEE DETAIL 1/7

ROCK RIVER

LEGEND

- 768 DOCUMENTED RESTORATION GRADE (1' CONTOUR)
- 770 DOCUMENTED RESTORATION GRADE (5' CONTOUR)
- EDGE OF RIVER/WATER
- EXISTING UNPAVED ROAD
- EXISTING RAILROAD TRACKS
- APPROXIMATE LIMITS OF EXISTING LANDFILL FINAL COVER
- EXISTING MONITORING WELL
- EXISTING DRAINAGE SWALE
- EXISTING CULVERT
- EXISTING RIPRAP
- RIVER FLOW DIRECTION
- TRACKING PAD
- ABANDONED OUTFALL PIPE
- SEEDED AND EROSION CONTROL BLANKET INSTALLED
- SEEDED AND MULCH INSTALLED

NOTES:

1. SEE SHEET 2 FOR ADDITIONAL BASE MAP LEGEND ITEMS AND NOTES. FINAL DRONE SURVEY PERFORMED BY CONTRACTOR.
2. FOLLOWING EXCAVATION THE BOTTOM OF THE POND WAS GRADED.
3. INSTALLED EMERGENCY SPILLWAY AT THE ABANDONED OUTLET STRUCTURE LOCATION IN THE BASIN.
4. INSTALLED NON-CHANNEL ERIOSION MATTING ON ALL SLOPES 4H:1V OR STEEPER UNLESS RIPRAP PRESENT.
5. PLACED TOPSOIL, NATIVE SEED, MULCH, AND/OR INSTALLED EROSION MAT ON ALL DISTURBED AREAS ABOVE THE BASE OF THE POND NOT COVERED IN RIPRAP.
6. REPAIRED NORTH ENDWALL OF STORM WATER MANAGEMENT POND CULVERT.
7. REINSTALL RIPRAP AT THE EXISTING STORM WATER MANAGEMENT POND EMERGENCY SPILLWAY.
8. SPREAD THE WOOD CHIP STOCKPILES ON BASE OF BASIN FOLLOWING EXCAVATION.
9. REMOVED EROSION CONTROLS FOLLOWING STABILIZATION OF THE SITE.
10. REMOVED EXCLUSION FENCE BEFORE DEMOBILIZATION.

N

30 0 30

SCALE: 1" = 30'

PROJECT NO. 25225032.00
DRAWN: 01/30/2025
REVISED: 03/07/2025

DRAWN BY: RVG
CHECKED BY: RJG
APPROVED BY: PEG 12/02/2025

Wisconsin Power and Light Company
CLIENT

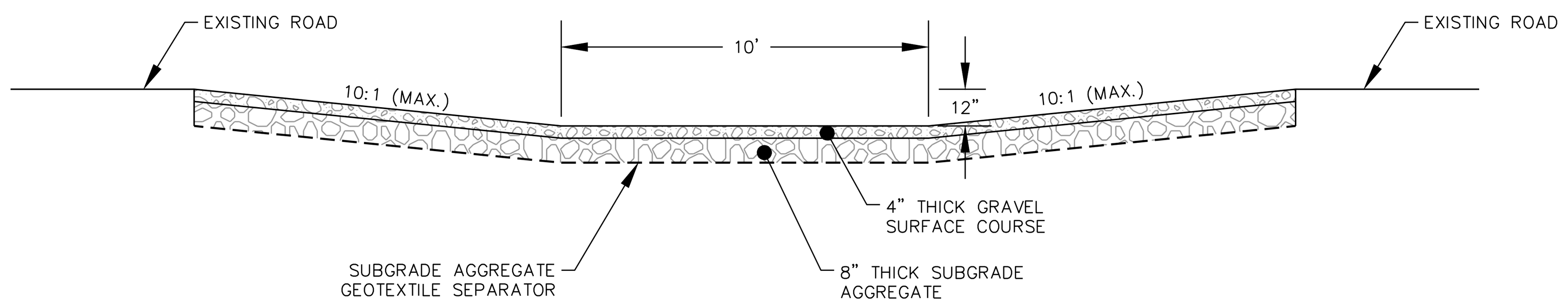
WISCONSIN POWER AND LIGHT
ROCK RIVER ASH DISPOSAL LANDFILL
827 MBR TOWNLINE ROAD
BELOIT, WISCONSIN

SCS ENGINEERS
2830 DAIRY DRIVE MADISON, WI 53718-6751
PHONE: (608) 224-2830
ENGINEER

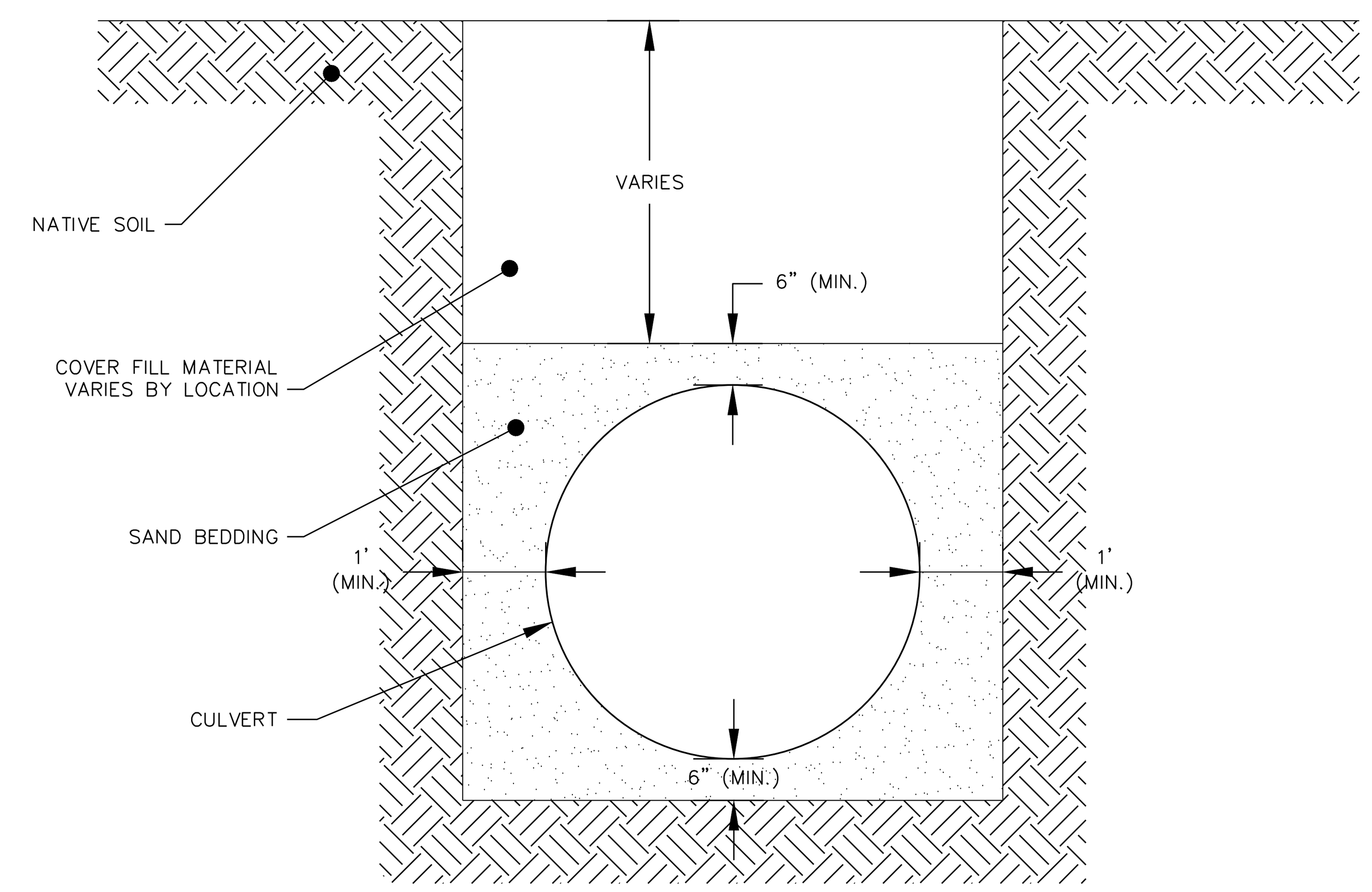
FINAL SETTLING POND CCR REMOVAL
ROCK RIVER ASH DISPOSAL LANDFILL
BELOIT, WISCONSIN
SITE

SITE RESTORATION

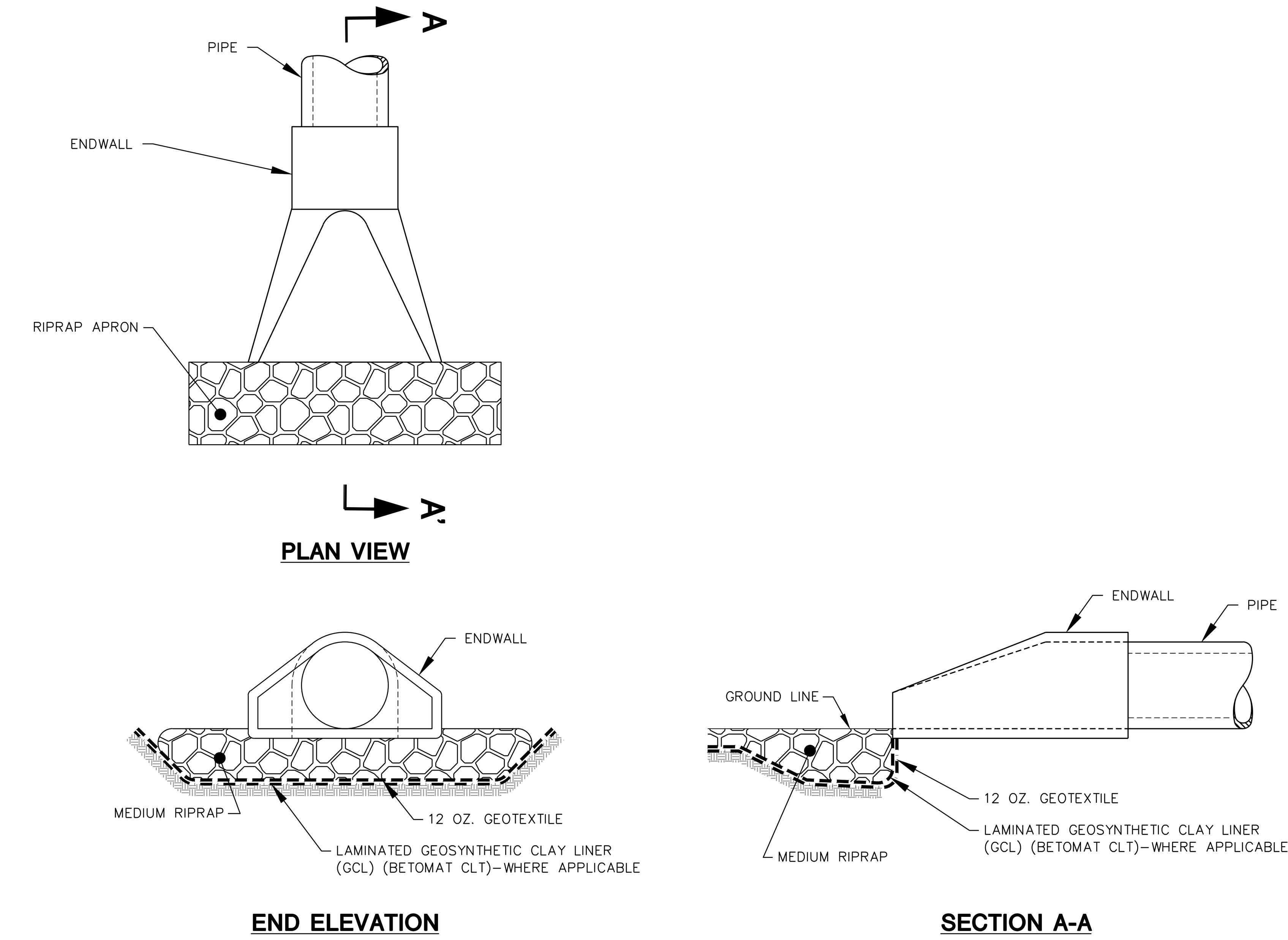
SHEET
5 of 8



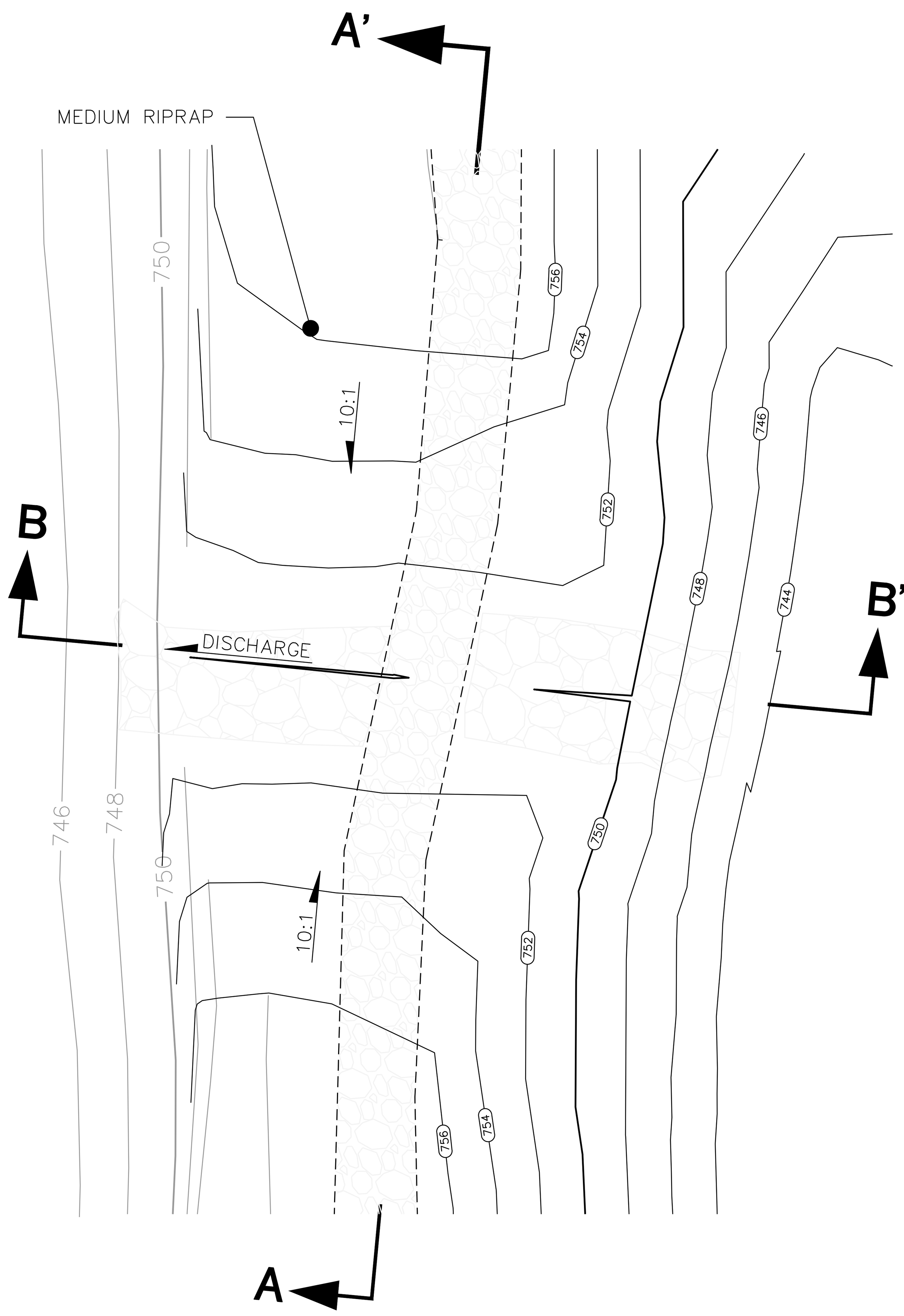
1/7 **BASIN EMERGENCY SPILLWAY**
NOT TO SCALE



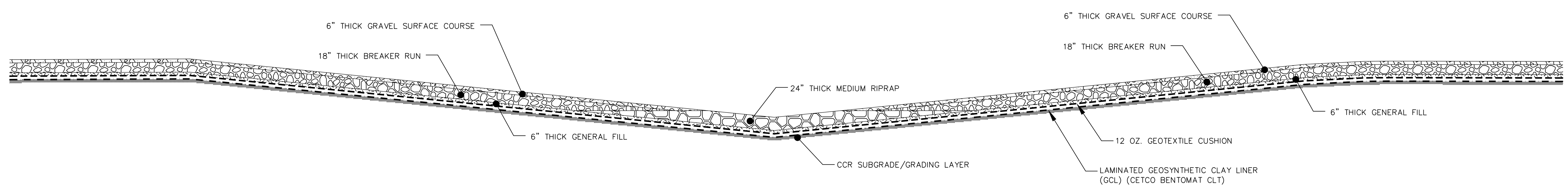
2/7 **EXISTING CUVLERT BEDDING DETAIL**
NOT TO SCALE



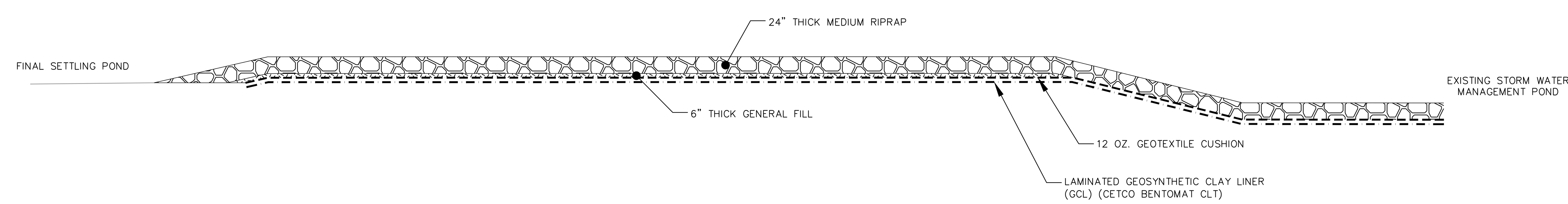
EXISTING STORM WATER MANAGEMENT CULVERT INLET AND RIPRAP PROTECTION
3/7
NOT TO SCALE



PLAN VIEW
(SCALE: 1" = 30')



SECTION A-A'
(SCALE: 1" = 10')



SECTION B-B'
(SCALE: 1" = 10')

4/7 **EXISTING STORM WATER MANAGEMENT POND EMERGENCY SPILLWAY**
NOT TO SCALE

DRAWN BY:	RJG
CHECKED BY:	RJG
APPROVED BY:	PEG 12/02/2025
PROJECT NO.	25225032.00
DRAWN:	01/30/2025
REVISED:	03/07/2025

WISCONSIN POWER AND LIGHT
ROCK RIVER ASH DISPOSAL LANDFILL
827 WEIR TOWNLINE ROAD
BELOIT, WISCONSIN

Wisconsin Power and Light Company

CLIENT

SCS ENGINEERS
2830 DAIRY DRIVE MADISON, WI 53718-6751
PHONE: (608) 224-2830

ENGINEER

FINAL SETTLING POND CCR REMOVAL
ROCK RIVER ASH DISPOSAL LANDFILL
BELOIT, WISCONSIN

SITE

DETAILS

SHEET
7 of 8

APPENDIX C – Hydraulic Analysis

Alliant Energy
Wisconsin Power and Light Company
Rock River Generating Station
Beloit, Wisconsin

Inflow Design Flood Control System Plan

Storm Water Management Calculations

Purpose:
The purpose of the storm water runoff calculations is to demonstrate that the existing storm water management features for the Rock River Legacy Surface Impoundment (Final WPDES Settling Pond) can accommodate and safely convey the runoff from a 1000-year, 24-hour storm event.

The current storm water management conditions are shown in **Figure C1.**

Approach:
Hydrograph Generation
HydroCAD was used to model the storm water management systems and develop hydrographs using TR-20 methodologies. The model is designed to simulate the surface runoff response of a watershed to a precipitation event. Input parameters for the model include precipitation depth for the design storm event from NOAA ATLAS 14, storm type MSE 3, contributing drainage areas, runoff curve numbers, and time of concentration.

Pond Evaluation
The Final WPDES Settling Pond was evaluated for the capacity to safely convey the 1000-year, 24-hour storm event without overtopping. HydroCAD was utilized to determine storage available based on the pond geometry and peak flow into the pond.

Key Assumptions:

- Drainage areas and time of concentration flow paths are as shown in **Figure C1**.
- A MSE 3 rainfall distribution was used based on the National Engineering Handbook Part 650. The precipitation depth for the 1000-year, 24-hour storm was assumed to be 10.0 inches, based on NOAA ATLAS 14 Point Precipitation Frequency Estimates (NOAA's National Weather Service Hydrometeorological Design Studies Center Precipitation Frequency Data Server).
- Runoff curve numbers were based on tables presented in Urban Hydrology for Small Watersheds and were assumed as follows and as listed in the modeling.

Cover Type	CN
Grass Area	74 – >75% Grass cover, Good, HSG C
Brush Area	76 – Woods/grass combination, Fair, HSG C
Road	98 – Paved Road
Water Surface	100 – Water Surface
Solar Panels & Gravel Area	96

- Final WPDES Settling Pond based on visual observations does not have ponding water during normal/dry conditions. Final WPDES Settling Pond was modeled without exfiltration.
- Other assumptions are included with the calculations attached.

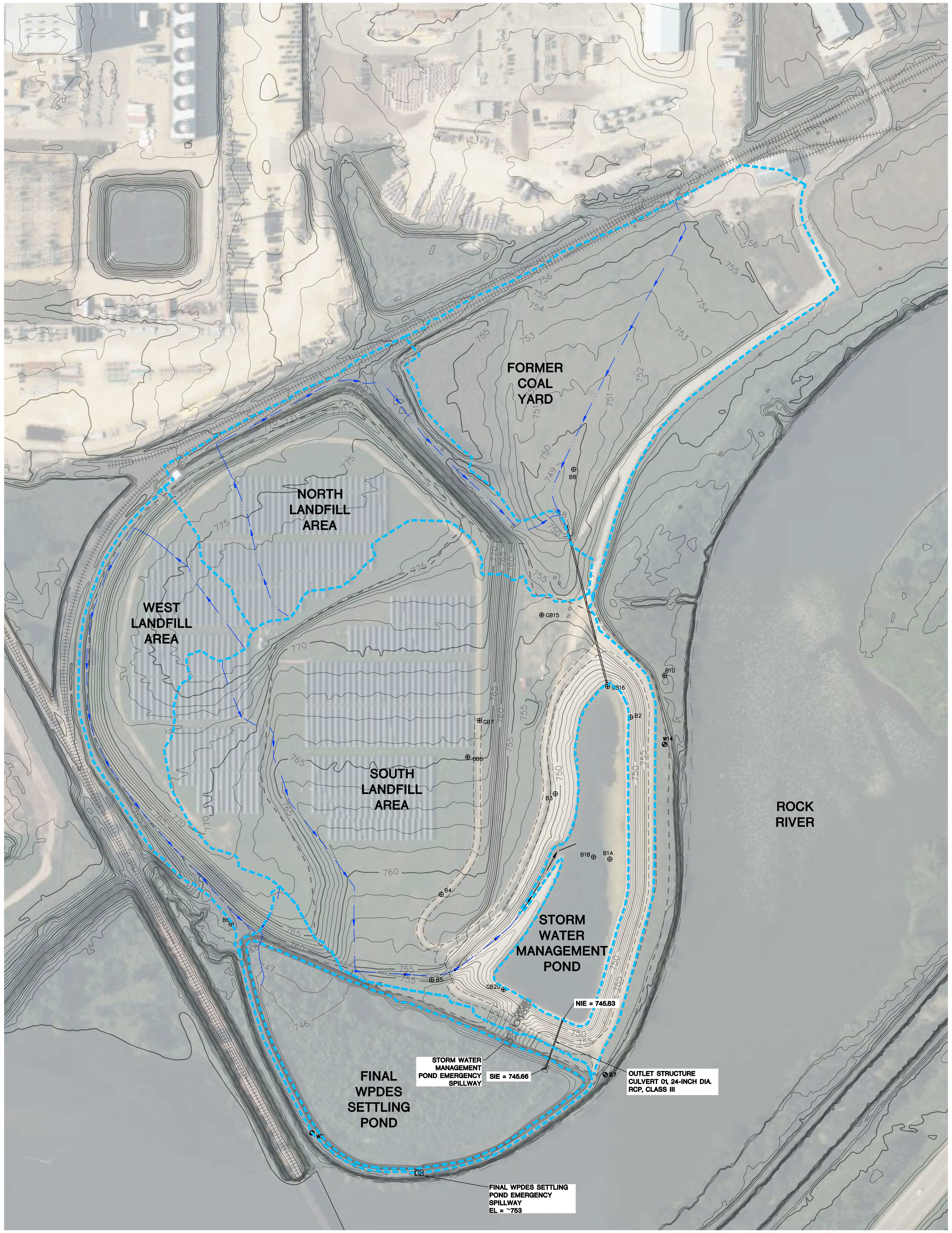
Results:

Hydrograph Generation

The hydrograph modeling results for the 1000-year, 24-hour storm event are included in the Hydrograph Generation section below.

Pond Evaluation

The Final WPDES Settling Pond has the capacity to safely convey the 1000-year, 24-hour storm event. Refer to the Hydrograph Generation section below. Peak water elevation in the Final WPDES Settling Pond reaches 750 feet with a berm height of ~753 feet leaving approximately 3 feet of freeboard under the evaluated storm event conditions.



LEGEND

762	EXISTING GRADE (1' CONTOUR)
770	EXISTING GRADE (5' CONTOUR)
	EDGE OF RIVER/WATER
	UNPAVED ROAD
	RAILROAD TRACKS
	UTILITY/LIGHT POLE
	APPROXIMATE LIMITS OF EXISTING FINAL COVER
	SOIL BORING
	GEOPROBE SOIL BORING
	MONITORING WELL
	DRAINAGE SWALE
	CULVERT
	RIPRAP
	TIME OF CONCENTRATION FLOWPATH
	DRAINAGE AREA LIMITS

NOTES

1. TOPOGRAPHIC BASE MAP FROM CONTOURS PREPARED BY KBM, INC. BASED ON 12/11/02 AERIAL PHOTOGRAPHY AND UPDATED BASED ON GROUND SURVEYS COMPLETED DURING 2004, 2005, 2006, 2008, 2013, AND 2015; 2020 ROCK COUNTY SURVEY; AND JANUARY 2025 DRONE SURVEY BY SCS ENGINEERS.
2. AERIAL IMAGE FROM BING MAPS, OBTAINED 09/19/2025
3. REFER TO STORM WATER CALCULATIONS FOR COVER TYPES AND CURVE NUMBERS WITHIN EACH DRAINAGE AREA.

N

125 0 125
SCALE: 1" = 125'

FIGURE C1

STORM WATER – EXISTING CONDITIONS

SITE: ROCK RIVER ASH DISPOSAL LANDFILL
BELOIT, WI

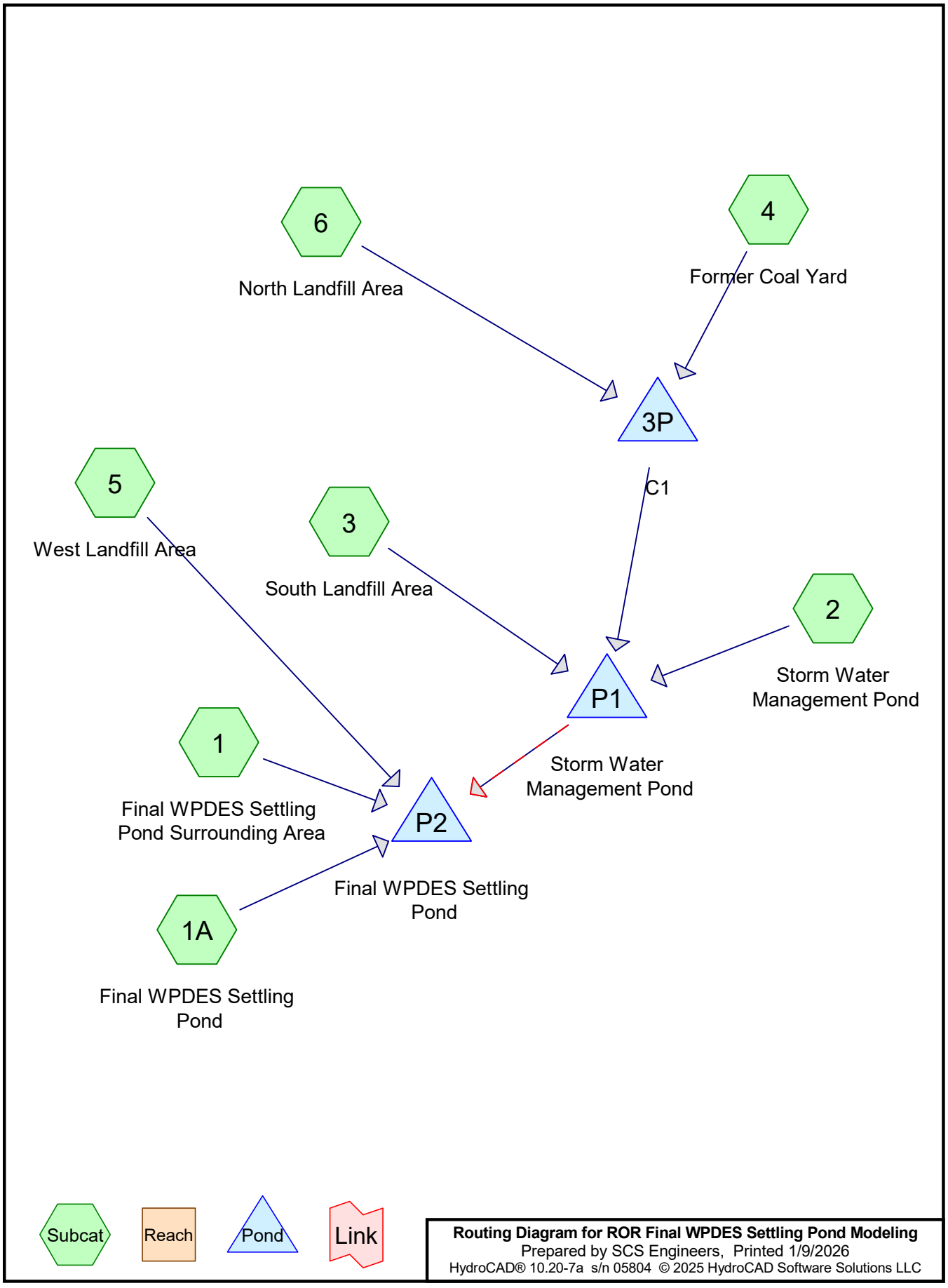
CLIENT: WISCONSIN POWER AND LIGHT
ROCK RIVER ASH DISPOSAL LANDFILL
827 WBR TOWNLINE ROAD
BELOIT, WI

ENGINEER: SCS ENGINEERS
2830 DAIRY DRIVE MADISON, WI 53718-6751
PHONE: (608) 224-2830

PROJECT NO.	25225169.01	DRAWN BY:	RAR
DRAWN:	03/11/2025	CHECKED BY:	RJG
REVISED:	01/16/2026	APPROVED BY:	BSS 01/16/2026

Hydrograph Generation

- 1000-year, 24-hour Storm Event



Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1000 year, 24 hour	MSE 24-hr	3	Default	24.00	1	10.00	2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
3.684	100	746' pond bottom surface area (1A)
28.128	74	>75% Grass cover, Good, HSG C (3, 4, 5, 6)
1.983	96	Gravel surface, HSG C (6)
1.232	98	Paved Road (4)
2.537	98	Water Surface, HSG C (2)
1.958	76	Woods/grass comb., Fair, HSG C (1)
5.960	98	solar panels/gravel area (3, 5)
45.481	**82**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
34.605	HSG C	1, 2, 3, 4, 5, 6
0.000	HSG D	
10.876	Other	1A, 3, 4, 5
45.481		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.000	0.000	3.684	3.684	746' pond bottom surface area	1A
0.000	0.000	28.128	0.000	0.000	28.128	>75% Grass cover, Good	3, 4, 5, 6
0.000	0.000	1.983	0.000	0.000	1.983	Gravel surface	6
0.000	0.000	0.000	0.000	1.232	1.232	Paved Road	4
0.000	0.000	2.537	0.000	0.000	2.537	Water Surface	2
0.000	0.000	1.958	0.000	0.000	1.958	Woods/grass comb., Fair	1
0.000	0.000	0.000	0.000	5.960	5.960	solar panels/gravel area	3, 5
0.000	**0.000**	**34.605**	**0.000**	**10.876**	**45.481**	**TOTAL AREA**	

Pipe Listing (all nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Width (inches)	Diam/Height (inches)	Inside-Fill (inches)	Node Name
1	3P	748.00	746.00	332.0	0.0060	0.012	0.0	36.0	0.0	
2	P1	745.83	745.66	110.0	0.0015	0.012	0.0	24.0	0.0	

Time span=0.00-100.00 hrs, dt=0.01 hrs, 10001 points x 2
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1: Final WPDES Settling Runoff Area=85,290 sf 0.00% Impervious Runoff Depth=7.01"
Flow Length=231' Tc=9.1 min CN=76 Runoff=21.54 cfs 1.143 af

Subcatchment 1A: Final WPDES Runoff Area=160,475 sf 100.00% Impervious Runoff Depth=10.00"
Tc=0.0 min CN=100 Runoff=61.17 cfs 3.070 af

Subcatchment 2: Storm Water Runoff Area=110,512 sf 100.00% Impervious Runoff Depth=9.76"
Tc=0.0 min CN=98 Runoff=42.08 cfs 2.063 af

Subcatchment 3: South Landfill Area Runoff Area=751,553 sf 26.83% Impervious Runoff Depth=7.52"
Flow Length=1,216' Tc=25.0 min CN=80 Runoff=126.31 cfs 10.813 af

Subcatchment 4: Former Coal Yard Runoff Area=405,274 sf 13.24% Impervious Runoff Depth=7.14"
Flow Length=803' Tc=31.9 min CN=77 Runoff=56.87 cfs 5.532 af

Subcatchment 5: West Landfill Area Runoff Area=188,443 sf 30.78% Impervious Runoff Depth=7.65"
Flow Length=1,420' Tc=36.1 min CN=81 Runoff=26.05 cfs 2.757 af

Subcatchment 6: North Landfill Area Runoff Area=279,622 sf 0.00% Impervious Runoff Depth=7.65"
Flow Length=1,390' Tc=36.5 min CN=81 Runoff=38.26 cfs 4.091 af

Pond 3P: C1 Peak Elev=752.22' Storage=90,222 cf Inflow=94.57 cfs 9.624 af
36.0" Round Culvert n=0.012 L=332.0' S=0.0060 '/' Outflow=48.90 cfs 9.433 af

Pond P1: Storm Water Management Peak Elev=750.40' Storage=803,317 cf Inflow=171.34 cfs 22.309 af
Primary=22.70 cfs 9.670 af Secondary=2.46 cfs 0.268 af Outflow=24.58 cfs 9.938 af

Pond P2: Final WPDES Settling Pond Peak Elev=749.96' Storage=736,540 cf Inflow=94.17 cfs 16.909 af
Outflow=0.00 cfs 0.000 af

Total Runoff Area = 45.481 ac Runoff Volume = 29.471 af Average Runoff Depth = 7.78"
70.51% Pervious = 32.068 ac 29.49% Impervious = 13.413 ac

Summary for Subcatchment 1: Final WPDES Settling Pond Surrounding Area

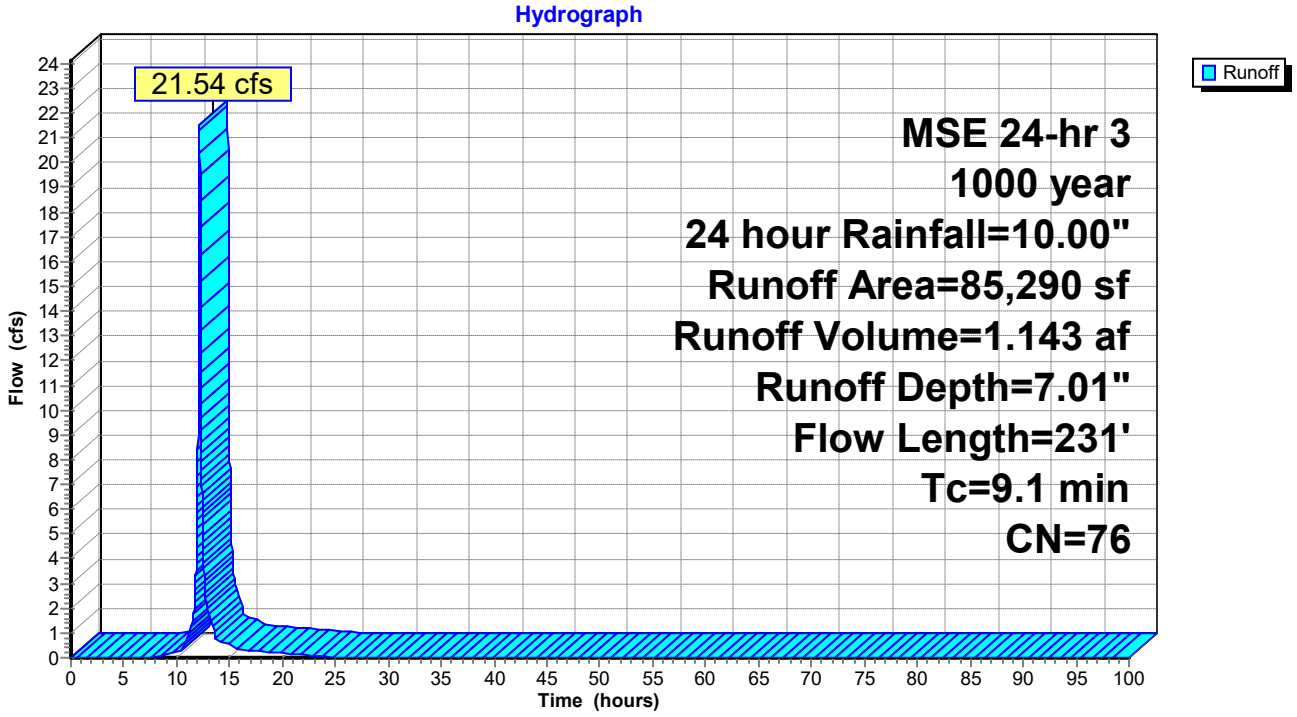
Runoff = 21.54 cfs @ 12.16 hrs, Volume= 1.143 af, Depth= 7.01"
Routed to Pond P2 : Final WPDES Settling Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 1000 year, 24 hour Rainfall=10.00"

Area (sf)	CN	Description
85,290	76	Woods/grass comb., Fair, HSG C
85,290		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.3	74	0.0374	0.19		**Sheet Flow, Closed Landfill** Grass: Short n= 0.150 P2= 2.87"
1.4	26	0.1961	0.31		**Sheet Flow, Closed Landfill** Grass: Short n= 0.150 P2= 2.87"
0.2	18	0.0604	1.72		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.1	18	0.5235	5.06		**Shallow Concentrated Flow, Entering Final Settling Pond** Short Grass Pasture Kv= 7.0 fps
1.1	95	0.0421	1.44		**Shallow Concentrated Flow, From 750' to 746' in bottom of pond** Short Grass Pasture Kv= 7.0 fps
9.1	231	Total			

Subcatchment 1: Final WPDES Settling Pond Surrounding Area



Summary for Subcatchment 1A: Final WPDES Settling Pond

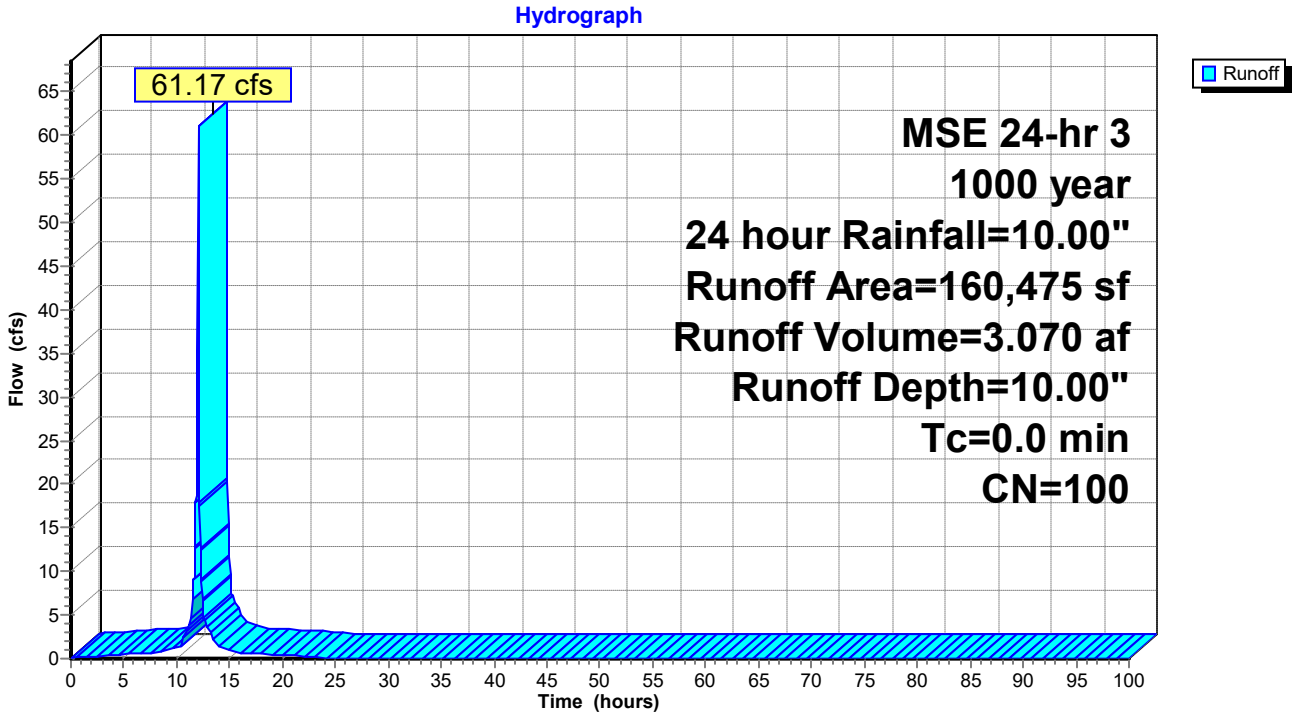
[46] Hint: Tc=0 (Instant runoff peak depends on dt)

Runoff = 61.17 cfs @ 12.07 hrs, Volume= 3.070 af, Depth=10.00"
Routed to Pond P2 : Final WPDES Settling Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 1000 year, 24 hour Rainfall=10.00"

	Area (sf)	CN	Description
*	160,475	100	746' pond bottom surface area
	160,475		100.00% Impervious Area

Subcatchment 1A: Final WPDES Settling Pond



Summary for Subcatchment 2: Storm Water Management Pond

[46] Hint: Tc=0 (Instant runoff peak depends on dt)

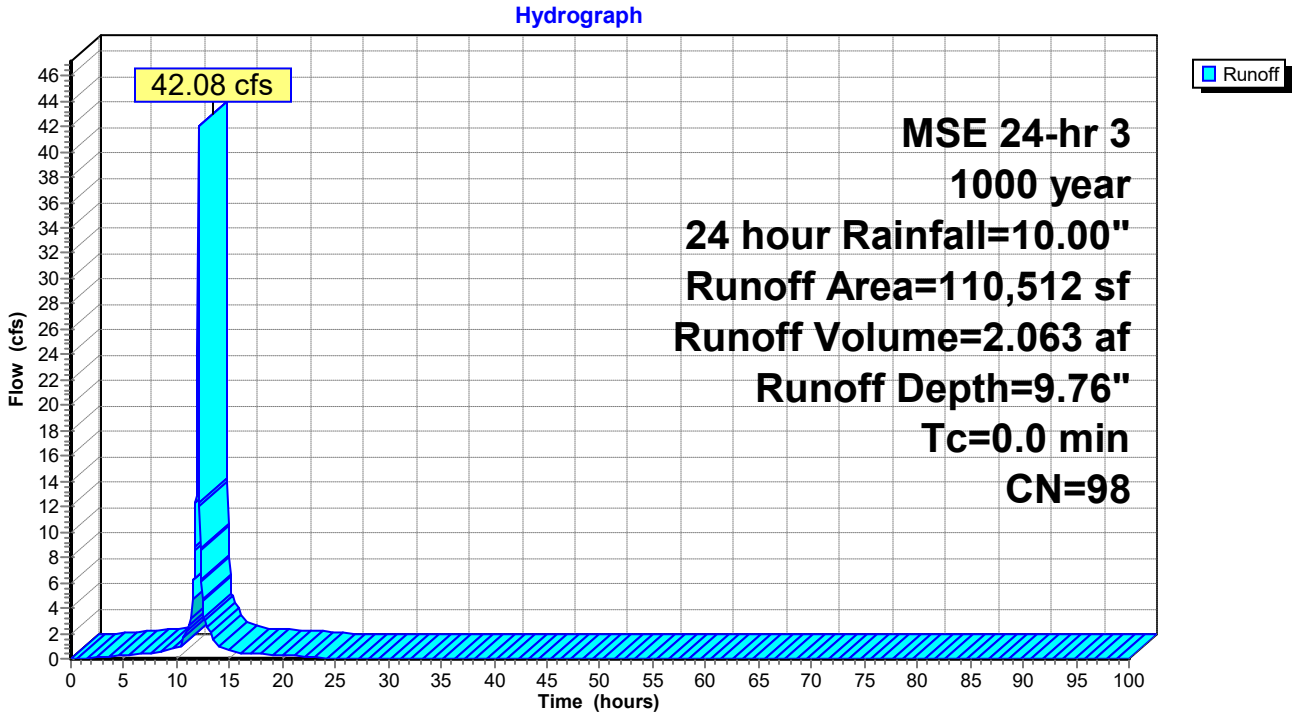
Runoff = 42.08 cfs @ 12.09 hrs, Volume= 2.063 af, Depth= 9.76"
Routed to Pond P1 : Storm Water Management Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 1000 year, 24 hour Rainfall=10.00"

Area (sf)	CN	Description
110,512	98	Water Surface, HSG C
110,512		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.0					**Direct Entry,**

Subcatchment 2: Storm Water Management Pond



Summary for Subcatchment 3: South Landfill Area

[47] Hint: Peak is 1158% of capacity of segment #3

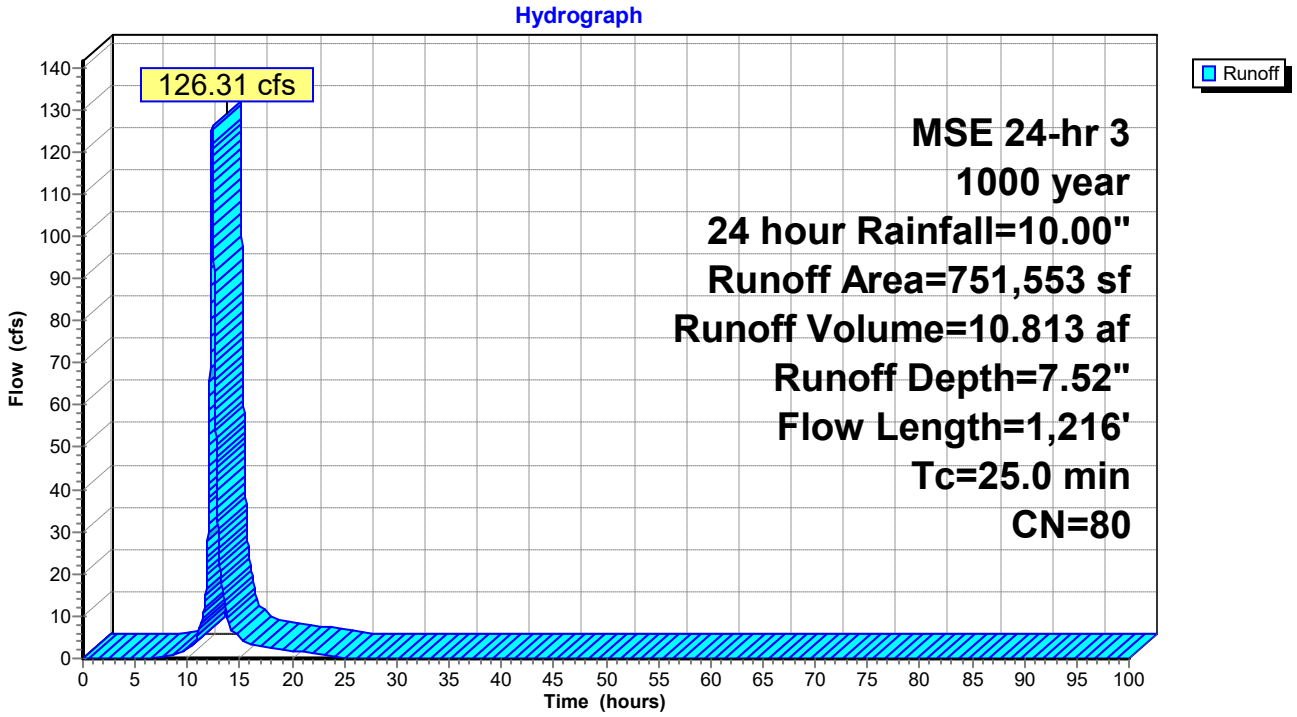
Runoff = 126.31 cfs @ 12.36 hrs, Volume= 10.813 af, Depth= 7.52"
Routed to Pond P1 : Storm Water Management Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 1000 year, 24 hour Rainfall=10.00"

	Area (sf)	CN	Description
*	201,606	98	solar panels/gravel area
	549,947	74	>75% Grass cover, Good, HSG C
	751,553	80	Weighted Average
	549,947		73.17% Pervious Area
	201,606		26.83% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.3	100	0.0330	0.14		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.87"
10.1	696	0.0269	1.15		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
2.6	420	0.0235	2.73	10.90	**Trap/Vee/Rect Channel Flow,** Bot.W=6.00' D=0.50' Z= 4.0 '/' Top.W=10.00' n= 0.045
25.0	1,216	Total			

Subcatchment 3: South Landfill Area



Summary for Subcatchment 4: Former Coal Yard

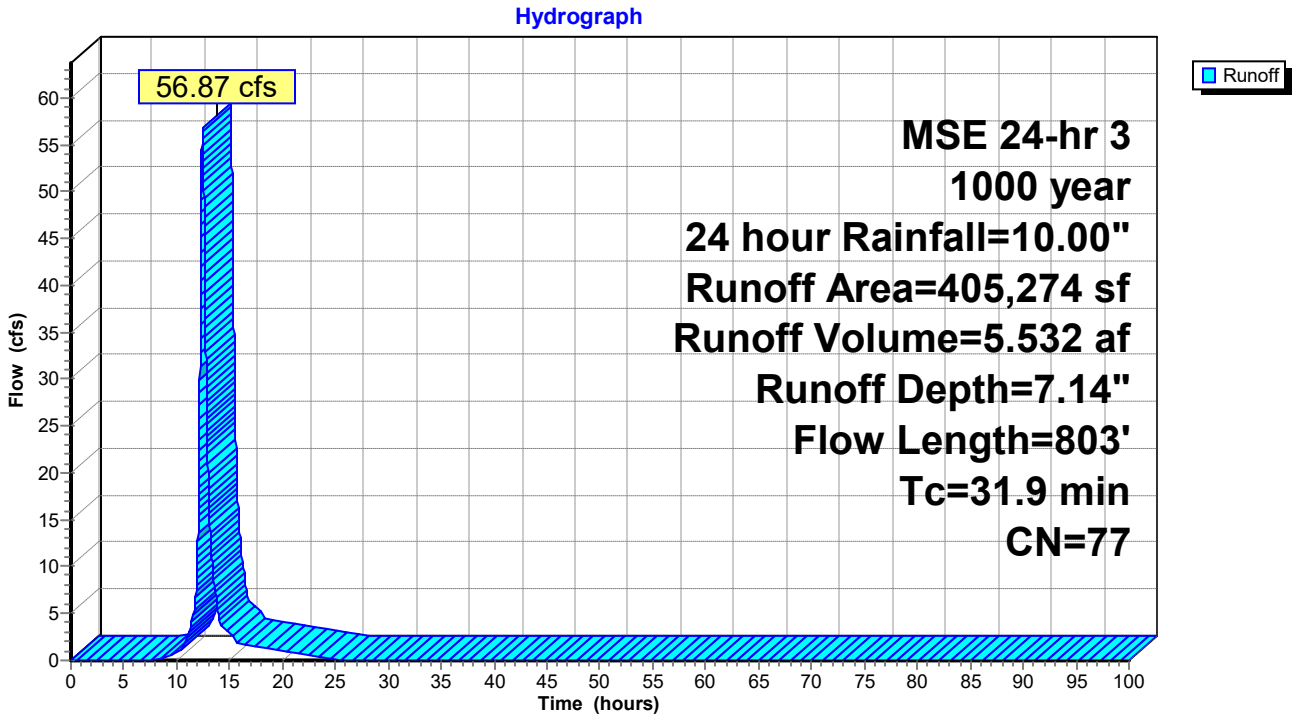
Runoff = 56.87 cfs @ 12.44 hrs, Volume= 5.532 af, Depth= 7.14"
Routed to Pond 3P : C1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 1000 year, 24 hour Rainfall=10.00"

	Area (sf)	CN	Description
	351,608	74	>75% Grass cover, Good, HSG C
*	53,666	98	Paved Road
	405,274	77	Weighted Average
	351,608		86.76% Pervious Area
	53,666		13.24% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
23.8	100	0.0025	0.07		**Sheet Flow,** Grass: Short n= 0.150 P2= 2.87"
8.1	703	0.0092	1.44		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
31.9	803	Total			

Subcatchment 4: Former Coal Yard



Summary for Subcatchment 5: West Landfill Area

[47] Hint: Peak is 2031% of capacity of segment #4

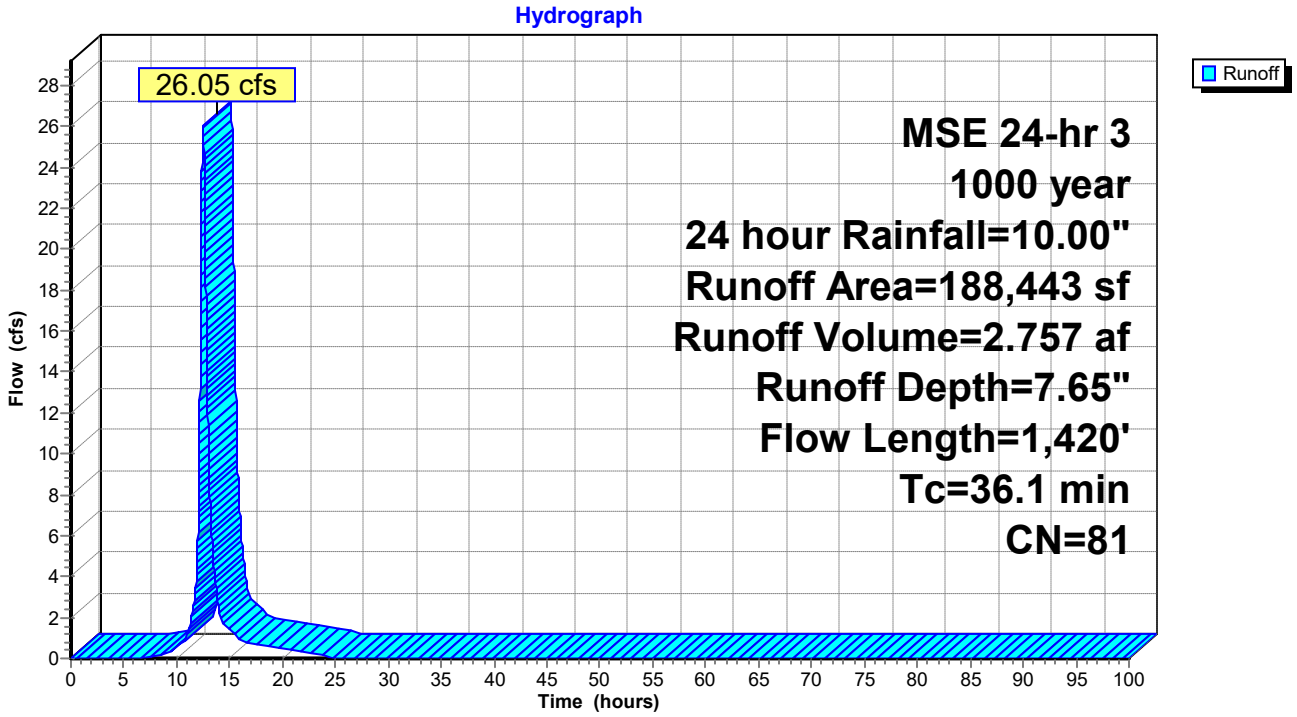
Runoff = 26.05 cfs @ 12.48 hrs, Volume= 2.757 af, Depth= 7.65"
Routed to Pond P2 : Final WPDES Settling Pond

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 1000 year, 24 hour Rainfall=10.00"

	Area (sf)	CN	Description
*	58,009	98	solar panels/gravel area
	130,434	74	>75% Grass cover, Good, HSG C
	188,443	81	Weighted Average
	130,434		69.22% Pervious Area
	58,009		30.78% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.5	100	0.0138	0.10		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.87"
4.6	227	0.0138	0.82		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.3	40	0.1250	2.47		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
13.7	1,053	0.0100	1.28	1.28	**Trap/Vee/Rect Channel Flow,** Bot.W=0.00' D=0.50' Z= 3.0 & 5.0 '/' Top.W=4.00' n= 0.045
36.1	1,420	Total			

Subcatchment 5: West Landfill Area



Summary for Subcatchment 6: North Landfill Area

[47] Hint: Peak is 1880% of capacity of segment #5

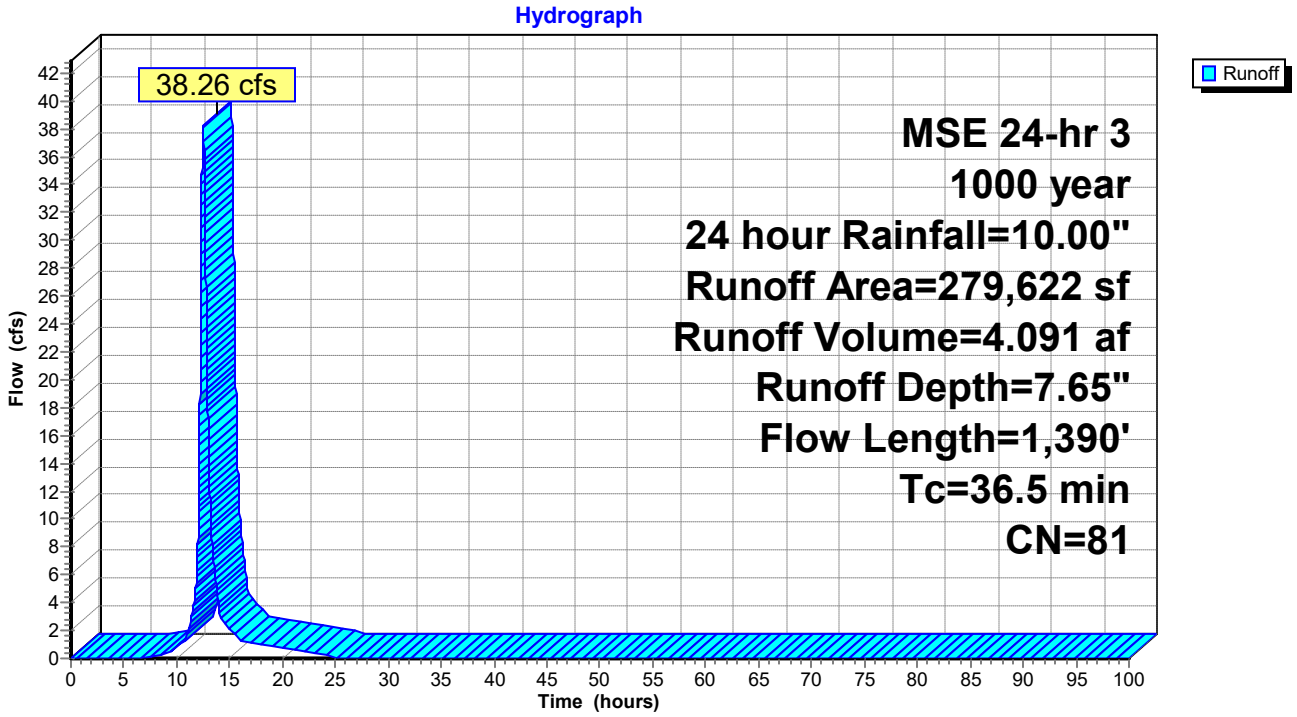
Runoff = 38.26 cfs @ 12.49 hrs, Volume= 4.091 af, Depth= 7.65"
Routed to Pond 3P : C1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 1000 year, 24 hour Rainfall=10.00"

Area (sf)	CN	Description
86,359	96	Gravel surface, HSG C
193,263	74	>75% Grass cover, Good, HSG C
279,622	81	Weighted Average
279,622		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.2	100	0.0109	0.09		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.87"
5.9	259	0.0109	0.73		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.3	38	0.1079	2.30		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.1	22	0.2050	3.17		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
9.4	838	0.0131	1.48	2.03	**Trap/Vee/Rect Channel Flow,** Bot.W=0.00' D=0.50' Z= 8.0 & 3.0 '/' Top.W=5.50' n= 0.045
1.6	133	0.0414	1.42		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
36.5	1,390	Total			

Subcatchment 6: North Landfill Area



Summary for Pond 3P: C1

Inflow Area = 15.723 ac, 7.84% Impervious, Inflow Depth = 7.35" for 1000 year, 24 hour event
Inflow = 94.57 cfs @ 12.45 hrs, Volume= 9.624 af
Outflow = 48.90 cfs @ 12.70 hrs, Volume= 9.433 af, Atten= 48%, Lag= 14.9 min
Primary = 48.90 cfs @ 12.70 hrs, Volume= 9.433 af
Routed to Pond P1 : Storm Water Management Pond

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 752.22' @ 12.85 hrs Surf.Area= 71,784 sf Storage= 90,222 cf

Plug-Flow detention time= 29.2 min calculated for 9.433 af (98% of inflow)
Center-of-Mass det. time= 17.7 min (825.9 - 808.3)

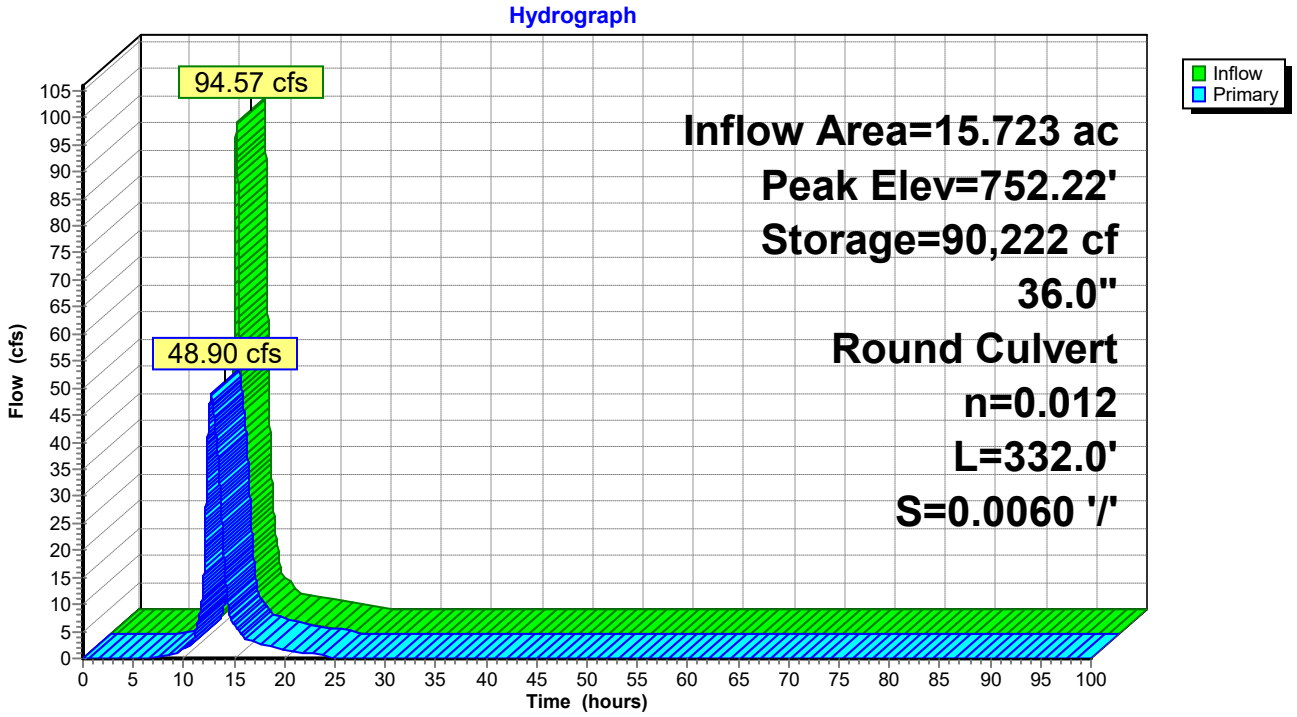
Volume	Invert	Avail.Storage	Storage Description
#1	748.00'	489,697 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
748.00	443	0	0
749.00	3,118	1,781	1,781
750.00	10,749	6,934	8,714
751.00	30,095	20,422	29,136
752.00	62,286	46,191	75,327
753.00	105,029	83,658	158,984
754.00	161,880	133,455	292,439
755.00	232,636	197,258	489,697

Device	Routing	Invert	Outlet Devices
#1	Primary	748.00'	**36.0" Round Culvert** L= 332.0' RCP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 748.00' / 746.00' S= 0.0060 '/' Cc= 0.900 n= 0.012, Flow Area= 7.07 sf

Primary OutFlow Max=48.91 cfs @ 12.70 hrs HW=752.15' TW=749.36' (Dynamic Tailwater)
1=Culvert (Outlet Controls 48.91 cfs @ 6.92 fps)

Pond 3P: C1


Hydrograph
94.57 cfs
48.90 cfs
Inflow Area=15.723 ac
Peak Elev=752.22'
Storage=90,222 cf
36.0"
Round Culvert
n=0.012
L=332.0'
S=0.0060 '/'
Inflow
Primary
Flow (cfs)
Time (hours)

Summary for Pond P1: Storm Water Management Pond

Inflow Area = 35.513 ac, 23.65% Impervious, Inflow Depth = 7.54" for 1000 year, 24 hour event
Inflow = 171.34 cfs @ 12.36 hrs, Volume= 22.309 af
Outflow = 24.58 cfs @ 13.89 hrs, Volume= 9.938 af, Atten= 86%, Lag= 91.4 min
Primary = 22.70 cfs @ 13.50 hrs, Volume= 9.670 af
Routed to Pond P2 : Final WPDES Settling Pond
Secondary = 2.46 cfs @ 14.06 hrs, Volume= 0.268 af
Routed to Pond P2 : Final WPDES Settling Pond

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs / 2
Starting Elev= 746.00' Surf.Area= 110,512 sf Storage= 194,019 cf
Peak Elev= 750.40' @ 14.06 hrs Surf.Area= 164,866 sf Storage= 803,317 cf (609,298 cf above start)

Plug-Flow detention time= 331.5 min calculated for 5.483 af (25% of inflow)
Center-of-Mass det. time= 110.3 min (914.1 - 803.7)

Volume	Invert	Avail.Storage	Storage Description
#1	744.00'	1,082,089 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

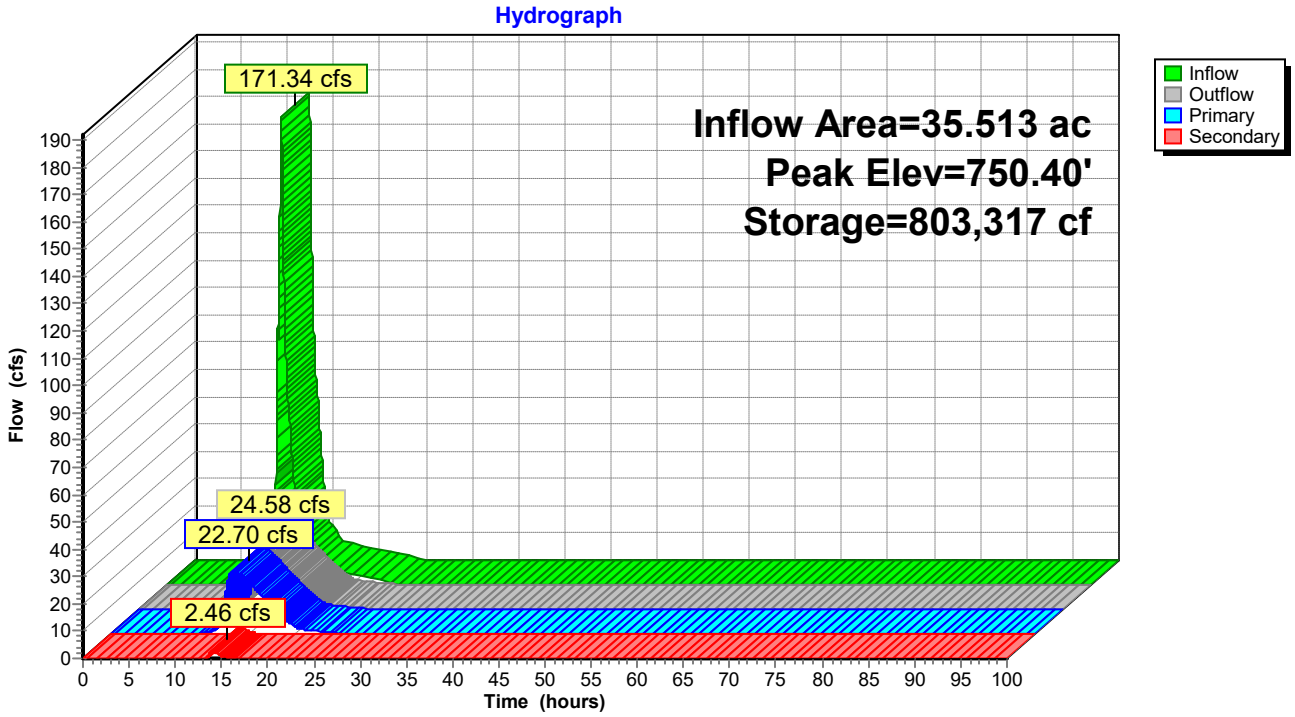
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
744.00	83,507	0	0
746.00	110,512	194,019	194,019
748.00	136,892	247,404	441,423
750.00	160,344	297,236	738,659
752.00	183,086	343,430	1,082,089

Device	Routing	Invert	Outlet Devices
#1	Primary	745.83'	**24.0" Round Culvert** L= 110.0' RCP, sq.cut end projecting, Ke= 0.500 Inlet / Outlet Invert= 745.83' / 745.66' S= 0.0015 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 3.14 sf
#2	Secondary	750.00'	**168.6 deg x 2.00' rise Sharp-Crested Vee/Trap Weir** Cv= 2.46 (C= 3.08)

Primary OutFlow Max=22.70 cfs @ 13.50 hrs HW=750.25' TW=748.00' (Dynamic Tailwater)
1=Culvert (Inlet Controls 22.70 cfs @ 7.23 fps)

Secondary OutFlow Max=2.46 cfs @ 14.06 hrs HW=750.40' TW=748.31' (Dynamic Tailwater)
2=Sharp-Crested Vee/Trap Weir (Weir Controls 2.46 cfs @ 1.55 fps)

Pond P1: Storm Water Management Pond



Summary for Pond P2: Final WPDES Settling Pond

[80] Warning: Exceeded Pond P1 by 0.02' @ 6.41 hrs (0.04 cfs 1.352 af)

Inflow Area = 45.481 ac, 29.49% Impervious, Inflow Depth = 4.46" for 1000 year, 24 hour event
Inflow = 94.17 cfs @ 12.09 hrs, Volume= 16.909 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-100.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 749.96' @ 100.00 hrs Surf.Area= 200,133 sf Storage= 736,540 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	746.00'	1,574,433 cf	**Custom Stage Data (Conic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
746.00	160,475	0	0	160,475
748.00	191,680	351,693	351,693	191,821
750.00	200,287	391,935	743,629	200,983
752.00	207,639	407,904	1,151,533	209,002
754.00	215,284	422,900	1,574,433	217,313

Device	Routing	Invert	Outlet Devices
#1	Primary	753.00'	**10.0' long x 1.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 Coef. (English) 2.69 2.72 2.75 2.85 2.98 3.08 3.20 3.28 3.31 3.30 3.31 3.32

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=746.00' (Free Discharge)
1=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond P2: Final WPDES Settling Pond