

EXISTING STORMWATER REPORT

Contents:

Project Narrative
Map Exhibits
Drainage & Coverage Exhibits
CN & Stage-Storage Calculations
PondPack Reports & Schematic
Reference Documents

Project:
Riverwoods Reserve

Location:
3750 Deerfield Road
Riverwoods, Illinois

Prepared For:
Lexington Homes
1731 Marcey Street
Suite 200
Chicago, IL 60614

Date:
February 23, 2022

Revised:
November 1, 2022

Prepared By:
Phil Ceratto, P.E.
Haeger Project No.: 20-147



ENGINEERING | SURVEYING | CONSTRUCTION



PROJECT OVERVIEW

Existing Conditions

Riverwoods Reserve, also known as the Federal Life site, is a proposed townhome development of a 9.379-acre parcel (8.851-acre after the proposed Deerfield Road R.O.W. dedication) located at 3750 Deerfield Road in Riverwoods, Lake County, Illinois. The site is bounded to the south by Deerfield Road, to the east and north by residential development, and to the west by the Colonial Court shopping center.

The site was previously developed into a commercial building with associated parking lot and stormwater basin for detention and compensatory storage in approximately 1979/1980. The original construction plans indicated a design normal water level (NWL) of 638.00 and high water level (H WL) of 643.00. The basin was designed to have a flat 24-inch diameter outlet pipe to an outlet control structure in the northeastern corner of the property, discharging into a drainage ditch which is ultimately tributary to the Des Plaines River. The outlet control structure includes a flap gate on the outlet pipe, and per plan was proposed to include a 6-inch relief pipe to function as a restrictor.

Additional field investigation of the stormwater components was completed by Haeger Engineering, as summarized in the memorandum included at the end of this report which provides additional information. The additional field investigation was required to verify the dimensions of the Deerfield Road culvert to the south, the flap gate and outlet control structure, and the normal water level of the basin. The Deerfield Road culvert was found to be a 3' x 4' concrete box culvert on the upstream end, and an elliptical CMP culvert with dimensions approximately 56" x 36" on the downstream end. Based on the lesser flow area, the downstream end of the culvert was used in the modelling as controlling the flow rate. A 42" round equivalent was modeled as PondPack does not accept elliptical culvert inputs.

The flap gate and outlet control structure were inspected and measured to verify invert of the adjacent sewers and the diameter and invert of the proposed 6-inch relief pipe described above. The relief pipe was found to be an approximately 0.47'-diameter hole drilled through the flap gate at an invert of 638.08. As noted in the memorandum, the flap gate is not water tight and allows water to discharge below the invert of the orifice opening. In combination with this information and multiple surveys of the pond, the NWL was verified to be 638.0.

The existing pond receives stormwater runoff from multiple upstream tributary areas west of the site and south of Deerfield Road. To the west, the Colonial Court shopping center & a portion of Milwaukee Avenue discharge runoff into the pond. To the south, an existing culvert conveys runoff Deerfield Road and an existing wetland / depressional area into the pond. The adjacent CubeSmart property, east of the wetland, discharges into the Federal Life pond, as well as the vacant property at the southeast corner of Milwaukee Avenue & Deerfield Road and portions of the existing landfill site to the south.

To accurately model the existing pond with the complex outlet control conditions, the outlet control structure was modeled as a receiving pond with a 0.47' diameter orifice opening at 638.08 and an overland flow weir to the drainage ditch east of the site. The outlet control pond receives upstream water from the 24" sewer connecting the pond and outlet control structure. These two ponds were modeled as interconnected ponds with forward and reverse flow along the 24" sewer to analyze the tailwater effect the outlet control structure would have on the sewer flow rate.

Drainage areas were delineated utilizing a combination of Lake County GIS topography and roadway plans for Milwaukee Avenue and Deerfield Road in the vicinity of the site. Site coverage for the drainage areas were calculated using *Table 2-2a Runoff curve numbers for urban areas* from NRCS TR-55. The composite curve numbers and drainage areas are summarized in Table 1-1 below.



Table 1-1: Sub-Area Parameters

Drainage Sub-Area	Drainage Area (Ac.)	Curve Number
Site Tributary to Basin	7.452	77
Deerfield Road North	6.284	92
Deerfield Road South	7.488	86
CubeSmart Tributary	2.218	92
Bypass thru CubeSmart	1.057	80
Site to Meadowlake	0.233	61
Site to 3700 Deerfield Rd (N)	0.461	61
Site to 3700 Deerfield Rd (S)	0.235	61
Site to Deerfield Road	0.730	64

Stage-storage tables for the existing Federal Life basin and the existing wetland were determined utilizing a combination of the topographic survey by Haeger Engineering and supplemented with topographic information from Lake County GIS. Discharge rates were modeled in PondPack utilizing surveyed field conditions for culverts, irregular overflow weirs and record drawings of the CubeSmart site to accurately model the provided detention.

Results of the hydrologic modeling are summarized at the end of this report.

Floodplain Fill, Flood Protection & Compensatory Storage

Flood maps indicate the presence of both Zone AE and Zone X floodplain on and adjacent to the site. An analysis of the flood profile of Des Plaines River showed that the floodplain elevation varies from north to south across the site. The 10 and 100-year floodplains elevations are summarized in Table 1-2 below.

Table 1-2: Floodplain Elevation

Location	10-Year Flood Elevation	100-Year Flood Elevation
North Property Line	642.35	645.30
South Property Line / Deerfield ROW	642.25	645.00

Compensatory storage will be provided in accordance with the Lake County WDO requirements at a 1.2:1 ratio for the 0-10 year fill and 10-100 year fill.

HYDROLOGIC MODELING

The hydrologic and hydraulic models were performed using PondPack, a computer program developed by Bentley Systems and based on the TR-20 methodology.

This report presents a brief discussion of the PondPack input, analysis, and results, and then provides exhibits and appendices at the back of each respective section that include the input / output of the PondPack model.



PondPack uses the following input data in order to develop the computer model:

- Drainage Area
- Runoff Curve Number
- Time of Concentration
- Channel Geometry and Reach Length
- Pond Stage-Storage relationships
- Pond discharge characteristics
- Rainfall Depth
- Time Distribution of Rainfall

A. Subbasin Delineation

The tributary area for each subbasin was based on an analysis of the contours derived from the topographic survey and information gathered from previous analysis of the site. For the proposed condition, the drainage areas were defined from the proposed street layout and grading analysis.

B. Runoff Curve Number

The Runoff Curve Number (RCN) is used by PondPack to determine rainfall losses. The RCN is a function of:

- Hydrologic Soil Group (HSG)
- Cover type
- Treatment
- Hydrologic condition
- Antecedent runoff condition

Recommended values of RCN for various land uses and HSGs are presented in SCS TR-55 and were used in the model based on the soils map for the site and the proposed use.

C. Time of Concentration

The factors affecting time of concentration (Tc) are surface roughness, channel shape and flow patterns, and slope. Water travels through a watershed through four types of flow: sheet flow, shallow concentrated flow, open channel flow, pipe flow, or some combination of these. These parameters are computed according to SCS TR-55 for each subbasin.

D. Pond Stage-Storage Relationships

The pond stage-storage relationships for the existing depressions were derived from the existing contours. The proposed conditions for the storage relationship were defined by the proposed grading shown on the engineering plans.

E. Pond Discharge Relationships

The pond discharge relationship for the existing depressions was derived from the existing contours, and weirs were defined at the overflow elevations. The proposed conditions for the discharge relationship were defined by an orifice or pipe to deliver the desired discharge, and weirs were utilized as overflow structures. Pond Pack considers tailwater effects in the discharge rate of interconnected ponds.

F. Rainfall Depth

The rainfall depths for various storm frequencies were obtained using Bulletin 75, Northeast Quadrant rainfall data. Refer to Bulletin 75, Table 7 for rainfall depths.



G. Time Distribution of Rainfall

Bulletin 75, Northeast Section, provides information on the time-distribution characteristics of heavy rainstorms in Illinois. Storms are categorized as first, second, third, or fourth quartile storms depending on whether the greatest percentage of total storm rainfall occurred in the first, second, third, or fourth quartile of the storm period. The following criteria are used to determine which time distribution is used for a given storm:

<u>Storm Duration</u>	<u>Quartile Storm</u>
Less than or equal to 6 hours	First
Greater than six or less than or equal to 12 hours	Second
Greater than 12 or less than or equal to 24 hours	Third
Greater than 24 hours	Fourth

Per comments from the Village, the 10-year BFE tailwater of 642.35 was used in the modeling:

Model 1 – Existing Conditions 10 Year BFE Tailwater

This model is based on the existing topography and defines the existing peak discharges and storage elevations with a 10-year BFE modeled as the tailwater. Based on the location of the discharge near the northern property line, a constant tailwater at elevation 642.35 was modeled. A critical storm analysis was also run with this model for the 2- and 100-year storms with 5 minute to 10-day durations in order to determine the existing depressional storage and critical duration flows for the site.

Summary

A schematic overview of the models above and detailed calculations for composite curve numbers, stage-storage tables, and a critical duration analysis summary are included at the end of this report, with PondPack outputs for the various modeled alternatives. The modeling shows that the basin will exceed the design HWL of 643.00 for longer duration events under 10-year tailwater scenario, resulting in ponding in the parking lot and over land flow to the east.

The peak HWL is approximately 644.0, controlled by the combination of the 24" sewer discharge to the outlet control structure and the outlet control orifice & weir discharge to the drainage ditch, summarized in Table 1-3 below. At this elevation, approximately 5.8 ac-ft of storage is utilized in the existing basin.

Table 1-3: 10-Year BFE Tailwater Peak Flow and Elevation @ Existing Basin

Scenario	Peak Flow (cfs)	Peak Elevation (ft)	Storage @ Peak Elevation (ac-ft)	Storm Event (100 Year)
Model 1 (10-Year BFE)	13.57	643.97	5.818	18 Hour

Additionally, 2- and 100-year flow rates to the adjacent properties were analyzed, summarized in Table 1-4 below.

Table 1-4: 2- & 100-Year Peak Flow Rates

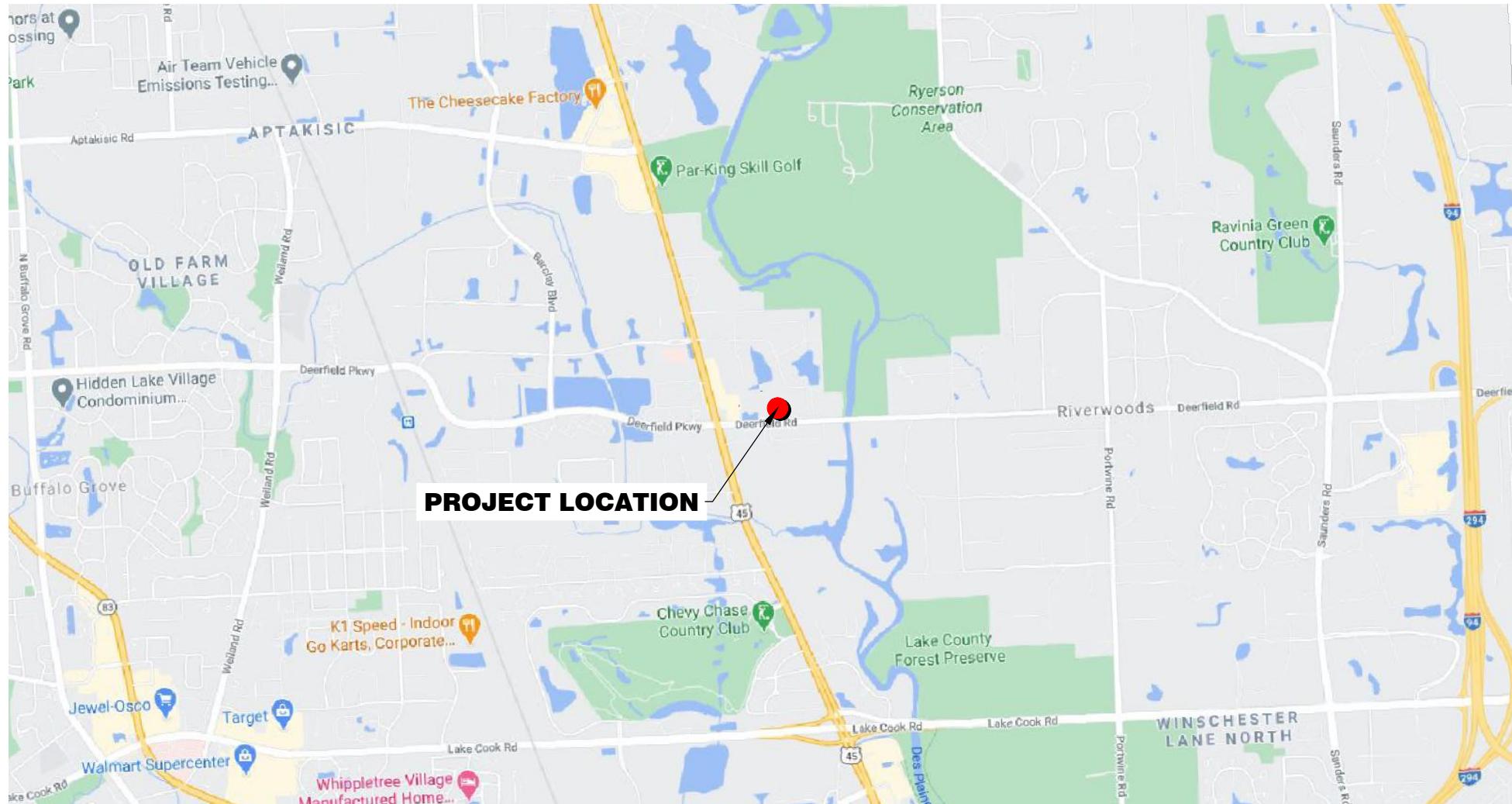
ID	2-Year Peak Flow (cfs)	Storm Event (2 Year)	100-Year Peak Flow (cfs)	Storm Event (100 Year)
To Drainage Ditch (Des Plaines River)	8.79	48 Hour	9.64	18 Hour
To Meadowlake	0.02	18 Hour	0.33	2 Hour
To 3700 Deerfield Road	0.07	18 Hour	0.98	2 Hour
To Deerfield Road	0.08	18 Hour	1.26	1 Hour



The allowable release rate for the proposed development that includes stormwater management for offsite areas will be based on the Lake County WDO requirement and coordination with third party agencies. The adjacent Colonial Court property to the west has finished floor elevations as low as 645.0, and the proposed development would also look to reduce the calculated HWL, if practicable, to allow for additional flood protection of the adjacent developments.



Map Exhibits



0 0.5 mi.
Scale: 1" = 0.5 mi.

LOCATION MAP 3750 DEERFIELD ROAD

VILLAGE OF RIVERWOODS, LAKE COUNTY, ILLINOIS



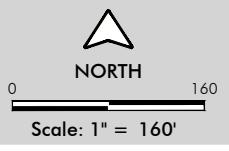
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Engineer: C J B
Date: 2/2/2022
Project No. 20-147
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NOTE:
Parcel and contour information are from Lake County GIS.
Aerial imagery is courtesy of USGS.



AERIAL PROPERTY EXHIBIT 3750 DEERFIELD ROAD

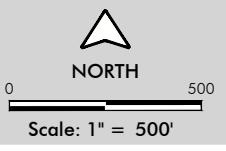
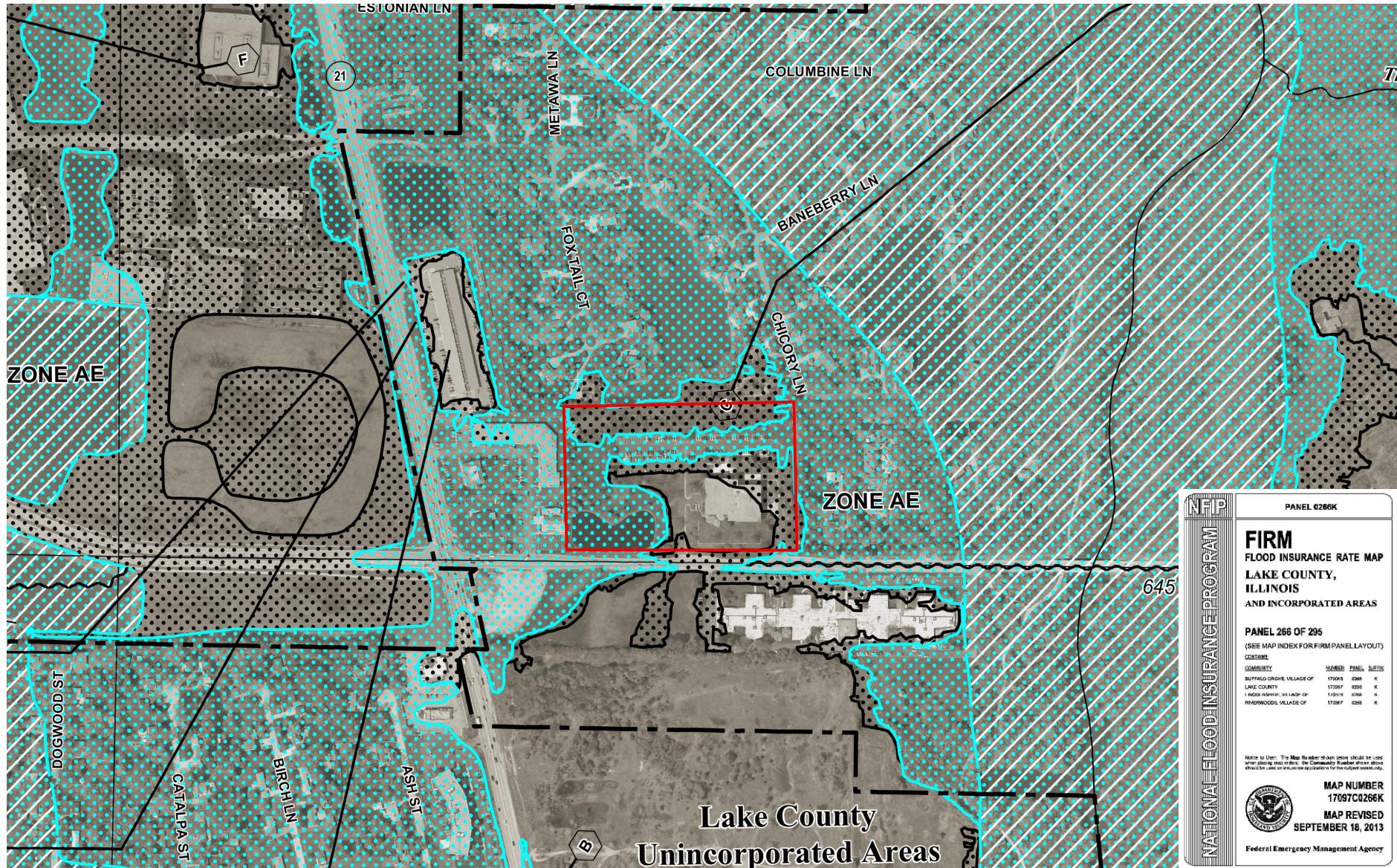
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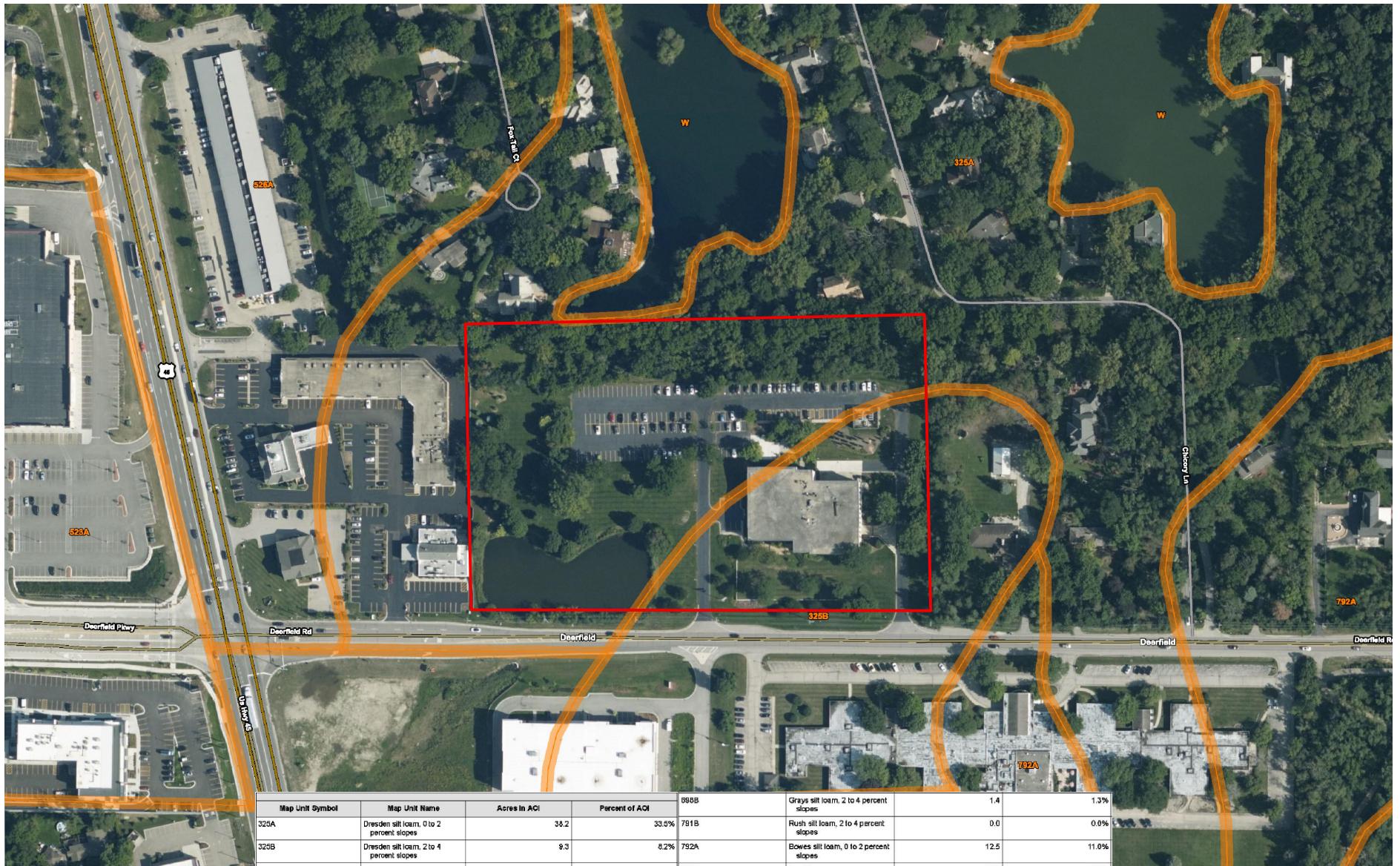
FEMA FIRM EXHIBIT 3750 DEERFIELD ROAD

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NOTE:
Soils information is from USDA Natural Resources Conservation Service (NRCS) accessed online 9-9-2020.

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI				
325A	Dresden silt loam, 0 to 2 percent slopes	38.2	33.5%	698B	Grays silt loam, 2 to 4 percent slopes	1.4	1.3%
325B	Dresden silt loam, 2 to 4 percent slopes	8.3	6.2%	791B	Rush silt loam, 2 to 4 percent slopes	0.0	0.0%
442A	Mundelein silt loam, 0 to 2 percent slopes	0.4	0.3%	792A	Bowes silt loam, 0 to 2 percent slopes	12.5	11.0%
523A	Dunham silty clay loam, 0 to 2 percent slopes	8.3	7.3%	830	Landfills	10.8	9.5%
526A	Grundlein silt loam, 0 to 2 percent slopes	16.4	14.4%	1107A	Sawmill silty clay loam, undrained, cool, 0 to 2 percent slopes, frequently flooded	1.4	1.2%
557A	Millstream silt loam, 0 to 2 percent slopes	3.5	3.1%	W	Water	11.8	10.2%
Totals for Area of Interest						113.8	100.0%



0 250

Scale: 1" = 250'

SOILS MAP EXHIBIT 3750 DEERFIELD ROAD

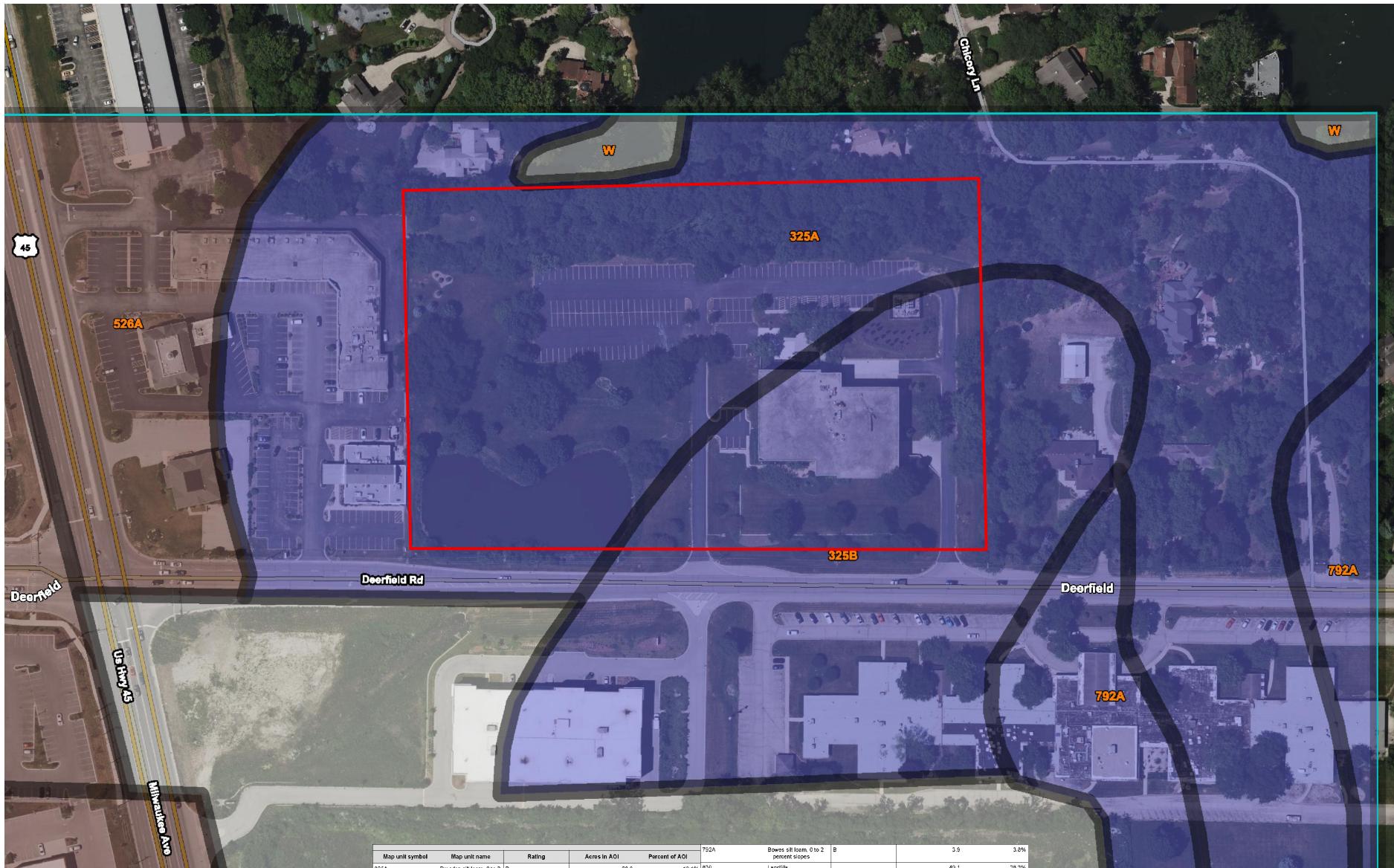
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NOTE:
Soils information is from USDA Natural Resources Conservation Service (NRCS) accessed online 12-13-2022.

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI	792A	Brews silt loam, 0 to 2 percent slopes	B	3.9	3.8%
325A	Dresden silt loam, 0 to 2 percent slopes	B	20.0	19.1%	830	Lentilis	B/D	40.1	38.3%
325B	Dresden silt loam, 2 to 4 percent slopes	B	9.3	8.9%	1107A	Savann silty clay loam, undrained, cool, 0 to 2 percent slopes, frequently flooded	B/D	9.0	0.0%
523A	Durham silty clay loam, 0 to 2 percent slopes	B/O	7.6	7.2%	3107A	Savann silty clay loam, heavy ill plan, 0 to 2 percent slopes, frequently flooded	B/D	2.3	2.2%
526A	Groeschen silt loam, 0 to 2 percent slopes	B/O	10.9	10.4%					
571A	Milwaukee silt loam, 0 to 2 percent slopes	B/O	10.0	9.6%	W	Water		0.5	0.5%

SOILS MAP EXHIBIT (HYDROLOGIC SOILS GROUP) 3750 DEERFIELD ROAD

VILLAGE OF RIVERWOODS, LAKE COUNTY, ILLINOIS

0 200
Scale: 1" = 200'



Wetlands

■ Estuarine and Marine Deepwater
■ Estuarine and Marine Wetland

■ Freshwater Emergent Wetland

■ Freshwater Forested/Shrub Wetland

■ Freshwater Pond

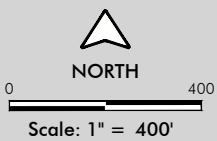
■ Lake

■ Other

■ Riverine

NOTE:

Wetland information is from National Wetlands Inventory accessed online 9-9-2020.



WETLANDS MAP EXHIBIT 3750 DEERFIELD ROAD

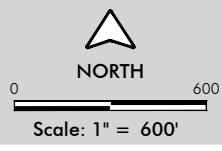
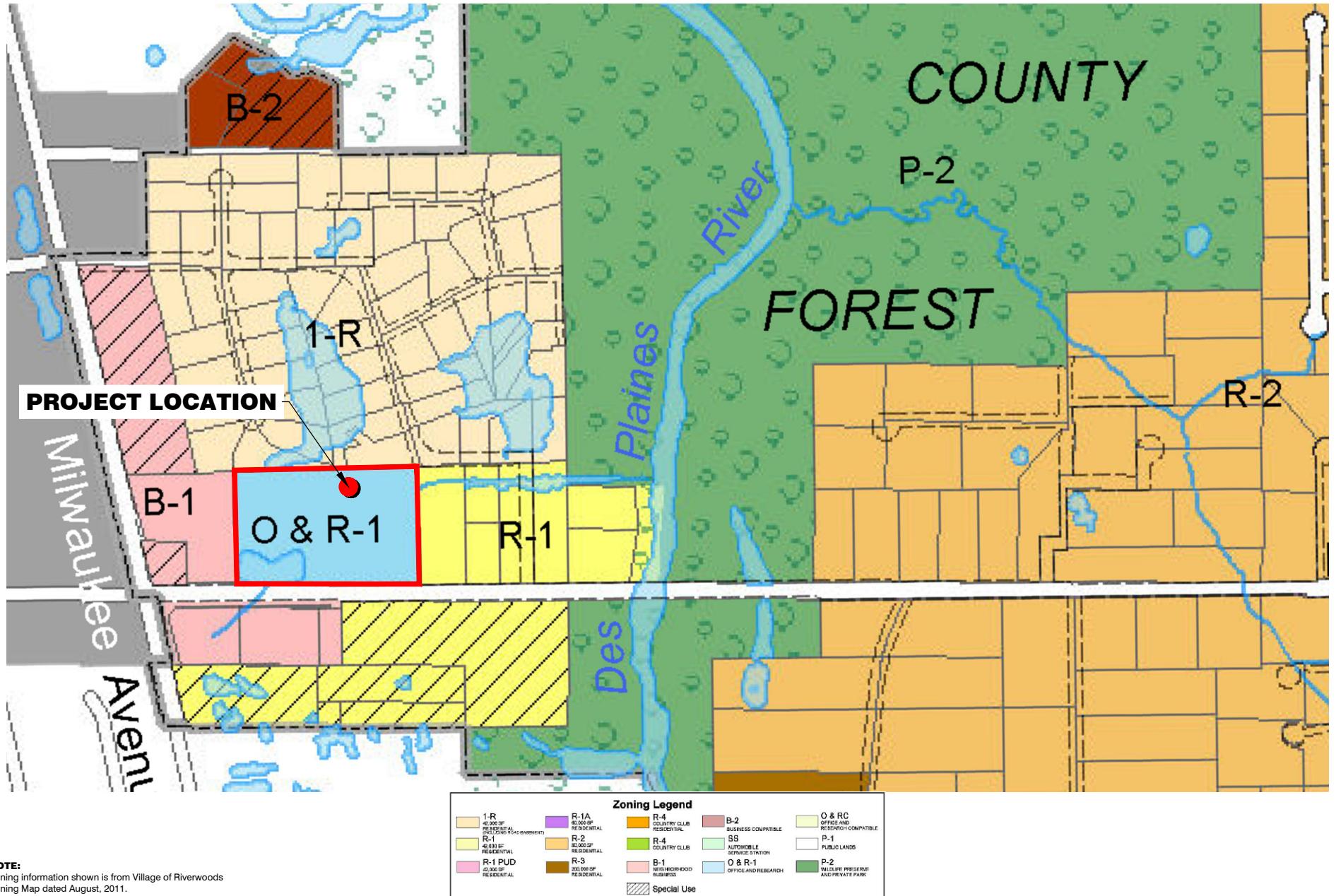
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ZONING MAP EXHIBIT 3750 DEERFIELD ROAD

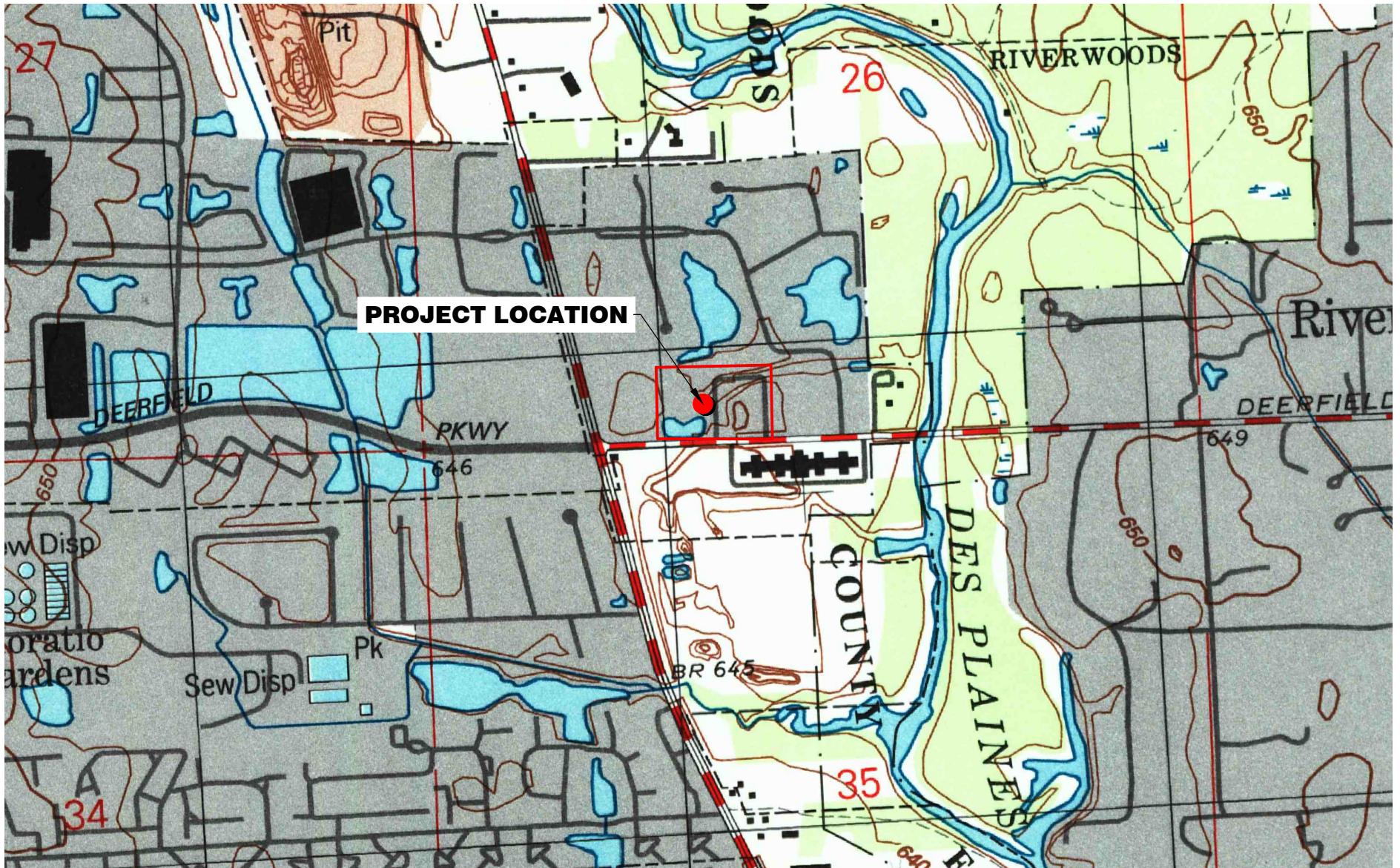
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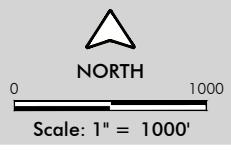
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USGS 7.5-minute series Topographic Map
Wheeling Quadrangle Illinois



USGS TOPO MAP EXHIBIT 3750 DEERFIELD ROAD

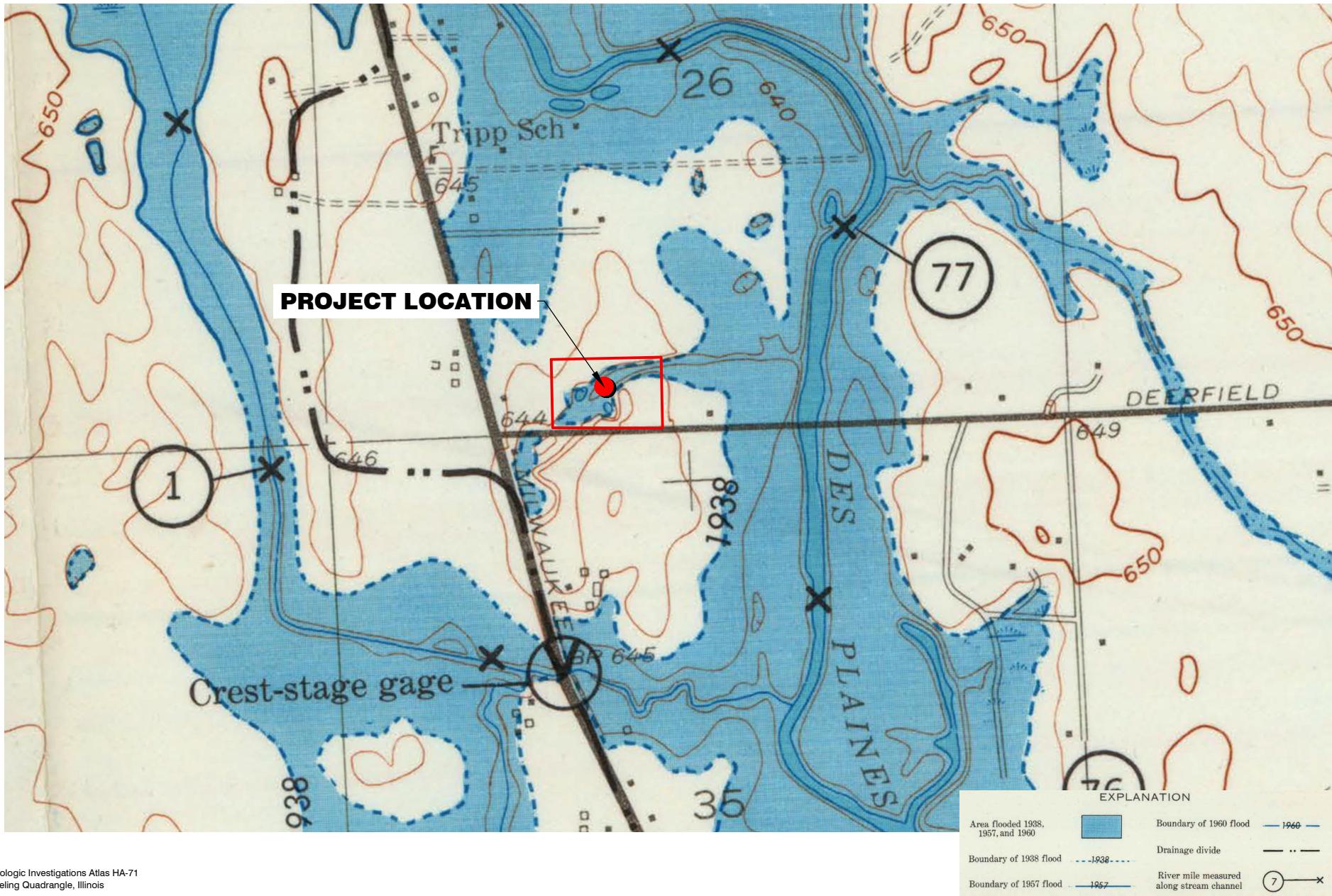
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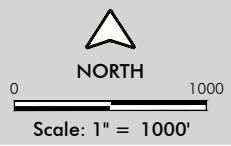
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Sheet 8 / 9



Hydrologic Investigations Atlas HA-71
Wheeling Quadrangle, Illinois



HYDROLOGIC ATLAS EXHIBIT 3750 DEERFIELD ROAD

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Sheet 9 / 9



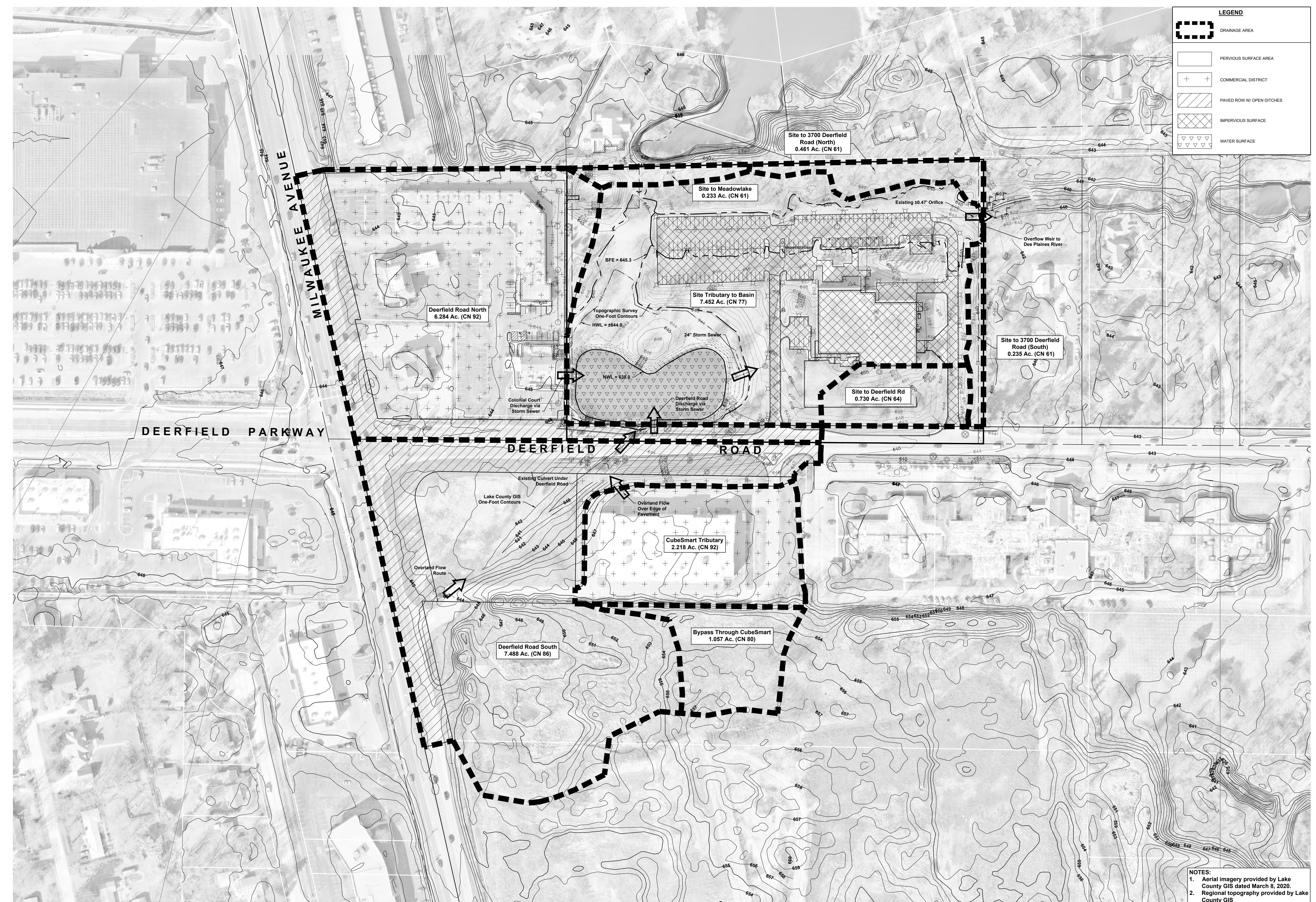
Drainage & Coverage Exhibits



NORTH

Scale: 1" = 80'

	DRAINAGE AREA
	PERVIOUS SURFACE AREA
	COMMERCIAL DISTRICT
	PAVED ROW W/ OPEN DITCHES
	IMPERVIOUS SURFACE
	WATER SURFACE



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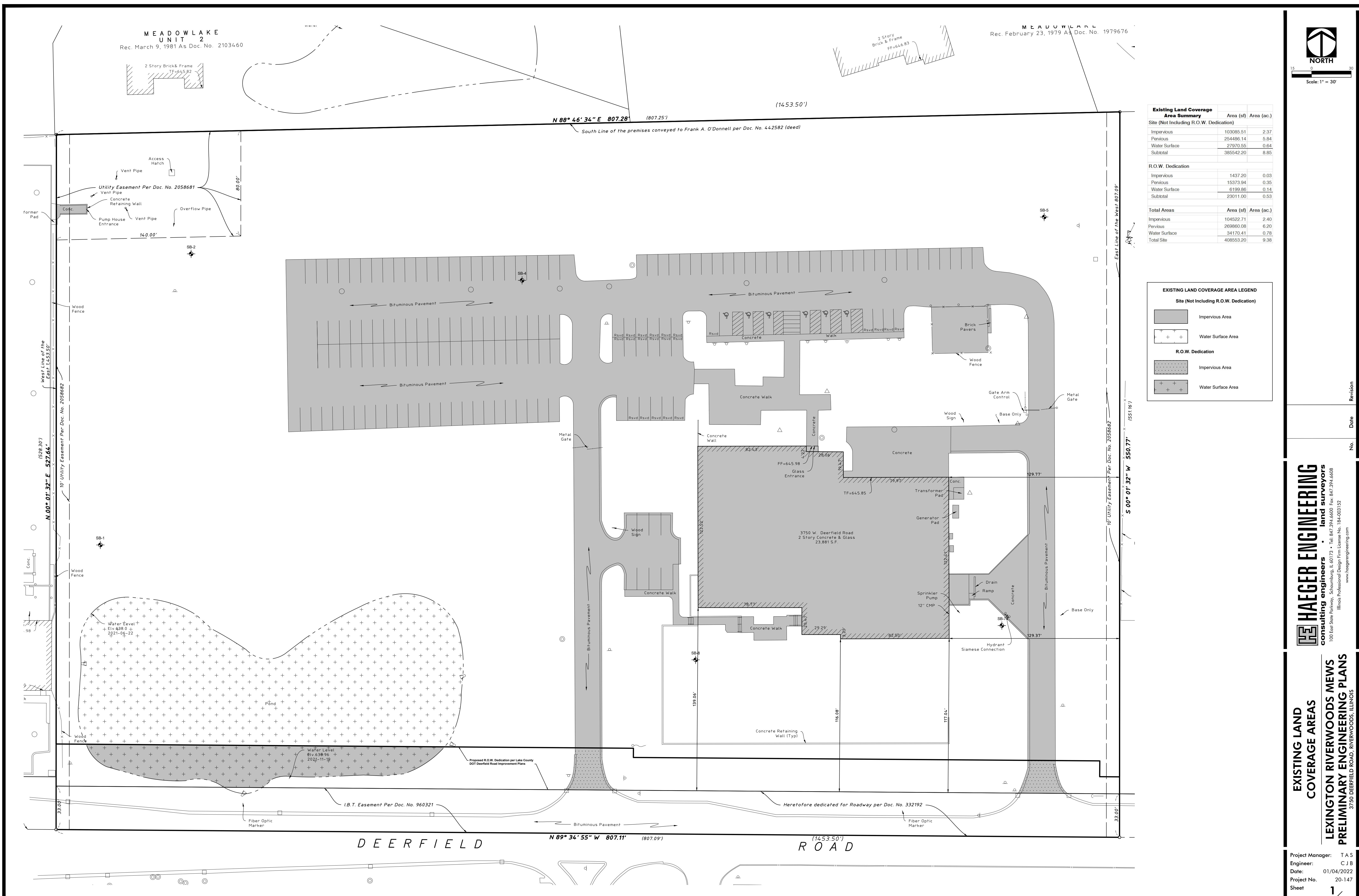
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**EXISTING REGIONAL
DRAINAGE EXHIBIT**

**LEXINGTON RIVERWOODS Mews
3750 DEERFIELD ROAD**

VILLAGE OF RIVERWOODS, LAKE COUNTY, ILLINOIS

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Engineer: C.J.R.
Date: 11/01/2022
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**EXISTING LAND
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PRELIMINARY ENGINEERING PLANS

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PRELIMINARY ENGINEERING PLANS
3750 DEERFIELD ROAD, RIVERWOODS, ILLINOIS
T A S
C J B
4/2022
20-147



CN & Stage-Storage Calculations

COMPOSITE RUNOFF CURVE NUMBER (CN)

PROJECT: Lexington Riverwoods - Site Tributary to Basin **PERMIT NUMBER:** _____

LOCATION: 3750 Deerfield Road, Riverwoods, IL **DATE:** 11/1/2022

TYPE OF AREA (SELECT WITH DROP-DOWN)

- DETAINED AREA
 UNRESTRICTED AREA
 UPSTREAM AREA

MAJOR STORMWATER SYSTEM

OTHER: _____

CONDITION (SELECT WITH DROP-DOWN)

PROPOSED CONDITION

EXISTING CONDITION

RUNOFF CURVE NUMBER

Surface Description	Hydrologic Soil Group (HSG)	CN	Area (acres)	Product (CN)(Area)
Impervious Surface	B	98	2.340	229.31
Pervious Surface	B	61	4.328	263.99
Water Surface	B	100	0.784	78.44

TOTALS:	7.452	571.74
---------	-------	--------

COMPOSITE RUNOFF CURVE NUMBER

$$\text{Composite CN} = \frac{\text{Total Product}}{\text{Total Area}} = \frac{571.74}{7.45} \rightarrow \text{Composite CN} = 76.72$$

COMPOSITE RUNOFF CURVE NUMBER (CN)

PROJECT: Lexington Riverwoods - Site to Meadowlake **PERMIT NUMBER:** _____

LOCATION: 3750 Deerfield Road, Riverwoods, IL **DATE:** 11/1/2022

TYPE OF AREA (SELECT WITH DROP-DOWN)

- DETAINED AREA
- MAJOR STORMWATER SYSTEM
- UNRESTRICTED AREA
- OTHER: _____
- UPSTREAM AREA

CONDITION (SELECT WITH DROP-DOWN)

- PROPOSED CONDITION
- EXISTING CONDITION

RUNOFF CURVE NUMBER

Surface Description	Hydrologic Soil Group (HSG)	CN	Area (acres)	Product (CN)(Area)
Impervious Surface	B	98	0.000	0.00
Pervious Surface	B	61	0.233	14.19
Water Surface	B	100	0.000	0.00

TOTALS:	0.233	14.19
---------	-------	-------

COMPOSITE RUNOFF CURVE NUMBER

$$\text{Composite CN} = \frac{\text{Total Product}}{\text{Total Area}} = \frac{14.19}{0.23} \rightarrow \text{Composite CN} = 61.00$$

COMPOSITE RUNOFF CURVE NUMBER (CN)

PROJECT: Lexington Riverwoods - Site to 3700 Deerfield Rd (N) **PERMIT NUMBER:** _____

LOCATION: 3750 Deerfield Road, Riverwoods, IL **DATE:** 11/1/2022

TYPE OF AREA (SELECT WITH DROP-DOWN)

- DETAINED AREA
- MAJOR STORMWATER SYSTEM
- UNRESTRICTED AREA
- OTHER: _____
- UPSTREAM AREA

CONDITION (SELECT WITH DROP-DOWN)

- PROPOSED CONDITION
- EXISTING CONDITION

RUNOFF CURVE NUMBER

Surface Description	Hydrologic Soil Group (HSG)	CN	Area (acres)	Product (CN)(Area)
Impervious Surface	B	98	0.000	0.00
Pervious Surface	B	61	0.461	28.13
Water Surface	B	100	0.000	0.00

TOTALS: 0.461 28.13

COMPOSITE RUNOFF CURVE NUMBER

$$\text{Composite CN} = \frac{\text{Total Product}}{\text{Total Area}} = \frac{28.13}{0.46} \rightarrow \text{Composite CN} = \boxed{61.00}$$

COMPOSITE RUNOFF CURVE NUMBER (CN)

PROJECT: Lexington Riverwoods - Site to 3700 Deerfield Rd (S) **PERMIT NUMBER:** _____

LOCATION: 3750 Deerfield Road, Riverwoods, IL **DATE:** 11/1/2022

TYPE OF AREA (SELECT WITH DROP-DOWN)

- DETAINED AREA
- MAJOR STORMWATER SYSTEM
- UNRESTRICTED AREA
- OTHER: _____
- UPSTREAM AREA

CONDITION (SELECT WITH DROP-DOWN)

- PROPOSED CONDITION
- EXISTING CONDITION

RUNOFF CURVE NUMBER

Surface Description	Hydrologic Soil Group (HSG)	CN	Area (acres)	Product (CN)(Area)
Impervious Surface	B	98	0.000	0.00
Pervious Surface	B	61	0.235	14.36
Water Surface	B	100	0.000	0.00

TOTALS:	0.235	14.36
---------	-------	-------

COMPOSITE RUNOFF CURVE NUMBER

$$\text{Composite CN} = \frac{\text{Total Product}}{\text{Total Area}} = \frac{14.36}{0.24} \rightarrow \text{Composite CN} = 61.00$$

COMPOSITE RUNOFF CURVE NUMBER (CN)

PROJECT: Lexington Riverwoods - Site to Deerfield Rd **PERMIT NUMBER:** _____

LOCATION: 3750 Deerfield Road, Riverwoods, IL **DATE:** 11/1/2022

TYPE OF AREA (SELECT WITH DROP-DOWN)

- DETAINED AREA
- MAJOR STORMWATER SYSTEM
- UNRESTRICTED AREA
- OTHER: _____
- UPSTREAM AREA

CONDITION (SELECT WITH DROP-DOWN)

- PROPOSED CONDITION
- EXISTING CONDITION

RUNOFF CURVE NUMBER

Surface Description	Hydrologic Soil Group (HSG)	CN	Area (acres)	Product (CN)(Area)
Impervious Surface	B	98	0.060	5.84
Pervious Surface	B	61	0.670	40.90
Water Surface	B	100	0.000	0.00

TOTALS:	0.730	46.74
---------	-------	-------

COMPOSITE RUNOFF CURVE NUMBER

$$\text{Composite CN} = \frac{\text{Total Product}}{\text{Total Area}} = \frac{46.74}{0.73} \rightarrow \text{Composite CN} = 64.02$$

COMPOSITE RUNOFF CURVE NUMBER (CN)

PROJECT: Lexington Riverwoods - Deerfield Road North **PERMIT NUMBER:** _____

LOCATION: 3750 Deerfield Road, Riverwoods, IL **DATE:** 2/1/2022

TYPE OF AREA (SELECT WITH DROP-DOWN)

- DETAINED AREA
 UNRESTRICTED AREA
 UPSTREAM AREA

MAJOR STORMWATER SYSTEM

OTHER: _____

CONDITION (SELECT WITH DROP-DOWN)

PROPOSED CONDITION

EXISTING CONDITION

RUNOFF CURVE NUMBER

Surface Description	Hydrologic Soil Group (HSG)	CN	Area (acres)	Product (CN)(Area)
Paved ROW	B	98	1.383	135.56
Urban Commercial District	B	92	4.633	426.24
Pervious Surface	B	61	0.268	16.32

TOTALS:	6.284	578.11
---------	-------	--------

COMPOSITE RUNOFF CURVE NUMBER

$$\text{Composite CN} = \frac{\text{Total Product}}{\text{Total Area}} = \frac{578.11}{6.28} \rightarrow \text{Composite CN} = 92.00$$

COMPOSITE RUNOFF CURVE NUMBER (CN)

PROJECT: Lexington Riverwoods - Deerfield Road South **PERMIT NUMBER:** _____

LOCATION: 3750 Deerfield Road, Riverwoods, IL **DATE:** 2/1/2022

TYPE OF AREA (SELECT WITH DROP-DOWN)

- DETAINED AREA
 UNRESTRICTED AREA
 UPSTREAM AREA

MAJOR STORMWATER SYSTEM

OTHER: _____

CONDITION (SELECT WITH DROP-DOWN)

PROPOSED CONDITION

EXISTING CONDITION

RUNOFF CURVE NUMBER

Surface Description	Hydrologic Soil Group (HSG)	CN	Area (acres)	Product (CN)(Area)
Paved ROW	D	98	2.200	215.58
Urban Commercial District	B	92	0.298	27.38
Pervious Surface	D	80	4.991	399.25

TOTALS:	7.488	642.20
---------	-------	--------

COMPOSITE RUNOFF CURVE NUMBER

$$\text{Composite CN} = \frac{\text{Total Product}}{\text{Total Area}} = \frac{642.20}{7.49} \rightarrow \text{Composite CN} = 85.76$$

COMPOSITE RUNOFF CURVE NUMBER (CN)

PROJECT: Lexington Riverwoods - CubeSmart Tributary **PERMIT NUMBER:** _____

LOCATION: 3750 Deerfield Road, Riverwoods, IL **DATE:** 2/1/2022

TYPE OF AREA (SELECT WITH DROP-DOWN)

- | | |
|---|--|
| <input checked="" type="checkbox"/> DETAINED AREA | <input type="checkbox"/> MAJOR STORMWATER SYSTEM |
| <input type="checkbox"/> UNRESTRICTED AREA | <input type="checkbox"/> OTHER: _____ |
| <input checked="" type="checkbox"/> UPSTREAM AREA | |

CONDITION (SELECT WITH DROP-DOWN)

- | | |
|---|--|
| <input type="checkbox"/> PROPOSED CONDITION | <input checked="" type="checkbox"/> EXISTING CONDITION |
|---|--|

RUNOFF CURVE NUMBER

Surface Description	Hydrologic Soil Group (HSG)	CN	Area (acres)	Product (CN)(Area)
Urban Commercial District	B	92	2.218	204.10

TOTALS:	2.218	204.10
---------	-------	--------

COMPOSITE RUNOFF CURVE NUMBER

$$\text{Composite CN} = \frac{\text{Total Product}}{\text{Total Area}} = \frac{204.10}{2.22} \rightarrow \text{Composite CN} = \boxed{92.00}$$

COMPOSITE RUNOFF CURVE NUMBER (CN)

PROJECT: Lexington Riverwoods - Bypass thru CubeSmart

PERMIT NUMBER: _____

LOCATION: 3750 Deerfield Road, Riverwoods, IL

DATE: 2/1/2022

TYPE OF AREA (SELECT WITH DROP-DOWN)

DETAINED AREA

MAJOR STORMWATER SYSTEM

UNRESTRICTED AREA

OTHER: _____

UPSTREAM AREA

CONDITION (SELECT WITH DROP-DOWN)

PROPOSED CONDITION

EXISTING CONDITION

RUNOFF CURVE NUMBER

Surface Description	Hydrologic Soil Group (HSG)	CN	Area (acres)	Product (CN)(Area)
Pervious Surface	D	80	1.057	84.58

TOTALS:	1.057	84.58
---------	-------	-------

COMPOSITE RUNOFF CURVE NUMBER

$$\text{Composite CN} = \frac{\text{Total Product}}{\text{Total Area}} = \frac{84.58}{1.06} \rightarrow \text{Composite CN} = 80.00$$

EXISTING STORAGE VOLUME PROVIDED

PROJECT: Lexington Riverwoods - Existing Pond Volume

PERMIT NUMBER: _____

LOCATION: 3750 Deerfield Road, Riverwoods, IL

DATE: 2/1/2022

AREA UNITS (CHOOSE WITH DROP-DOWN)

Units:

ft²

POND / VAULT / SURFACE DETENTION VOLUME

Elevation (ft)	Area (ft ²)	Average Area (ft ²)	Increment Volume (ac-ft)	Cumulative Volume (ac-ft)
638.00	34169.00			0.000
		35063.00	0.80	
639.00	35957.00			0.805
		36949.00	0.85	
640.00	37941.00			1.653
		38995.50	0.90	
641.00	40050.00			2.548
		41384.50	0.95	
642.00	42719.00			3.498
		45181.00	1.04	
643.00	47643.00			4.536
		56465.50	1.04	
643.80	61759.00			5.573
		63523.50	0.29	
644.00	65288.00			5.864
		70197.75	0.81	
644.50	75107.50			6.670
		80017.25	0.92	
645.00	84927.00			7.589
		88176.00	0.61	
645.30	91425.00			8.196

STORAGE VOLUME PROVIDED

PROJECT: Thornton's Site Wetland / Depressional Storage

PERMIT NUMBER: _____

LOCATION: 3750 Deerfield Road, Riverwoods, IL

DATE: 2/1/2022

AREA UNITS (CHOOSE WITH DROP-DOWN)

Units:

ft²

POND / VAULT / SURFACE DETENTION VOLUME

Elevation (ft)	Area (ft ²)	Average Area (ft ²)	Increment Volume (ac-ft)	Cumulative Volume (ac-ft)
637.55	0.00			0.000
		30.00	0.00	
639.00	60.00			0.001
		1138.00	0.03	
640.00	2216.00			0.027
		4027.00	0.09	
641.00	5838.00			0.120
		9134.00	0.21	
642.00	12430.00			0.329
		25562.50	0.59	
643.00	38695.00			0.916
		67760.00	1.56	
644.00	96825.00			2.472
		113541.50	2.61	
645.00	130258.00			5.078

STORAGE VOLUME PROVIDED

PROJECT: CubeSmart Storage (from AsBuiltons)

PERMIT NUMBER:

LOCATION: 3750 Deerfield Road, Riverwoods, IL

DATE: 2/1/2022

AREA UNITS (CHOOSE WITH DROP-DOWN)

Units:

ft²

POND / VAULT / SURFACE DETENTION VOLUME

Elevation (ft)	Area (ft ²)	Vault Volume (cu-ft)	Basin Volume (cu-ft)	Cumulative Volume (ac-ft)
642.50		0.00	0.00	0.000
643.00		3024.00	0.00	0.069
644.00		9071.00	0.00	0.208
645.00		15118.00	0.00	0.347
645.50		18141.50	0.00	0.416
646.00		21165.00	304.67	0.493
647.00		27212.00	914.00	0.646
648.00		33259.00	2703.00	0.826
649.00		33259.00	5686.00	0.894

EXISTING STORAGE VOLUME PROVIDED

PROJECT: Lexington Riverwoods - OCS Pond

PERMIT NUMBER:

LOCATION: 3750 Deerfield Road, Riverwoods, IL

DATE: 11/1/2022

AREA UNITS (CHOOSE WITH DROP-DOWN)

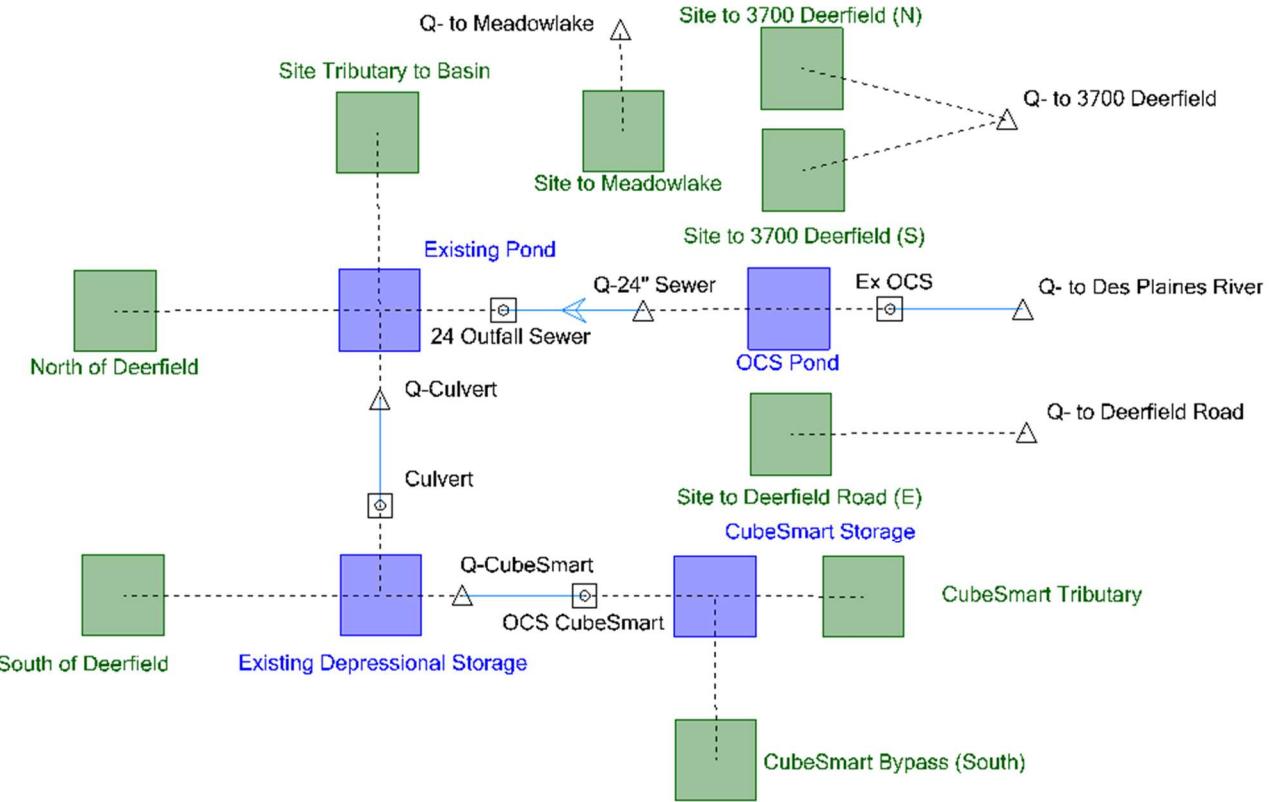
Units:

ft^2

POND / VAULT / SURFACE DETENTION VOLUME



PondPack Reports & Schematic



Existing Conditions Overall Drainage

Model 1: 10 Year Tailwater

Project Summary	
Title	Lexington Riverwoods
Engineer	PAC
Company	Haeger Engineering LLC
Date	11/1/2022
Notes	Existing Conditions Model w/ 10-year BFE (Elev = 642.35)

Table of Contents

Master Network Summary	2
B75 - 100 Year Critical Storm	
Time-Depth Curve, 100.00 years (100 yr 1 hr)	35
B75 - 2 Year Critical Storm	
Time-Depth Curve, 2.00 years (2 yr 1 hr)	36
B75 - 100 Year Critical Storm	
Time-Depth Curve, 100.00 years (100 yr 10 min)	37
B75 - 2 Year Critical Storm	
Time-Depth Curve, 2.00 years (2 yr 10 min)	38
B75 - 100 Year Critical Storm	
Time-Depth Curve, 100.00 years (100 yr 12 hr)	39
B75 - 2 Year Critical Storm	
Time-Depth Curve, 2.00 years (2 yr 12 hr)	40
B75 - 100 Year Critical Storm	
Time-Depth Curve, 100.00 years (100 yr 120 hr)	41
B75 - 2 Year Critical Storm	
Time-Depth Curve, 2.00 years (2 yr 120 hr)	42
B75 - 100 Year Critical Storm	
Time-Depth Curve, 100.00 years (100 yr 15 min)	43
B75 - 2 Year Critical Storm	
Time-Depth Curve, 2.00 years (2 yr 15 min)	44
B75 - 100 Year Critical Storm	
Time-Depth Curve, 100.00 years (100 yr 18 hr)	45
B75 - 2 Year Critical Storm	
Time-Depth Curve, 2.00 years (2 yr 18 hr)	46
B75 - 100 Year Critical Storm	
Time-Depth Curve, 100.00 years (100 yr 2 hr)	47
B75 - 2 Year Critical Storm	
Time-Depth Curve, 2.00 years (2 yr 2 hr)	48
B75 - 100 Year Critical Storm	
Time-Depth Curve, 100.00 years (100 yr 24 hr)	49
B75 - 2 Year Critical Storm	
Time-Depth Curve, 2.00 years (2 yr 24 hr)	50
B75 - 100 Year Critical Storm	

20147-Existing Conditions Regional Drainage-
100YR BFE.ppc
11/1/2022

Bentley Systems, Inc. HEC-18 Methods Solution
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Watertown, CT 06795 USA +1-203-755-1666

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[10.02.00.01]
Page 1 of 107

Table of Contents

Time-Depth Curve, 100.00 years (100 yr 240 hr)	51
B75 - 2 Year Critical Storm	
Time-Depth Curve, 2.00 years (2 yr 240 hr)	52
B75 - 100 Year Critical Storm	
Time-Depth Curve, 100.00 years (100 yr 3 hr)	53
B75 - 2 Year Critical Storm	
Time-Depth Curve, 2.00 years (2 yr 3 hr)	54
B75 - 100 Year Critical Storm	
Time-Depth Curve, 2.00 years (2 yr 6 hr)	55
B75 - 2 Year Critical Storm	
Time-Depth Curve, 100.00 years (100 yr 30 min)	56
B75 - 2 Year Critical Storm	
Time-Depth Curve, 2.00 years (2 yr 30 min)	57
B75 - 100 Year Critical Storm	
Time-Depth Curve, 100.00 years (100 yr 48 hr)	58
B75 - 2 Year Critical Storm	
Time-Depth Curve, 2.00 years (2 yr 48 hr)	59
B75 - 100 Year Critical Storm	
Time-Depth Curve, 100.00 years (100 yr 5 min)	60
B75 - 2 Year Critical Storm	
Time-Depth Curve, 2.00 years (2 yr 5 min)	61
B75 - 100 Year Critical Storm	
Time-Depth Curve, 100.00 years (100 yr 6 hr)	62
B75 - 2 Year Critical Storm	
Time-Depth Curve, 100.00 years (100 yr 72 hr)	63
CubeSmart Bypass (South)	
Time-Depth Curve, 2.00 years (2 yr 72 hr)	64
CubeSmart Tributary	
Time of Concentration Calculations, 2.00 years (2 yr 1 hr)	65
North of Deerfield	
Time of Concentration Calculations, 2.00 years (2 yr 1 hr)	67
Site to 3700 Deerfield (N)	
Time of Concentration Calculations, 2.00 years (2 yr 1 hr)	69
Site to 3700 Deerfield (S)	
Time of Concentration Calculations, 2.00 years (2 yr 1 hr)	71

Table of Contents

Time of Concentration Calculations, 2.00 years (2 yr 1 hr)	73
Site to Deerfield Road (E)	
Time of Concentration Calculations, 2.00 years (2 yr 1 hr)	75
Site to Meadowlake	
Time of Concentration Calculations, 2.00 years (2 yr 1 hr)	77
Site Tributary to Basin	
Time of Concentration Calculations, 2.00 years (2 yr 1 hr)	79
South of Deerfield	
Time of Concentration Calculations, 2.00 years (2 yr 1 hr)	81
CubeSmart Bypass (South)	
Runoff CN-Area, 2.00 years (2 yr 1 hr)	83
CubeSmart Tributary	
Runoff CN-Area, 2.00 years (2 yr 1 hr)	84
North of Deerfield	
Runoff CN-Area, 2.00 years (2 yr 1 hr)	85
Site to 3700 Deerfield (N)	
Runoff CN-Area, 2.00 years (2 yr 1 hr)	86
Site to 3700 Deerfield (S)	
Runoff CN-Area, 2.00 years (2 yr 1 hr)	87
Site to Deerfield Road (E)	
Runoff CN-Area, 2.00 years (2 yr 1 hr)	88
Site to Meadowlake	
Runoff CN-Area, 2.00 years (2 yr 1 hr)	89
Site Tributary to Basin	
Runoff CN-Area, 2.00 years (2 yr 1 hr)	90
South of Deerfield	
Runoff CN-Area, 2.00 years (2 yr 1 hr)	91
CubeSmart Storage	
Elevation vs. Volume Curve, 2.00 years (2 yr 1 hr)	92
Existing Depressional Storage	
Elevation vs. Volume Curve, 2.00 years (2 yr 1 hr)	93
Existing Pond	
Elevation vs. Volume Curve, 2.00 years (2 yr 1 hr)	94
OCS Pond	

Table of Contents

	Elevation vs. Volume Curve, 2.00 years (2 yr 1 hr)	95
24IN Outfall Sewer	Outlet Input Data, 2.00 years (2 yr 1 hr)	96
CubeSmart OCS	Outlet Input Data, 2.00 years (2 yr 1 hr)	98
Deerfield Rd Culvert	Outlet Input Data, 2.00 years (2 yr 1 hr)	100
Existing OCS	Outlet Input Data, 2.00 years (2 yr 1 hr)	103

Subsection: Master Network Summary

Catchments Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)
Site Tributary to Basin	2 yr 5 min	2.00	0.000	0.00	0.00
Site Tributary to Basin	2 yr 10 min	2.00	0.002	0.25	0.16
Site Tributary to Basin	2 yr 15 min	2.00	0.017	0.30	1.03
Site Tributary to Basin	2 yr 30 min	2.00	0.071	0.40	2.41
Site Tributary to Basin	2 yr 1 hr	2.00	0.148	0.45	2.77
Site Tributary to Basin	2 yr 2 hr	2.00	0.259	0.65	3.10
Site Tributary to Basin	2 yr 3 hr	2.00	0.326	0.90	2.80
Site Tributary to Basin	2 yr 6 hr	2.00	0.326	0.90	2.80
Site Tributary to Basin	2 yr 12 hr	2.00	0.627	6.00	1.71
Site Tributary to Basin	2 yr 18 hr	2.00	0.726	12.60	1.58
Site Tributary to Basin	2 yr 24 hr	2.00	0.815	16.80	1.31
Site Tributary to Basin	2 yr 48 hr	2.00	0.964	41.50	1.00
Site Tributary to Basin	2 yr 72 hr	2.00	1.112	62.50	0.76
Site Tributary to Basin	2 yr 120 hr	2.00	1.334	104.00	0.53
Site Tributary to Basin	2 yr 240 hr	2.00	1.945	208.50	0.37
Site Tributary to Basin	100 yr 5 min	100.00	0.033	0.15	2.54
Site Tributary to Basin	100 yr 10 min	100.00	0.215	0.20	13.80
Site Tributary to Basin	100 yr 15 min	100.00	0.392	0.20	20.54
Site Tributary to Basin	100 yr 30 min	100.00	0.740	0.25	26.32
Site Tributary to Basin	100 yr 1 hr	100.00	1.140	0.35	27.12
Site Tributary to Basin	100 yr 2 hr	100.00	1.613	0.55	22.21
Site Tributary to Basin	100 yr 3 hr	100.00	1.887	0.75	17.88
Site Tributary to Basin	100 yr 6 hr	100.00	2.395	1.30	11.78
Site Tributary to Basin	100 yr 12 hr	100.00	2.969	5.00	7.77
Site Tributary to Basin	100 yr 18 hr	100.00	3.310	11.90	6.11
Site Tributary to Basin	100 yr 24 hr	100.00	3.602	15.90	4.94
Site Tributary to Basin	100 yr 48 hr	100.00	4.015	41.50	3.41
Site Tributary to Basin	100 yr 72 hr	100.00	4.348	62.50	2.44
Site Tributary to Basin	100 yr 120 hr	100.00	4.824	104.00	1.60
Site Tributary to Basin	100 yr 240 hr	100.00	5.999	208.50	0.97
North of Deerfield	2 yr 5 min	2.00	0.000	0.00	0.00
North of Deerfield	2 yr 10 min	2.00	0.104	0.20	6.50
North of Deerfield	2 yr 15 min	2.00	0.173	0.20	9.20
North of Deerfield	2 yr 30 min	2.00	0.308	0.25	11.27
North of Deerfield	2 yr 1 hr	2.00	0.451	0.35	10.99
North of Deerfield	2 yr 2 hr	2.00	0.620	0.50	8.67
North of Deerfield	2 yr 3 hr	2.00	0.714	0.70	6.90
North of Deerfield	2 yr 6 hr	2.00	0.714	0.70	6.90
North of Deerfield	2 yr 12 hr	2.00	1.087	5.00	2.80
North of Deerfield	2 yr 18 hr	2.00	1.201	11.90	2.13
North of Deerfield	2 yr 24 hr	2.00	1.301	15.80	1.71
North of Deerfield	2 yr 48 hr	2.00	1.462	41.50	1.18
North of Deerfield	2 yr 72 hr	2.00	1.619	62.50	0.86
North of Deerfield	2 yr 120 hr	2.00	1.847	104.00	0.58
North of Deerfield	2 yr 240 hr	2.00	2.449	208.50	0.37

2014-Existing Conditions Regional Drainage-10YR BFE.ppc
11/1/2022

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Page 2 of 107

Subsection: Master Network Summary

Catchments Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)
North of Deerfield	100 yr 5 min	100.00	0.220	0.15	16.08
North of Deerfield	100 yr 10 min	100.00	0.555	0.15	34.56
North of Deerfield	100 yr 15 min	100.00	0.800	0.20	42.35
North of Deerfield	100 yr 30 min	100.00	1.218	0.20	47.80
North of Deerfield	100 yr 1 hr	100.00	1.648	0.30	42.65
North of Deerfield	100 yr 2 hr	100.00	2.126	0.45	31.14
North of Deerfield	100 yr 3 hr	100.00	2.393	0.55	24.22
North of Deerfield	100 yr 6 hr	100.00	2.876	1.00	15.02
North of Deerfield	100 yr 12 hr	100.00	3.409	4.90	8.23
North of Deerfield	100 yr 18 hr	100.00	3.720	11.90	5.92
North of Deerfield	100 yr 24 hr	100.00	3.984	15.80	4.73
North of Deerfield	100 yr 48 hr	100.00	4.356	41.50	3.15
North of Deerfield	100 yr 72 hr	100.00	4.653	62.50	2.24
North of Deerfield	100 yr 120 hr	100.00	5.075	104.00	1.45
North of Deerfield	100 yr 240 hr	100.00	6.108	208.50	0.86
South of Deerfield	2 yr 5 min	2.00	0.000	0.00	0.00
South of Deerfield	2 yr 10 min	2.00	0.044	0.20	2.92
South of Deerfield	2 yr 15 min	2.00	0.094	0.25	4.89
South of Deerfield	2 yr 30 min	2.00	0.205	0.25	6.85
South of Deerfield	2 yr 1 hr	2.00	0.336	0.35	7.54
South of Deerfield	2 yr 2 hr	2.00	0.502	0.60	6.70
South of Deerfield	2 yr 3 hr	2.00	0.597	0.80	5.55
South of Deerfield	2 yr 6 hr	2.00	0.597	0.80	5.55
South of Deerfield	2 yr 12 hr	2.00	0.990	5.00	2.62
South of Deerfield	2 yr 18 hr	2.00	1.113	11.90	2.16
South of Deerfield	2 yr 24 hr	2.00	1.222	15.90	1.77
South of Deerfield	2 yr 48 hr	2.00	1.400	41.50	1.27
South of Deerfield	2 yr 72 hr	2.00	1.574	62.50	0.94
South of Deerfield	2 yr 120 hr	2.00	1.830	104.00	0.64
South of Deerfield	2 yr 240 hr	2.00	2.516	208.50	0.42
South of Deerfield	100 yr 5 min	100.00	0.131	0.15	9.75
South of Deerfield	100 yr 10 min	100.00	0.438	0.20	26.53
South of Deerfield	100 yr 15 min	100.00	0.686	0.20	36.59
South of Deerfield	100 yr 30 min	100.00	1.131	0.25	41.99
South of Deerfield	100 yr 1 hr	100.00	1.606	0.30	39.72
South of Deerfield	100 yr 2 hr	100.00	2.146	0.50	30.64
South of Deerfield	100 yr 3 hr	100.00	2.451	0.65	24.14
South of Deerfield	100 yr 6 hr	100.00	3.008	1.05	15.42
South of Deerfield	100 yr 12 hr	100.00	3.625	4.90	9.14
South of Deerfield	100 yr 18 hr	100.00	3.988	11.90	6.77
South of Deerfield	100 yr 24 hr	100.00	4.297	15.80	5.43
South of Deerfield	100 yr 48 hr	100.00	4.732	41.50	3.66
South of Deerfield	100 yr 72 hr	100.00	5.081	62.50	2.60
South of Deerfield	100 yr 120 hr	100.00	5.577	104.00	1.70
South of Deerfield	100 yr 240 hr	100.00	6.795	208.50	1.02

Subsection: Master Network Summary

Catchments Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)
CubeSmart Bypass (South)	2 yr 5 min	2.00	0.000	0.00	0.00
CubeSmart Bypass (South)	2 yr 10 min	2.00	0.001	0.25	0.09
CubeSmart Bypass (South)	2 yr 15 min	2.00	0.005	0.25	0.27
CubeSmart Bypass (South)	2 yr 30 min	2.00	0.015	0.35	0.49
CubeSmart Bypass (South)	2 yr 1 hr	2.00	0.028	0.40	0.57
CubeSmart Bypass (South)	2 yr 2 hr	2.00	0.046	0.65	0.58
CubeSmart Bypass (South)	2 yr 3 hr	2.00	0.057	0.90	0.50
CubeSmart Bypass (South)	2 yr 6 hr	2.00	0.057	0.90	0.50
CubeSmart Bypass (South)	2 yr 12 hr	2.00	0.104	6.00	0.28
CubeSmart Bypass (South)	2 yr 18 hr	2.00	0.119	11.90	0.25
CubeSmart Bypass (South)	2 yr 24 hr	2.00	0.133	15.90	0.21
CubeSmart Bypass (South)	2 yr 48 hr	2.00	0.156	41.50	0.15
CubeSmart Bypass (South)	2 yr 72 hr	2.00	0.178	62.50	0.12
CubeSmart Bypass (South)	2 yr 120 hr	2.00	0.211	104.00	0.08
CubeSmart Bypass (South)	2 yr 240 hr	2.00	0.301	208.50	0.05
CubeSmart Bypass (South)	100 yr 5 min	100.00	0.008	0.15	0.61
CubeSmart Bypass (South)	100 yr 10 min	100.00	0.039	0.20	2.48
CubeSmart Bypass (South)	100 yr 15 min	100.00	0.068	0.20	3.58
CubeSmart Bypass (South)	100 yr 30 min	100.00	0.122	0.25	4.41
CubeSmart Bypass (South)	100 yr 1 hr	100.00	0.182	0.35	4.41
CubeSmart Bypass (South)	100 yr 2 hr	100.00	0.253	0.55	3.51
CubeSmart Bypass (South)	100 yr 3 hr	100.00	0.293	0.70	2.81
CubeSmart Bypass (South)	100 yr 6 hr	100.00	0.367	1.30	1.82
CubeSmart Bypass (South)	100 yr 12 hr	100.00	0.451	5.00	1.17

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Page 4 of 107

2014-Existing Conditions Regional Drainage-10YR BFE.ppc
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Page 3 of 107

Subsection: Master Network Summary

Catchments Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)
CubeSmart Bypass (South)	100 yr 18 hr	100.00	0.500	11.90	0.90
CubeSmart Bypass (South)	100 yr 24 hr	100.00	0.543	15.80	0.73
CubeSmart Bypass (South)	100 yr 48 hr	100.00	0.602	41.50	0.50
CubeSmart Bypass (South)	100 yr 72 hr	100.00	0.651	62.50	0.35
CubeSmart Bypass (South)	100 yr 120 hr	100.00	0.719	104.00	0.23
CubeSmart Bypass (South)	100 yr 240 hr	100.00	0.888	208.50	0.14
CubeSmart Tributary	2 yr 5 min	2.00	0.000	0.00	0.00
CubeSmart Tributary	2 yr 10 min	2.00	0.037	0.20	2.29
CubeSmart Tributary	2 yr 15 min	2.00	0.061	0.20	3.25
CubeSmart Tributary	2 yr 30 min	2.00	0.109	0.25	3.98
CubeSmart Tributary	2 yr 1 hr	2.00	0.159	0.35	3.88
CubeSmart Tributary	2 yr 2 hr	2.00	0.219	0.50	3.06
CubeSmart Tributary	2 yr 3 hr	2.00	0.252	0.70	2.44
CubeSmart Tributary	2 yr 6 hr	2.00	0.252	0.70	2.44
CubeSmart Tributary	2 yr 12 hr	2.00	0.384	5.00	0.99
CubeSmart Tributary	2 yr 18 hr	2.00	0.424	11.90	0.75
CubeSmart Tributary	2 yr 24 hr	2.00	0.459	15.80	0.60
CubeSmart Tributary	2 yr 48 hr	2.00	0.516	41.50	0.42
CubeSmart Tributary	2 yr 72 hr	2.00	0.571	62.50	0.30
CubeSmart Tributary	2 yr 120 hr	2.00	0.652	104.00	0.21
CubeSmart Tributary	2 yr 240 hr	2.00	0.865	208.50	0.13
CubeSmart Tributary	100 yr 5 min	100.00	0.078	0.15	5.68
CubeSmart Tributary	100 yr 10 min	100.00	0.196	0.15	12.20
CubeSmart Tributary	100 yr 15 min	100.00	0.282	0.20	14.95
CubeSmart Tributary	100 yr 30 min	100.00	0.430	0.20	16.87
CubeSmart Tributary	100 yr 1 hr	100.00	0.582	0.30	15.05
CubeSmart Tributary	100 yr 2 hr	100.00	0.750	0.45	10.99
CubeSmart Tributary	100 yr 3 hr	100.00	0.844	0.55	8.55
CubeSmart Tributary	100 yr 6 hr	100.00	1.015	1.00	5.30
CubeSmart Tributary	100 yr 12 hr	100.00	1.203	4.90	2.91
CubeSmart Tributary	100 yr 18 hr	100.00	1.313	11.90	2.09
CubeSmart Tributary	100 yr 24 hr	100.00	1.406	15.80	1.67
CubeSmart Tributary	100 yr 48 hr	100.00	1.538	41.50	1.11
CubeSmart Tributary	100 yr 72 hr	100.00	1.642	62.50	0.79
CubeSmart Tributary	100 yr 120 hr	100.00	1.791	104.00	0.51
CubeSmart Tributary	100 yr 240 hr	100.00	2.156	208.50	0.31
Site to Meadowlake	2 yr 5 min	2.00	0.000	0.00	0.00
Site to Meadowlake	2 yr 10 min	2.00	0.000	0.00	0.00
Site to Meadowlake	2 yr 15 min	2.00	0.000	0.00	0.00
Site to Meadowlake	2 yr 30 min	2.00	0.000	0.00	0.00

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Page 5 of 107

Subsection: Master Network Summary

Catchments Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)
Site to Meadowlake	2 yr 1 hr	2.00	0.000	1.00	0.01
Site to Meadowlake	2 yr 2 hr	2.00	0.001	1.35	0.01
Site to Meadowlake	2 yr 3 hr	2.00	0.002	1.80	0.01
Site to Meadowlake	2 yr 6 hr	2.00	0.002	1.80	0.01
Site to Meadowlake	2 yr 12 hr	2.00	0.006	6.00	0.02
Site to Meadowlake	2 yr 18 hr	2.00	0.008	12.80	0.02
Site to Meadowlake	2 yr 24 hr	2.00	0.010	17.00	0.02
Site to Meadowlake	2 yr 48 hr	2.00	0.013	43.50	0.02
Site to Meadowlake	2 yr 72 hr	2.00	0.016	65.50	0.01
Site to Meadowlake	2 yr 120 hr	2.00	0.020	104.00	0.01
Site to Meadowlake	2 yr 240 hr	2.00	0.024	208.50	0.01
Site to Meadowlake	100 yr 5 min	100.00	0.000	0.00	0.00
Site to Meadowlake	100 yr 10 min	100.00	0.001	0.25	0.05
Site to Meadowlake	100 yr 15 min	100.00	0.003	0.25	0.16
Site to Meadowlake	100 yr 30 min	100.00	0.008	0.35	0.28
Site to Meadowlake	100 yr 1 hr	100.00	0.016	0.40	0.32
Site to Meadowlake	100 yr 2 hr	100.00	0.026	0.65	0.33
Site to Meadowlake	100 yr 3 hr	100.00	0.032	0.90	0.29
Site to Meadowlake	100 yr 6 hr	100.00	0.045	1.55	0.21
Site to Meadowlake	100 yr 12 hr	100.00	0.059	6.00	0.16
Site to Meadowlake	100 yr 18 hr	100.00	0.068	11.90	0.14
Site to Meadowlake	100 yr 24 hr	100.00	0.075	15.90	0.12
Site to Meadowlake	100 yr 48 hr	100.00	0.086	41.50	0.09
Site to Meadowlake	100 yr 72 hr	100.00	0.095	62.50	0.06
Site to Meadowlake	100 yr 120 hr	100.00	0.108	104.00	0.04
Site to Meadowlake	100 yr 240 hr	100.00	0.141	208.50	0.03
Site to 3700 Deerfield	2 yr 5 min	2.00	0.000	0.00	0.00
Site to 3700 Deerfield	2 yr 10 min	2.00	0.000	0.00	0.00
Site to 3700 Deerfield	2 yr 15 min	2.00	0.000	0.00	0.00
Site to 3700 Deerfield	2 yr 30 min	2.00	0.000	0.00	0.00

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Page 6 of 107

Subsection: Master Network Summary

Catchments Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)
Site to 3700 Deerfield	2 yr 24 hr	2.00	0.019	17.00	0.04
(N)	2 yr 48 hr	2.00	0.025	43.50	0.03
(N)	2 yr 72 hr	2.00	0.031	65.50	0.03
(N)	2 yr 120 hr	2.00	0.040	104.00	0.02
(N)	2 yr 240 hr	2.00	0.067	208.50	0.02
Site to 3700 Deerfield	100 yr 5 min	100.00	0.000	0.00	0.00
Site to 3700 Deerfield	100 yr 10 min	100.00	0.002	0.25	0.10
Site to 3700 Deerfield	100 yr 15 min	100.00	0.006	0.25	0.31
Site to 3700 Deerfield	100 yr 30 min	100.00	0.017	0.35	0.55
Site to 3700 Deerfield	100 yr 1 hr	100.00	0.032	0.40	0.64
Site to 3700 Deerfield	100 yr 2 hr	100.00	0.052	0.65	0.65
Site to 3700 Deerfield	100 yr 3 hr	100.00	0.064	0.90	0.57
Site to 3700 Deerfield	100 yr 6 hr	100.00	0.088	1.55	0.41
Site to 3700 Deerfield	100 yr 12 hr	100.00	0.117	6.00	0.31
Site to 3700 Deerfield	100 yr 18 hr	100.00	0.134	11.90	0.28
Site to 3700 Deerfield	100 yr 24 hr	100.00	0.149	15.90	0.23
Site to 3700 Deerfield	100 yr 48 hr	100.00	0.171	41.50	0.17
Site to 3700 Deerfield	100 yr 72 hr	100.00	0.189	62.50	0.12
Site to 3700 Deerfield	100 yr 120 hr	100.00	0.215	104.00	0.08
Site to 3700 Deerfield	100 yr 240 hr	100.00	0.280	208.50	0.05
Site to 3700 Deerfield	2 yr 5 min	2.00	0.000	0.00	0.00
(S)	2 yr 10 min	2.00	0.000	0.00	0.00
(S)	2 yr 15 min	2.00	0.000	0.00	0.00
(S)	2 yr 30 min	2.00	0.000	0.00	0.00

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Page 7 of 107

Subsection: Master Network Summary

Catchments Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)
Site to 3700 Deerfield	2 yr 1 hr	2.00	0.000	1.00	0.01
(S)	2 yr 2 hr	2.00	0.001	1.35	0.01
(S)	2 yr 3 hr	2.00	0.002	1.80	0.01
(S)	2 yr 6 hr	2.00	0.002	1.80	0.01
(S)	2 yr 12 hr	2.00	0.006	6.00	0.02
(S)	2 yr 18 hr	2.00	0.008	12.80	0.02
(S)	2 yr 24 hr	2.00	0.010	17.00	0.02
(S)	2 yr 48 hr	2.00	0.013	43.50	0.02
(S)	2 yr 72 hr	2.00	0.016	65.50	0.01
(S)	2 yr 120 hr	2.00	0.020	104.00	0.01
(S)	2 yr 240 hr	2.00	0.034	208.50	0.01
(S)	100 yr 5 min	100.00	0.000	0.00	0.00
(S)	100 yr 10 min	100.00	0.001	0.25	0.05
(S)	100 yr 15 min	100.00	0.003	0.25	0.16
(S)	100 yr 30 min	100.00	0.008	0.35	0.28
(S)	100 yr 1 hr	100.00	0.016	0.40	0.33
(S)	100 yr 2 hr	100.00	0.026	0.65	0.33
(S)	100 yr 3 hr	100.00	0.033	0.90	0.29
(S)	100 yr 6 hr	100.00	0.045	1.55	0.21
(S)	100 yr 12 hr	100.00	0.060	6.00	0.16
(S)	100 yr 18 hr	100.00	0.068	11.90	0.14
(S)	100 yr 24 hr	100.00	0.076	15.90	0.12
(S)	100 yr 48 hr	100.00	0.087	41.50	0.09
(S)	100 yr 72 hr	100.00	0.096	62.50	0.06

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Page 8 of 107

Subsection: Master Network Summary

Catchments Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)
Site to 3700 Deerfield (S)	100 yr 120 hr	100.00	0.109	104.00	0.04
Site to 3700 Deerfield (S)	100 yr 240 hr	100.00	0.143	208.50	0.03
Site to Deerfield Road (E)	2 yr 5 min	2.00	0.000	0.00	0.00
Site to Deerfield Road (E)	2 yr 10 min	2.00	0.000	0.00	0.00
Site to Deerfield Road (E)	2 yr 15 min	2.00	0.000	0.00	0.00
Site to Deerfield Road (E)	2 yr 30 min	2.00	0.000	0.55	0.01
Site to Deerfield Road (E)	2 yr 1 hr	2.00	0.002	0.80	0.04
Site to Deerfield Road (E)	2 yr 2 hr	2.00	0.006	1.25	0.07
Site to Deerfield Road (E)	2 yr 3 hr	2.00	0.009	1.80	0.07
Site to Deerfield Road (E)	2 yr 6 hr	2.00	0.009	1.80	0.07
Site to Deerfield Road (E)	2 yr 12 hr	2.00	0.026	6.00	0.08
Site to Deerfield Road (E)	2 yr 18 hr	2.00	0.032	12.80	0.08
Site to Deerfield Road (E)	2 yr 24 hr	2.00	0.038	16.90	0.07
Site to Deerfield Road (E)	2 yr 48 hr	2.00	0.048	43.50	0.06
Site to Deerfield Road (E)	2 yr 72 hr	2.00	0.058	62.50	0.05
Site to Deerfield Road (E)	2 yr 120 hr	2.00	0.074	104.00	0.04
Site to Deerfield Road (E)	2 yr 240 hr	2.00	0.121	208.50	0.03
Site to Deerfield Road (E)	100 yr 5 min	100.00	0.000	0.00	0.00
Site to Deerfield Road (E)	100 yr 10 min	100.00	0.004	0.20	0.29
Site to Deerfield Road (E)	100 yr 15 min	100.00	0.013	0.25	0.70
Site to Deerfield Road (E)	100 yr 30 min	100.00	0.033	0.35	1.08
Site to Deerfield Road (E)	100 yr 1 hr	100.00	0.060	0.40	1.26
Site to Deerfield Road (E)	100 yr 2 hr	100.00	0.095	0.60	1.21
Site to Deerfield Road (E)	100 yr 3 hr	100.00	0.116	0.85	1.04

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Page 9 of 107

Subsection: Master Network Summary

Catchments Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)
Site to Deerfield Road (E)	100 yr 6 hr	100.00	0.157	1.55	0.74
Site to Deerfield Road (E)	100 yr 12 hr	100.00	0.204	5.00	0.54
Site to Deerfield Road (E)	100 yr 18 hr	100.00	0.233	11.90	0.48
Site to Deerfield Road (E)	100 yr 24 hr	100.00	0.258	15.90	0.39
Site to Deerfield Road (E)	100 yr 48 hr	100.00	0.294	41.50	0.28
Site to Deerfield Road (E)	100 yr 72 hr	100.00	0.323	62.50	0.21
Site to Deerfield Road (E)	100 yr 120 hr	100.00	0.365	104.00	0.14
Site to Deerfield Road (E)	100 yr 240 hr	100.00	0.471	208.50	0.09

Node Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)
Q- to Des Plaines River	2 yr 5 min	2.00	0.000	0.00	0.00
Q- to Des Plaines River	2 yr 10 min	2.00	5.148	36.95	5.66
Q- to Des Plaines River	2 yr 15 min	2.00	5.211	36.30	5.66
Q- to Des Plaines River	2 yr 30 min	2.00	5.406	38.40	5.66
Q- to Des Plaines River	2 yr 1 hr	2.00	5.667	42.45	5.66
Q- to Des Plaines River	2 yr 2 hr	2.00	6.240	13.30	5.86
Q- to Des Plaines River	2 yr 3 hr	2.00	6.326	14.30	5.86
Q- to Des Plaines River	2 yr 6 hr	2.00	6.326	14.30	5.86
Q- to Des Plaines River	2 yr 12 hr	2.00	12.418	5.60	6.03
Q- to Des Plaines River	2 yr 18 hr	2.00	19.043	10.30	6.06
Q- to Des Plaines River	2 yr 24 hr	2.00	19.118	13.20	6.03
Q- to Des Plaines River	2 yr 48 hr	2.00	74.143	43.50	8.79
Q- to Des Plaines River	2 yr 72 hr	2.00	77.339	66.50	8.46
Q- to Des Plaines River	2 yr 120 hr	2.00	77.022	105.50	7.68
Q- to Des Plaines River	2 yr 240 hr	2.00	76.694	211.00	7.07
Q- to Des Plaines River	100 yr 5 min	100.00	5.285	49.95	5.66
Q- to Des Plaines River	100 yr 10 min	100.00	5.893	44.50	5.66
Q- to Des Plaines River	100 yr 15 min	100.00	3.271	6.75	5.87
Q- to Des Plaines River	100 yr 30 min	100.00	3.772	0.35	3.41
Q- to Des Plaines River	100 yr 1 hr	100.00	0.936	1.00	4.56
Q- to Des Plaines River	100 yr 2 hr	100.00	2.694	2.15	6.26
Q- to Des Plaines River	100 yr 3 hr	100.00	3.697	3.15	7.06
Q- to Des Plaines River	100 yr 6 hr	100.00	5.603	5.10	7.64
Q- to Des Plaines River	100 yr 12 hr	100.00	8.153	8.20	8.84

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Page 10 of 107

Subsection: Master Network Summary

Node Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)
Q- to Des Plaines River	100 yr 18 hr	100.00	10.004	14.40	9.64
Q- to Des Plaines River	100 yr 24 hr	100.00	11.388	19.00	9.41
Q- to Des Plaines River	100 yr 48 hr	100.00	14.364	33.50	8.53
Q- to Des Plaines River	100 yr 72 hr	100.00	17.774	52.50	8.56
Q- to Des Plaines River	100 yr 120 hr	100.00	24.468	92.50	8.81
Q- to Des Plaines River	100 yr 240 hr	100.00	82.350	202.00	8.78
Q- to Meadowlake	2 yr 5 min	2.00	0.000	0.00	0.00
Q- to Meadowlake	2 yr 10 min	2.00	0.000	0.00	0.00
Q- to Meadowlake	2 yr 15 min	2.00	0.000	0.00	0.00
Q- to Meadowlake	2 yr 30 min	2.00	0.000	0.00	0.00
Q- to Meadowlake	2 yr 1 hr	2.00	0.000	1.00	0.01
Q- to Meadowlake	2 yr 2 hr	2.00	0.001	1.35	0.01
Q- to Meadowlake	2 yr 3 hr	2.00	0.002	1.80	0.01
Q- to Meadowlake	2 yr 6 hr	2.00	0.002	1.80	0.01
Q- to Meadowlake	2 yr 12 hr	2.00	0.006	6.00	0.02
Q- to Meadowlake	2 yr 18 hr	2.00	0.008	12.80	0.02
Q- to Meadowlake	2 yr 24 hr	2.00	0.010	17.00	0.02
Q- to Meadowlake	2 yr 48 hr	2.00	0.013	43.50	0.02
Q- to Meadowlake	2 yr 72 hr	2.00	0.016	65.50	0.01
Q- to Meadowlake	2 yr 120 hr	2.00	0.020	104.00	0.01
Q- to Meadowlake	2 yr 240 hr	2.00	0.034	208.50	0.01
Q- to Meadowlake	100 yr 5 min	100.00	0.000	0.00	0.00
Q- to Meadowlake	100 yr 10 min	100.00	0.001	0.25	0.05
Q- to Meadowlake	100 yr 15 min	100.00	0.003	0.25	0.16
Q- to Meadowlake	100 yr 30 min	100.00	0.008	0.35	0.28
Q- to Meadowlake	100 yr 1 hr	100.00	0.016	0.40	0.32
Q- to Meadowlake	100 yr 2 hr	100.00	0.026	0.65	0.33
Q- to Meadowlake	100 yr 3 hr	100.00	0.032	0.90	0.29
Q- to Meadowlake	100 yr 6 hr	100.00	0.045	1.55	0.21
Q- to Meadowlake	100 yr 12 hr	100.00	0.059	6.00	0.16
Q- to Meadowlake	100 yr 18 hr	100.00	0.068	11.90	0.14
Q- to Meadowlake	100 yr 24 hr	100.00	0.075	15.90	0.12
Q- to Meadowlake	100 yr 48 hr	100.00	0.086	41.50	0.09
Q- to Meadowlake	100 yr 72 hr	100.00	0.095	62.50	0.06
Q- to Meadowlake	100 yr 120 hr	100.00	0.108	104.00	0.04
Q- to Meadowlake	100 yr 240 hr	100.00	0.141	208.50	0.03
Q- to 3700 Deerfield	2 yr 5 min	2.00	0.000	0.00	0.00
Q- to 3700 Deerfield	2 yr 10 min	2.00	0.000	0.00	0.00
Q- to 3700 Deerfield	2 yr 15 min	2.00	0.000	0.00	0.00
Q- to 3700 Deerfield	2 yr 30 min	2.00	0.000	0.00	0.00
Q- to 3700 Deerfield	2 yr 1 hr	2.00	0.001	1.00	0.02
Q- to 3700 Deerfield	2 yr 2 hr	2.00	0.004	1.35	0.04
Q- to 3700 Deerfield	2 yr 3 hr	2.00	0.006	1.80	0.04
Q- to 3700 Deerfield	2 yr 6 hr	2.00	0.006	1.80	0.04
Q- to 3700 Deerfield	2 yr 12 hr	2.00	0.019	6.00	0.06

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Page 11 of 107

Subsection: Master Network Summary

Node Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)
Q- to 3700 Deerfield	2 yr 18 hr	2.00	0.024	12.80	0.07
Q- to 3700 Deerfield	2 yr 24 hr	2.00	0.029	17.00	0.06
Q- to 3700 Deerfield	2 yr 48 hr	2.00	0.038	43.50	0.05
Q- to 3700 Deerfield	2 yr 72 hr	2.00	0.046	65.50	0.04
Q- to 3700 Deerfield	2 yr 120 hr	2.00	0.060	104.00	0.03
Q- to 3700 Deerfield	2 yr 240 hr	2.00	0.101	208.50	0.02
Q- to 3700 Deerfield	100 yr 5 min	100.00	0.000	0.00	0.00
Q- to 3700 Deerfield	100 yr 10 min	100.00	0.002	0.25	0.15
Q- to 3700 Deerfield	100 yr 15 min	100.00	0.008	0.25	0.47
Q- to 3700 Deerfield	100 yr 30 min	100.00	0.025	0.35	0.83
Q- to 3700 Deerfield	100 yr 1 hr	100.00	0.048	0.40	0.97
Q- to 3700 Deerfield	100 yr 2 hr	100.00	0.078	0.65	0.98
Q- to 3700 Deerfield	100 yr 3 hr	100.00	0.097	0.90	0.85
Q- to 3700 Deerfield	100 yr 6 hr	100.00	0.133	1.55	0.62
Q- to 3700 Deerfield	100 yr 12 hr	100.00	0.176	6.00	0.47
Q- to 3700 Deerfield	100 yr 18 hr	100.00	0.202	11.90	0.42
Q- to 3700 Deerfield	100 yr 24 hr	100.00	0.225	15.90	0.35
Q- to 3700 Deerfield	100 yr 48 hr	100.00	0.258	41.50	0.26
Q- to 3700 Deerfield	100 yr 72 hr	100.00	0.285	62.50	0.19
Q- to 3700 Deerfield	100 yr 120 hr	100.00	0.324	104.00	0.13
Q- to 3700 Deerfield	100 yr 240 hr	100.00	0.422	208.50	0.08
Q- to Deerfield Road	2 yr 5 min	2.00	0.000	0.00	0.00
Q- to Deerfield Road	2 yr 10 min	2.00	0.000	0.00	0.00
Q- to Deerfield Road	2 yr 15 min	2.00	0.000	0.00	0.00
Q- to Deerfield Road	2 yr 30 min	2.00	0.000	0.00	0.01
Q- to Deerfield Road	2 yr 1 hr	2.00	0.002	0.00	0.04
Q- to Deerfield Road	2 yr 2 hr	2.00	0.006	0.00	0.07
Q- to Deerfield Road	2 yr 3 hr	2.00	0.009	0.00	0.07
Q- to Deerfield Road	2 yr 6 hr	2.00	0.009	1.80	0.07
Q- to Deerfield Road	2 yr 12 hr	2.00	0.026	6.00	0.08
Q- to Deerfield Road	2 yr 18 hr	2.00	0.032	12.80	

Subsection: Master Network Summary

Node Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)	
Q-to Deerfield Road	100 yr 18 hr	100.00	0.233	11.90	0.48	
Q-to Deerfield Road	100 yr 24 hr	100.00	0.258	15.90	0.39	
Q-to Deerfield Road	100 yr 48 hr	100.00	0.294	41.50	0.28	
Q-to Deerfield Road	100 yr 72 hr	100.00	0.323	62.50	0.21	
Q-to Deerfield Road	100 yr 120 hr	100.00	0.365	104.00	0.14	
Q-to Deerfield Road	100 yr 240 hr	100.00	0.471	208.50	0.09	

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Existing Pond (IN)	2 yr 5 min	2.00	0.000	0.00	0.00	(N/A)	(N/A)
Existing Pond (Reverse)	2 yr 5 min	2.00	0.000	0.80	0.00	(N/A)	(N/A)
Existing Pond (OUT)	2 yr 5 min	2.00	0.000	2.00	0.00	637.77	0.000
Existing Pond (Reverse)	2 yr 10 min	2.00	0.793	0.20	9.16	(N/A)	(N/A)
Existing Pond (IN)	2 yr 10 min	2.00	-1.086	15.50	-1.30	(N/A)	(N/A)
Existing Pond (OUT)	2 yr 10 min	2.00	10.992	36.90	9.70	640.75	2.322
Existing Pond (Reverse)	2 yr 10 min	2.00	-12.076	2.20	-14.19	(N/A)	(N/A)
Existing Pond (IN)	2 yr 15 min	2.00	0.945	0.25	14.01	(N/A)	(N/A)
Existing Pond (Reverse)	2 yr 15 min	2.00	-1.095	20.45	-1.28	(N/A)	(N/A)
Existing Pond (OUT)	2 yr 15 min	2.00	11.087	36.25	9.70	640.75	2.322
Existing Pond (Reverse)	2 yr 15 min	2.00	-12.165	1.75	-14.19	(N/A)	(N/A)
Existing Pond (IN)	2 yr 30 min	2.00	1.294	0.30	19.04	(N/A)	(N/A)

Subsection: Master Network Summary

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Existing Pond (Reverse)	2 yr 30 min	2.00	-1.120	9.95	-1.30	(N/A)	(N/A)
Existing Pond (OUT)	2 yr 30 min	2.00	11.383	38.35	9.70	640.75	2.322
Existing Pond (Reverse)	2 yr 30 min	2.00	-12.334	0.90	-14.18	(N/A)	(N/A)
Existing Pond (IN)	2 yr 1 hr	2.00	1.703	0.35	20.33	(N/A)	(N/A)
Existing Pond (Reverse)	2 yr 1 hr	2.00	-1.150	14.60	-1.24	(N/A)	(N/A)
Existing Pond (OUT)	2 yr 1 hr	2.00	11.660	42.40	9.70	640.75	2.322
Existing Pond (Reverse)	2 yr 1 hr	2.00	-12.622	0.75	-14.07	(N/A)	(N/A)
Existing Pond (IN)	2 yr 2 hr	2.00	2.322	0.60	18.14	(N/A)	(N/A)
Existing Pond (Reverse)	2 yr 2 hr	2.00	-1.232	8.65	-1.10	(N/A)	(N/A)
Existing Pond (OUT)	2 yr 2 hr	2.00	12.156	12.85	9.85	640.80	2.372
Existing Pond (Reverse)	2 yr 2 hr	2.00	-12.754	0.80	-14.05	(N/A)	(N/A)
Existing Pond (IN)	2 yr 3 hr	2.00	2.503	0.80	15.01	(N/A)	(N/A)
Existing Pond (Reverse)	2 yr 3 hr	2.00	-1.216	45.05	-1.07	(N/A)	(N/A)
Existing Pond (OUT)	2 yr 3 hr	2.00	12.224	13.85	9.85	640.80	2.372
Existing Pond (Reverse)	2 yr 6 hr	2.00	-12.638	1.00	-14.06	(N/A)	(N/A)
Existing Pond (IN)	2 yr 6 hr	2.00	2.503	0.80	15.01	(N/A)	(N/A)
Existing Pond (Reverse)	2 yr 6 hr	2.00	-1.216	45.05	-1.07	(N/A)	(N/A)
Existing Pond (OUT)	2 yr 6 hr	2.00	12.224	13.85	9.85	640.80	2.372

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Page 13 of 107

2014-Existing Conditions Regional Drainage- 10YR BFE.ppc

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Page 14 of 107

Subsection: Master Network Summary

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Existing Pond (Reverse)	2 yr 6 hr	2.00	-12.638	1.00	-14.06	(N/A)	(N/A)
Existing Pond (IN)	2 yr 12 hr	2.00	5.471	5.00	7.25	(N/A)	(N/A)
Existing Pond (Reverse)	2 yr 12 hr	2.00	-3.159	12.20	-1.73	(N/A)	(N/A)
Existing Pond (OUT)	2 yr 12 hr	2.00	11.424	12.20	12.72	642.03	3.524
Existing Pond (Reverse)	2 yr 12 hr	2.00	-17.978	3.30	-14.33	(N/A)	(N/A)
Existing Pond (IN)	2 yr 18 hr	2.00	7.149	14.90	7.94	(N/A)	(N/A)
Existing Pond (Reverse)	2 yr 18 hr	2.00	-4.933	18.70	-3.33	(N/A)	(N/A)
Existing Pond (OUT)	2 yr 18 hr	2.00	17.465	16.00	13.06	642.17	3.679
Existing Pond (Reverse)	2 yr 18 hr	2.00	-26.458	4.10	-14.36	(N/A)	(N/A)
Existing Pond (IN)	2 yr 24 hr	2.00	7.415	18.10	8.21	(N/A)	(N/A)
Existing Pond (Reverse)	2 yr 24 hr	2.00	-4.733	24.60	-3.35	(N/A)	(N/A)
Existing Pond (OUT)	2 yr 24 hr	2.00	17.696	20.10	13.20	642.24	3.751
Existing Pond (Reverse)	2 yr 24 hr	2.00	-26.028	4.90	-14.36	(N/A)	(N/A)
Existing Pond (IN)	2 yr 48 hr	2.00	15.177	42.00	4.93	(N/A)	(N/A)
Existing Pond (Reverse)	2 yr 48 hr	2.00	-18.917	79.00	-1.47	(N/A)	(N/A)
Existing Pond (OUT)	2 yr 48 hr	2.00	58.370	51.00	11.68	642.02	3.522
Existing Pond (Reverse)	2 yr 48 hr	2.00	-86.094	8.00	-13.87	(N/A)	(N/A)
Existing Pond (IN)	2 yr 72 hr	2.00	7.055	65.50	4.24	(N/A)	(N/A)

Subsection: Master Network Summary

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Existing Pond (Reverse)	2 yr 72 hr	2.00	-1.653	73.50	-0.96	(N/A)	(N/A)
Existing Pond (OUT)	2 yr 72 hr	2.00	98.944	66.00	9.34	640.88	2.444
Existing Pond (Reverse)	2 yr 120 hr	2.00	-52.974	8.50	-14.27	(N/A)	(N/A)
Existing Pond (IN)	2 yr 120 hr	2.00	-1.545	121.50	-0.80	(N/A)	(N/A)
Existing Pond (Reverse)	2 yr 120 hr	2.00	98.529	105.00	8.55	640.64	2.223
Existing Pond (OUT)	2 yr 120 hr	2.00	-52.563	11.50	-14.00	(N/A)	(N/A)
Existing Pond (IN)	2 yr 240 hr	2.00	7.622	229.00	2.54	(N/A)	(N/A)
Existing Pond (Reverse)	2 yr 240 hr	2.00	-1.318	240.50	-0.69	(N/A)	(N/A)
Existing Pond (OUT)	2 yr 240 hr	2.00	98.014	210.50	7.96	640.45	2.056
Existing Pond (Reverse)	2 yr 240 hr	2.00	-51.825	18.00	-13.91	(N/A)	(N/A)
Existing Pond (IN)	100 yr 5 min	100.00	1.063	0.15	27.21	(N/A)	(N/A)
Existing Pond (Reverse)	100 yr 5 min	100.00	-1.107	11.10	-1.29	(N/A)	(N/A)
Existing Pond (OUT)	100 yr 5 min	100.00	11.207	49.90	9.70	640.75	2.322
Existing Pond (IN)	100 yr 5 min	100.00	-12.214	1.45	-14.19	(N/A)	(N/A)
Existing Pond (Reverse)	100 yr 10 min	100.00	2.001	0.20	69.78	(N/A)	(N/A)
Existing Pond (OUT)	100 yr 10 min	100.00	-1.171	11.45	-1.18	(N/A)	(N/A)
Existing Pond (IN)	100 yr 10 min	100.00	11.928	44.45	9.70	640.75	2.322

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Page 15 of 107

2014-Existing Conditions Regional Drainage- 10YR BFE.ppc

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Page 16 of 107

Subsection: Master Network Summary

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Existing Pond (Reverse)	100 yr 10 min	100.00	-12.882	0.40	-13.33	(N/A)	(N/A)
Existing Pond (IN)	100 yr 15 min	100.00	2.820	0.20	91.53	(N/A)	(N/A)
Existing Pond (Reverse)	100 yr 15 min	100.00	-1.690	11.05	-2.05	(N/A)	(N/A)
Existing Pond (OUT)	100 yr 15 min	100.00	6.334	49.15	12.20	641.74	3.253
Existing Pond (Reverse)	100 yr 15 min	100.00	-10.849	0.25	-12.96	(N/A)	(N/A)
Existing Pond (IN)	100 yr 30 min	100.00	4.274	0.25	105.90	(N/A)	(N/A)
Existing Pond (Reverse)	100 yr 30 min	100.00	-1.782	42.20	-1.71	(N/A)	(N/A)
Existing Pond (OUT)	100 yr 30 min	100.00	5.673	13.25	12.37	641.81	3.321
Existing Pond (Reverse)	100 yr 30 min	100.00	-9.435	0.25	-12.40	(N/A)	(N/A)
Existing Pond (IN)	100 yr 1 hr	100.00	4.621	0.35	102.81	(N/A)	(N/A)
Existing Pond (OUT)	100 yr 1 hr	100.00	0.971	0.80	12.82	642.38	3.890
Existing Pond (Reverse)	100 yr 1 hr	100.00	-0.154	0.25	-12.03	(N/A)	(N/A)
Existing Pond (IN)	100 yr 2 hr	100.00	6.374	0.50	80.87	(N/A)	(N/A)
Existing Pond (OUT)	100 yr 2 hr	100.00	2.744	1.00	13.17	643.06	4.617
Existing Pond (Reverse)	100 yr 2 hr	100.00	-0.149	0.45	-13.12	(N/A)	(N/A)
Existing Pond (IN)	100 yr 3 hr	100.00	7.347	0.60	64.14	(N/A)	(N/A)
Existing Pond (OUT)	100 yr 3 hr	100.00	3.757	1.15	13.14	643.24	4.860
Existing Pond (Reverse)	100 yr 3 hr	100.00	-0.171	0.45	-13.06	(N/A)	(N/A)
Existing Pond (IN)	100 yr 6 hr	100.00	9.156	1.00	39.87	(N/A)	(N/A)

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Page 17 of 107

Subsection: Master Network Summary

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Existing Pond (OUT)	100 yr 6 hr	100.00	5.688	1.70	13.23	643.39	5.053
Existing Pond (Reverse)	100 yr 6 hr	100.00	-0.274	0.80	-13.58	(N/A)	(N/A)
Existing Pond (IN)	100 yr 12 hr	100.00	11.118	4.40	22.02	(N/A)	(N/A)
Existing Pond (OUT)	100 yr 12 hr	100.00	-0.668	2.00	-14.33	(N/A)	(N/A)
Existing Pond (Reverse)	100 yr 18 hr	100.00	12.276	9.80	15.59	(N/A)	(N/A)
Existing Pond (IN)	100 yr 18 hr	100.00	10.365	9.70	13.57	643.97	5.818
Existing Pond (OUT)	100 yr 18 hr	100.00	-1.412	2.60	-14.34	(N/A)	(N/A)
Existing Pond (Reverse)	100 yr 24 hr	100.00	13.307	16.20	14.24	(N/A)	(N/A)
Existing Pond (IN)	100 yr 24 hr	100.00	11.876	12.30	13.46	643.89	5.725
Existing Pond (OUT)	100 yr 24 hr	100.00	-1.830	3.10	-14.36	(N/A)	(N/A)
Existing Pond (Reverse)	100 yr 48 hr	100.00	14.722	38.00	11.53	(N/A)	(N/A)
Existing Pond (IN)	100 yr 48 hr	100.00	0.000	1.50	0.00	(N/A)	(N/A)
Existing Pond (OUT)	100 yr 48 hr	100.00	15.873	37.50	12.65	643.32	4.956
Existing Pond (Reverse)	100 yr 48 hr	100.00	-3.413	4.00	-14.25	(N/A)	(N/A)
Existing Pond (IN)	100 yr 72 hr	100.00	15.849	58.50	11.85	(N/A)	(N/A)
Existing Pond (OUT)	100 yr 72 hr	100.00	0.000	1.50	0.00	(N/A)	(N/A)
Existing Pond (Reverse)	100 yr 72 hr	100.00	20.098	58.00	12.96	643.07	4.632
Existing Pond (IN)	100 yr 72 hr	100.00	-5.347	5.00	-14.07	(N/A)	(N/A)

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[10.02.00.01]
Page 18 of 107

Subsection: Master Network Summary

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Existing Pond (IN)	100 yr 120 hr	100.00	17.561	100.50	10.69	(N/A)	(N/A)
Existing Pond (Reverse)	100 yr 120 hr	100.00	-0.002	9.50	-0.16	(N/A)	(N/A)
Existing Pond (OUT)	100 yr 120 hr	100.00	28.456	100.00	12.92	642.78	4.313
Existing Pond (Reverse)	100 yr 120 hr	100.00	-9.351	7.50	-13.86	(N/A)	(N/A)
Existing Pond (IN)	100 yr 240 hr	100.00	24.191	217.50	8.78	(N/A)	(N/A)
Existing Pond (OUT)	100 yr 240 hr	100.00	-11.595	241.00	-2.80	(N/A)	(N/A)
Existing Pond (Reverse)	100 yr 240 hr	100.00	78.568	217.00	12.65	642.40	3.908
Existing Pond (IN)	100 yr 240 hr	100.00	-69.331	9.00	-14.21	(N/A)	(N/A)
Existing Pond (OUT)	2 yr 5 min	2.00	0.000	0.00	0.00	(N/A)	(N/A)
Existing Pond (Reverse)	2 yr 5 min	2.00	0.000	0.00	0.00	637.77	0.000
Existing Pond (IN)	2 yr 5 min	2.00	0.000	0.80	0.00	(N/A)	(N/A)
Existing Pond (OUT)	2 yr 10 min	2.00	0.082	0.20	2.97	(N/A)	(N/A)
Existing Pond (Reverse)	2 yr 10 min	2.00	0.687	0.25	2.68	640.74	0.096
Existing Pond (IN)	2 yr 10 min	2.00	-1.086	15.50	-1.30	(N/A)	(N/A)
Existing Pond (OUT)	2 yr 15 min	2.00	0.160	0.25	4.99	(N/A)	(N/A)

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[10.02.00.01]
Page 19 of 107

Subsection: Master Network Summary

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Existing Depressional Storage (OUT)	2 yr 15 min	2.00	0.755	0.25	4.88	640.74	0.096
Existing Depressional Storage (Reverse)	2 yr 15 min	2.00	-1.095	20.45	-1.28	(N/A)	(N/A)
Existing Depressional Storage (IN)	2 yr 30 min	2.00	0.329	0.30	6.96	(N/A)	(N/A)
Existing Depressional Storage (OUT)	2 yr 30 min	2.00	0.915	0.30	6.95	640.74	0.096
Existing Depressional Storage (Reverse)	2 yr 30 min	2.00	-1.120	9.95	-1.30	(N/A)	(N/A)
Existing Depressional Storage (IN)	2 yr 1 hr	2.00	0.524	0.35	7.67	(N/A)	(N/A)
Existing Depressional Storage (OUT)	2 yr 1 hr	2.00	1.104	0.40	7.60	640.74	0.096
Existing Depressional Storage (Reverse)	2 yr 1 hr	2.00	-1.150	14.60	-1.24	(N/A)	(N/A)
Existing Depressional Storage (IN)	2 yr 2 hr	2.00	0.767	0.60	6.87	(N/A)	(N/A)
Existing Depressional Storage (OUT)	2 yr 2 hr	2.00	1.443	0.60	6.82	640.79	0.101
Existing Depressional Storage (Reverse)	2 yr 2 hr	2.00	-1.235	8.65	-1.10	(N/A)	(N/A)
Existing Depressional Storage (IN)	2 yr 3 hr	2.00	0.906	0.80	5.73	(N/A)	(N/A)

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[10.02.00.01]
Page 20 of 107

Subsection: Master Network Summary

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Existing Depressional Storage (OUT)	2 yr 3 hr	2.00	1.458	0.85	5.69	640.80	0.101
Existing Depressional Storage (Reverse)	2 yr 3 hr	2.00	-1.217	45.05	-1.07	(N/A)	(N/A)
Existing Depressional Storage (IN)	2 yr 6 hr	2.00	0.906	0.80	5.73	(N/A)	(N/A)
Existing Depressional Storage (OUT)	2 yr 6 hr	2.00	1.458	0.85	5.69	640.80	0.101
Existing Depressional Storage (Reverse)	2 yr 6 hr	2.00	-1.217	45.05	-1.07	(N/A)	(N/A)
Existing Depressional Storage (IN)	2 yr 12 hr	2.00	1.478	5.00	2.86	(N/A)	(N/A)
Existing Depressional Storage (OUT)	2 yr 12 hr	2.00	3.653	8.40	3.57	642.02	0.338
Existing Depressional Storage (Reverse)	2 yr 12 hr	2.00	-3.263	12.20	-1.84	(N/A)	(N/A)
Existing Depressional Storage (IN)	2 yr 18 hr	2.00	1.656	11.90	2.45	(N/A)	(N/A)
Existing Depressional Storage (OUT)	2 yr 18 hr	2.00	5.308	14.90	6.37	642.15	0.418
Existing Depressional Storage (Reverse)	2 yr 18 hr	2.00	-5.091	18.70	-3.33	(N/A)	(N/A)
Existing Depressional Storage (IN)	2 yr 24 hr	2.00	1.814	15.90	2.06	(N/A)	(N/A)

Subsection: Master Network Summary

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Existing Depressional Storage (OUT)	2 yr 24 hr	2.00	5.267	19.90	6.54	642.23	0.463
Existing Depressional Storage (Reverse)	2 yr 24 hr	2.00	-4.989	24.60	-3.35	(N/A)	(N/A)
Existing Depressional Storage (IN)	2 yr 48 hr	2.00	2.071	41.50	1.53	(N/A)	(N/A)
Existing Depressional Storage (OUT)	2 yr 48 hr	2.00	12.941	59.00	3.58	642.02	0.338
Existing Depressional Storage (Reverse)	2 yr 48 hr	2.00	-19.067	79.00	-1.47	(N/A)	(N/A)
Existing Depressional Storage (IN)	2 yr 72 hr	2.00	2.323	62.50	1.19	(N/A)	(N/A)
Existing Depressional Storage (OUT)	2 yr 72 hr	2.00	4.363	71.00	2.81	640.88	0.108
Existing Depressional Storage (Reverse)	2 yr 72 hr	2.00	-1.759	73.50	-0.96	(N/A)	(N/A)
Existing Depressional Storage (IN)	2 yr 120 hr	2.00	2.694	104.00	0.85	(N/A)	(N/A)
Existing Depressional Storage (OUT)	2 yr 120 hr	2.00	4.320	120.50	2.00	640.63	0.086
Existing Depressional Storage (Reverse)	2 yr 120 hr	2.00	-1.753	121.50	-0.80	(N/A)	(N/A)
Existing Depressional Storage (IN)	2 yr 240 hr	2.00	3.682	208.50	0.59	(N/A)	(N/A)

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Page 21 of 10720147-Existing Conditions Regional Drainage-
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[10.02.00.01]
Page 22 of 107

Subsection: Master Network Summary

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Existing Depressional Storage (OUT)	2 yr 240 hr	2.00	4.369	229.00	2.12	640.44	0.068
Existing Depressional Storage (Reverse)	2 yr 240 hr	2.00	-1.765	231.50	-0.71	(N/A)	(N/A)
Existing Depressional Storage (IN)	100 yr 5 min	100.00	0.216	0.15	9.86	(N/A)	(N/A)
Existing Depressional Storage (OUT)	100 yr 5 min	100.00	0.810	0.15	8.58	640.74	0.096
Existing Depressional Storage (Reverse)	100 yr 5 min	100.00	-1.107	11.10	-1.29	(N/A)	(N/A)
Existing Depressional Storage (IN)	100 yr 10 min	100.00	0.673	0.20	26.75	(N/A)	(N/A)
Existing Depressional Storage (OUT)	100 yr 10 min	100.00	1.231	0.20	24.04	640.74	0.096
Existing Depressional Storage (Reverse)	100 yr 10 min	100.00	-1.171	11.45	-1.18	(N/A)	(N/A)
Existing Depressional Storage (IN)	100 yr 15 min	100.00	1.036	0.20	36.83	(N/A)	(N/A)
Existing Depressional Storage (OUT)	100 yr 15 min	100.00	1.630	0.25	31.22	641.73	0.274
Existing Depressional Storage (Reverse)	100 yr 15 min	100.00	-1.691	11.05	-2.05	(N/A)	(N/A)
Existing Depressional Storage (IN)	100 yr 30 min	100.00	1.682	0.25	42.27	(N/A)	(N/A)

Subsection: Master Network Summary

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Existing Depressional Storage (OUT)	100 yr 30 min	100.00	2.318	0.30	36.65	641.81	0.288
Existing Depressional Storage (Reverse)	100 yr 30 min	100.00	-1.787	42.20	-1.71	(N/A)	(N/A)
Existing Depressional Storage (IN)	100 yr 1 hr	100.00	2.370	0.30	39.99	(N/A)	(N/A)
Existing Depressional Storage (OUT)	100 yr 1 hr	100.00	1.833	0.40	36.33	642.38	0.551
Existing Depressional Storage (Reverse)	100 yr 1 hr	100.00	-0.012	0.95	-2.54	(N/A)	(N/A)
Existing Depressional Storage (IN)	100 yr 2 hr	100.00	3.149	0.50	30.97	(N/A)	(N/A)
Existing Depressional Storage (OUT)	100 yr 2 hr	100.00	2.636	0.50	28.67	643.06	1.011
Existing Depressional Storage (Reverse)	100 yr 2 hr	100.00	-0.001	1.15	-0.92	(N/A)	(N/A)
Existing Depressional Storage (IN)	100 yr 3 hr	100.00	3.588	0.65	24.49	(N/A)	(N/A)
Existing Depressional Storage (OUT)	100 yr 3 hr	100.00	3.068	0.60	23.34	643.25	1.300
Existing Depressional Storage (Reverse)	100 yr 3 hr	100.00	-0.004	1.30	-1.17	(N/A)	(N/A)
Existing Depressional Storage (IN)	100 yr 6 hr	100.00	4.390	1.05	15.78	(N/A)	(N/A)

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Page 23 of 10720147-Existing Conditions Regional Drainage-
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[10.02.00.01]
Page 24 of 107

Subsection: Master Network Summary

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Existing Depressional Storage (OUT)	100 yr 6 hr	100.00	3.873	0.95	14.26	643.40	1.545
Existing Depressional Storage (Reverse)	100 yr 6 hr	100.00	-0.007	1.85	-1.54	(N/A)	(N/A)
Existing Depressional Storage (IN)	100 yr 12 hr	100.00	5.279	6.00	11.00	(N/A)	(N/A)
Existing Depressional Storage (OUT)	100 yr 12 hr	100.00	4.734	4.40	7.16	643.74	2.069
Existing Depressional Storage (Reverse)	100 yr 12 hr	100.00	-0.020	5.70	-1.32	(N/A)	(N/A)
Existing Depressional Storage (IN)	100 yr 18 hr	100.00	5.801	12.00	9.61	(N/A)	(N/A)
Existing Depressional Storage (OUT)	100 yr 18 hr	100.00	5.231	9.80	5.98	643.98	2.434
Existing Depressional Storage (Reverse)	100 yr 18 hr	100.00	-0.012	9.40	-1.77	(N/A)	(N/A)
Existing Depressional Storage (IN)	100 yr 24 hr	100.00	6.246	15.90	7.79	(N/A)	(N/A)
Existing Depressional Storage (OUT)	100 yr 24 hr	100.00	5.701	12.10	6.55	643.91	2.340
Existing Depressional Storage (Reverse)	100 yr 24 hr	100.00	-0.033	12.00	-2.29	(N/A)	(N/A)
Existing Depressional Storage (IN)	100 yr 48 hr	100.00	6.873	43.50	4.71	(N/A)	(N/A)

Subsection: Master Network Summary

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Existing Depressional Storage (OUT)	100 yr 48 hr	100.00	5.917	38.00	6.60	643.33	1.428
Existing Depressional Storage (Reverse)	100 yr 48 hr	100.00	-0.034	38.50	-1.05	(N/A)	(N/A)
Existing Depressional Storage (IN)	100 yr 72 hr	100.00	7.374	62.50	3.09	(N/A)	(N/A)
Existing Depressional Storage (OUT)	100 yr 72 hr	100.00	6.266	58.50	7.68	643.07	1.029
Existing Depressional Storage (Reverse)	100 yr 72 hr	100.00	-0.161	59.00	-1.59	(N/A)	(N/A)
Existing Depressional Storage (IN)	100 yr 120 hr	100.00	8.087	104.00	2.14	(N/A)	(N/A)
Existing Depressional Storage (OUT)	100 yr 120 hr	100.00	7.257	100.50	7.75	642.79	0.792
Existing Depressional Storage (Reverse)	100 yr 120 hr	100.00	-0.377	101.00	-2.11	(N/A)	(N/A)
Existing Depressional Storage (IN)	100 yr 240 hr	100.00	9.839	208.50	1.38	(N/A)	(N/A)
Existing Depressional Storage (OUT)	100 yr 240 hr	100.00	14.777	217.50	7.14	642.38	0.554
Existing Depressional Storage (Reverse)	100 yr 240 hr	100.00	-13.193	241.00	-2.80	(N/A)	(N/A)
CubeSmart Storage (IN)	2 yr 5 min	2.00	0.000	0.00	0.00	(N/A)	(N/A)
CubeSmart Storage (OUT)	2 yr 5 min	2.00	0.000	0.00	0.00	642.45	0.000

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Page 25 of 10720147-Existing Conditions Regional Drainage-10YR BFE.ppc
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Page 26 of 107

Subsection: Master Network Summary

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
CubeSmart Storage (IN)	2 yr 10 min	2.00	0.038	0.20	2.38	(N/A)	(N/A)
CubeSmart Storage (OUT)	2 yr 10 min	2.00	0.038	0.45	0.10	642.75	0.035
CubeSmart Storage (IN)	2 yr 15 min	2.00	0.066	0.20	3.45	(N/A)	(N/A)
CubeSmart Storage (OUT)	2 yr 15 min	2.00	0.066	0.50	0.14	642.94	0.051
CubeSmart Storage (IN)	2 yr 30 min	2.00	0.124	0.25	4.37	(N/A)	(N/A)
CubeSmart Storage (OUT)	2 yr 30 min	2.00	0.124	0.70	0.21	643.33	0.115
CubeSmart Storage (IN)	2 yr 1 hr	2.00	0.187	0.35	4.40	(N/A)	(N/A)
CubeSmart Storage (OUT)	2 yr 1 hr	2.00	0.187	1.20	0.25	643.72	0.170
CubeSmart Storage (IN)	2 yr 2 hr	2.00	0.265	0.55	3.59	(N/A)	(N/A)
CubeSmart Storage (OUT)	2 yr 2 hr	2.00	0.265	2.15	0.30	644.14	0.227
CubeSmart Storage (IN)	2 yr 3 hr	2.00	0.309	0.75	2.88	(N/A)	(N/A)
CubeSmart Storage (OUT)	2 yr 3 hr	2.00	0.309	3.10	0.31	644.30	0.250
CubeSmart Storage (IN)	2 yr 6 hr	2.00	0.309	0.75	2.88	(N/A)	(N/A)
CubeSmart Storage (OUT)	2 yr 6 hr	2.00	0.309	3.10	0.31	644.30	0.250
CubeSmart Storage (IN)	2 yr 12 hr	2.00	0.488	5.00	1.26	(N/A)	(N/A)
CubeSmart Storage (OUT)	2 yr 12 hr	2.00	0.488	8.70	0.34	644.65	0.299
CubeSmart Storage (IN)	2 yr 18 hr	2.00	0.543	11.90	1.00	(N/A)	(N/A)
CubeSmart Storage (OUT)	2 yr 18 hr	2.00	0.543	15.10	0.35	644.78	0.316
CubeSmart Storage (IN)	2 yr 24 hr	2.00	0.592	15.90	0.81	(N/A)	(N/A)

Subsection: Master Network Summary

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
CubeSmart Storage (OUT)	2 yr 24 hr	2.00	0.592	19.30	0.34	644.69	0.304
CubeSmart Storage (IN)	2 yr 48 hr	2.00	0.672	41.50	0.57	(N/A)	(N/A)
CubeSmart Storage (OUT)	2 yr 48 hr	2.00	0.672	46.00	0.31	644.25	0.243
CubeSmart Storage (IN)	2 yr 72 hr	2.00	0.749	62.50	0.42	(N/A)	(N/A)
CubeSmart Storage (OUT)	2 yr 72 hr	2.00	0.749	66.50	0.28	643.94	0.200
CubeSmart Storage (IN)	2 yr 120 hr	2.00	0.863	104.00	0.29	(N/A)	(N/A)
CubeSmart Storage (OUT)	2 yr 120 hr	2.00	0.863	109.50	0.23	643.53	0.142
CubeSmart Storage (IN)	2 yr 240 hr	2.00	1.166	208.50	0.19	(N/A)	(N/A)
CubeSmart Storage (OUT)	2 yr 240 hr	2.00	1.166	211.00	0.17	643.11	0.084
CubeSmart Storage (IN)	100 yr 5 min	100.00	0.086	0.15	6.29	(N/A)	(N/A)
CubeSmart Storage (OUT)	100 yr 5 min	100.00	0.086	0.40	0.17	643.08	0.080
CubeSmart Storage (IN)	100 yr 10 min	100.00	0.235	0.15	14.42	(N/A)	(N/A)
CubeSmart Storage (OUT)	100 yr 10 min	100.00	0.235	0.50	0.29	644.12	0.225
CubeSmart Storage (IN)	100 yr 15 min	100.00	0.350	0.20	18.53	(N/A)	(N/A)
CubeSmart Storage (OUT)	100 yr 15 min	100.00	0.350	0.55	0.36	644.92	0.336
CubeSmart Storage (IN)	100 yr 30 min	100.00	0.552	0.20	20.83	(N/A)	(N/A)
CubeSmart Storage (OUT)	100 yr 30 min	100.00	0.552	0.75	0.45	646.24	0.529
CubeSmart Storage (IN)	100 yr 1 hr	100.00	0.764	0.30	19.24	(N/A)	(N/A)

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Page 27 of 10720147-Existing Conditions Regional Drainage-10YR BFE.ppc
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Page 28 of 107

Subsection: Master Network Summary

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
CubeSmart Storage (OUT)	100 yr 1 hr	100.00	0.764	1.20	0.52	647.43	0.723
CubeSmart Storage (IN)	100 yr 2 hr	100.00	1.003	0.45	14.32	(N/A)	(N/A)
CubeSmart Storage (OUT)	100 yr 2 hr	100.00	1.003	1.75	2.46	648.22	0.841
CubeSmart Storage (OUT)	100 yr 3 hr	100.00	1.137	0.60	11.22	(N/A)	(N/A)
CubeSmart Storage (IN)	100 yr 3 hr	100.00	1.137	1.95	3.04	648.27	0.844
CubeSmart Storage (OUT)	100 yr 6 hr	100.00	1.383	1.05	7.09	(N/A)	(N/A)
CubeSmart Storage (IN)	100 yr 6 hr	100.00	1.382	2.65	2.42	648.22	0.841
CubeSmart Storage (OUT)	100 yr 12 hr	100.00	1.654	4.90	4.07	(N/A)	(N/A)
CubeSmart Storage (IN)	100 yr 12 hr	100.00	1.654	6.10	3.27	648.28	0.845
CubeSmart Storage (OUT)	100 yr 18 hr	100.00	1.813	11.90	2.99	(N/A)	(N/A)
CubeSmart Storage (IN)	100 yr 18 hr	100.00	1.813	12.10	2.93	648.26	0.844
CubeSmart Storage (OUT)	100 yr 24 hr	100.00	1.949	15.80	2.39	(N/A)	(N/A)
CubeSmart Storage (IN)	100 yr 24 hr	100.00	1.949	16.00	2.37	648.22	0.841
CubeSmart Storage (OUT)	100 yr 48 hr	100.00	2.140	41.50	1.61	(N/A)	(N/A)
CubeSmart Storage (IN)	100 yr 48 hr	100.00	2.140	43.50	1.42	648.13	0.835
CubeSmart Storage (OUT)	100 yr 72 hr	100.00	2.293	62.50	1.14	(N/A)	(N/A)
CubeSmart Storage (IN)	100 yr 72 hr	100.00	2.293	68.00	0.67	648.03	0.828
CubeSmart Storage (OUT)	100 yr 120 hr	100.00	2.510	104.00	0.75	(N/A)	(N/A)

Subsection: Master Network Summary

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
CubeSmart Storage (OUT)	100 yr 120 hr	100.00	2.510	114.00	0.48	646.80	0.615
CubeSmart Storage (IN)	100 yr 240 hr	100.00	3.044	208.50	0.45	(N/A)	(N/A)
CubeSmart Storage (OUT)	100 yr 240 hr	100.00	3.044	218.50	0.38	645.12	0.364
OCS Pond (IN)	2 yr 5 min	2.00	0.000	1.10	0.00	(N/A)	(N/A)
OCS Pond (Reverse)	2 yr 5 min	2.00	0.000	0.10	0.00	(N/A)	(N/A)
OCS Pond (OUT)	2 yr 5 min	2.00	0.000	0.00	0.00	637.77	0.000
OCS Pond (IN)	2 yr 10 min	2.00	10.992	36.90	9.70	(N/A)	(N/A)
OCS Pond (Reverse)	2 yr 10 min	2.00	-12.076	2.20	-14.19	(N/A)	(N/A)
OCS Pond (OUT)	2 yr 10 min	2.00	5.148	36.95	5.66	642.42	0.016
OCS Pond (IN)	2 yr 15 min	2.00	11.087	36.25	9.70	(N/A)	(N/A)
OCS Pond (Reverse)	2 yr 15 min	2.00	-12.165	1.75	-14.19	(N/A)	(N/A)
OCS Pond (OUT)	2 yr 15 min	2.00	5.211	36.30	5.66	642.42	0.016
OCS Pond (IN)	2 yr 30 min	2.00	11.383	38.35	9.70	(N/A)	(N/A)
OCS Pond (Reverse)	2 yr 30 min	2.00	-12.334	0.90	-14.18	(N/A)	(N/A)
OCS Pond (OUT)	2 yr 30 min	2.00	5.406	38.40	5.66	642.42	0.016
OCS Pond (IN)	2 yr 1 hr	2.00	11.660	42.40	9.70	(N/A)	(N/A)
OCS Pond (Reverse)	2 yr 1 hr	2.00	-12.622	0.75	-14.07	(N/A)	(N/A)
OCS Pond (OUT)	2 yr 1 hr	2.00	5.667	42.45	5.66	642.42	0.016
OCS Pond (IN)	2 yr 2 hr	2.00	12.156	12.85	9.85	(N/A)	(N/A)
OCS Pond (Reverse)	2 yr 2 hr	2.00	-12.754	0.80	-14.05	(N/A)	(N/A)
OCS Pond (OUT)	2 yr 2 hr	2.00	6.240	13.30	5.86	642.43	0.017
OCS Pond (IN)	2 yr 3 hr	2.00	12.224	13.85	9.85	(N/A)	(N/A)

20147-Existing Conditions Regional Drainage-

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Page 29 of 107

20147-Existing Conditions Regional Drainage-

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Page 30 of 107

Subsection: Master Network Summary

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
OCS Pond (Reverse)	2 yr 3 hr	2.00	-12.638	1.00	-14.06	(N/A)	(N/A)
OCS Pond (OUT)	2 yr 3 hr	2.00	6.326	14.30	5.86	642.43	0.017
OCS Pond (IN)	2 yr 6 hr	2.00	12.224	13.85	9.85	(N/A)	(N/A)
OCS Pond (Reverse)	2 yr 6 hr	2.00	-12.638	1.00	-14.06	(N/A)	(N/A)
OCS Pond (OUT)	2 yr 6 hr	2.00	6.326	14.30	5.86	642.43	0.017
OCS Pond (IN)	2 yr 12 hr	2.00	11.424	12.20	12.72	(N/A)	(N/A)
OCS Pond (Reverse)	2 yr 12 hr	2.00	-17.978	3.30	-14.33	(N/A)	(N/A)
OCS Pond (OUT)	2 yr 12 hr	2.00	12.418	5.60	6.03	642.43	0.017
OCS Pond (IN)	2 yr 18 hr	2.00	17.465	16.00	13.06	(N/A)	(N/A)
OCS Pond (Reverse)	2 yr 18 hr	2.00	-26.458	4.10	-14.36	(N/A)	(N/A)
OCS Pond (OUT)	2 yr 18 hr	2.00	19.043	10.30	6.06	642.43	0.017
OCS Pond (IN)	2 yr 24 hr	2.00	17.696	20.10	13.20	(N/A)	(N/A)
OCS Pond (Reverse)	2 yr 24 hr	2.00	-26.028	4.90	-14.36	(N/A)	(N/A)
OCS Pond (OUT)	2 yr 24 hr	2.00	19.118	13.20	6.03	642.43	0.017
OCS Pond (IN)	2 yr 48 hr	2.00	58.370	51.00	11.68	(N/A)	(N/A)
OCS Pond (Reverse)	2 yr 48 hr	2.00	-86.094	8.00	-13.87	(N/A)	(N/A)
OCS Pond (OUT)	2 yr 48 hr	2.00	74.143	43.50	8.79	642.47	0.018
OCS Pond (IN)	2 yr 72 hr	2.00	98.944	66.00	9.34	(N/A)	(N/A)
OCS Pond (Reverse)	2 yr 72 hr	2.00	-52.974	8.50	-14.27	(N/A)	(N/A)
OCS Pond (OUT)	2 yr 72 hr	2.00	77.339	66.50	8.46	642.46	0.018
OCS Pond (IN)	2 yr 120 hr	2.00	98.529	105.00	8.55	(N/A)	(N/A)
OCS Pond (Reverse)	2 yr 120 hr	2.00	-52.563	11.50	-14.00	(N/A)	(N/A)
OCS Pond (OUT)	2 yr 120 hr	2.00	77.022	105.50	7.68	642.45	0.017

Subsection: Master Network Summary

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
OCS Pond (IN)	2 yr 240 hr	2.00	98.014	210.50	7.96	(N/A)	(N/A)
OCS Pond (Reverse)	2 yr 240 hr	2.00	-51.825	18.00	-13.91	(N/A)	(N/A)
OCS Pond (OUT)	2 yr 240 hr	2.00	76.684	211.00	7.07	642.44	0.017
OCS Pond (IN)	100 yr 5 min	100.00	11.207	49.90	9.70	(N/A)	(N/A)
OCS Pond (Reverse)	100 yr 5 min	100.00	-12.214	1.45	-14.19	(N/A)	(N/A)
OCS Pond (OUT)	100 yr 5 min	100.00	5.285	49.95	5.66	642.42	0.016
OCS Pond (IN)	100 yr 10 min	100.00	11.928	44.45	9.70	(N/A)	(N/A)
OCS Pond (Reverse)	100 yr 10 min	100.00	-12.882	0.40	-13.33	(N/A)	(N/A)
OCS Pond (OUT)	100 yr 10 min	100.00	5.893	44.50	5.66	642.42	0.016
OCS Pond (IN)	100 yr 15 min	100.00	6.334	49.15	12.20	(N/A)	(N/A)
OCS Pond (Reverse)	100 yr 15 min	100.00	-10.849	0.25	-12.96	(N/A)	(N/A)
OCS Pond (OUT)	100 yr 15 min	100.00	3.271	6.75	5.87	642.43	0.017
OCS Pond (IN)	100 yr 30 min	100.00	5.673	13.25	12.37	(N/A)	(N/A)
OCS Pond (Reverse)	100 yr 30 min	100.00	-9.435	0.25	-12.40	(N/A)	(N/A)
OCS Pond (OUT)	100 yr 30 min	100.00	3.772	0.35	3.41	642.39	0.016
OCS Pond (IN)	100 yr 1 hr	100.00	0.971	0.80	12.82	(N/A)	(N/A)
OCS Pond (Reverse)	100 yr 1 hr	100.00	-0.154	0.25	-12.03	(N/A)	(N/A)
OCS Pond (OUT)	100 yr 1 hr	100.00	0.936	1.00	4.56	642.41	0.016
OCS Pond (IN)	100 yr 2 hr	100.00	2.744	1.00	13.17	(N/A)	(N/A)
OCS Pond (Reverse)	100 yr 2 hr	100.00	-0.149	0.45	-13.12	(N/A)	(N/A)
OCS Pond (OUT)	100 yr 2 hr	100.00	2.694	2.15	6.26	642.43	0.017
OCS Pond (IN)	100 yr 3 hr	100.00	3.757	1.15	13.14	(N/A)	(N/A)
OCS Pond (Reverse)	100 yr 3 hr	100.00	-0.171	0.45	-13.06	(N/A)	(N/A)

20147-Existing Conditions Regional Drainage-

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Page 31 of 107

20147-Existing Conditions Regional Drainage-

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Page 32 of 107

Subsection: Master Network Summary

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
OCS Pond (OUT)	100 yr 3 hr	100.00	3.697	3.15	7.06	642.44	0.017
OCS Pond (IN)	100 yr 6 hr	100.00	5.688	1.70	13.23	(N/A)	(N/A)
OCS Pond (Reverse)	100 yr 6 hr	100.00	-0.274	0.80	-13.58	(N/A)	(N/A)
OCS Pond (OUT)	100 yr 6 hr	100.00	5.603	5.10	7.64	642.45	0.017
OCS Pond (IN)	100 yr 12 hr	100.00	8.303	4.60	13.12	(N/A)	(N/A)
OCS Pond (Reverse)	100 yr 12 hr	100.00	-0.668	2.00	-14.33	(N/A)	(N/A)
OCS Pond (OUT)	100 yr 12 hr	100.00	8.153	8.20	8.84	642.47	0.018
OCS Pond (IN)	100 yr 18 hr	100.00	10.365	9.70	13.57	(N/A)	(N/A)
OCS Pond (Reverse)	100 yr 18 hr	100.00	-1.412	2.60	-14.34	(N/A)	(N/A)
OCS Pond (OUT)	100 yr 18 hr	100.00	10.004	14.40	9.41	642.48	0.018
OCS Pond (IN)	100 yr 24 hr	100.00	11.876	12.30	13.46	(N/A)	(N/A)
OCS Pond (Reverse)	100 yr 24 hr	100.00	-1.830	3.10	-14.36	(N/A)	(N/A)
OCS Pond (OUT)	100 yr 24 hr	100.00	11.388	19.00	9.41	642.47	0.018
OCS Pond (IN)	100 yr 48 hr	100.00	15.873	37.50	12.65	(N/A)	(N/A)
OCS Pond (Reverse)	100 yr 48 hr	100.00	-3.413	4.00	-14.25	(N/A)	(N/A)
OCS Pond (OUT)	100 yr 48 hr	100.00	14.364	33.50	8.53	642.46	0.018
OCS Pond (IN)	100 yr 72 hr	100.00	20.098	58.00	12.96	(N/A)	(N/A)
OCS Pond (Reverse)	100 yr 72 hr	100.00	-5.347	5.00	-14.07	(N/A)	(N/A)
OCS Pond (OUT)	100 yr 72 hr	100.00	17.774	52.50	8.56	642.46	0.018
OCS Pond (IN)	100 yr 120 hr	100.00	28.456	100.00	12.92	(N/A)	(N/A)
OCS Pond (Reverse)	100 yr 120 hr	100.00	-9.351	7.50	-13.86	(N/A)	(N/A)
OCS Pond (OUT)	100 yr 120 hr	100.00	24.468	92.50	8.81	642.47	0.018
OCS Pond (IN)	100 yr 240 hr	100.00	78.568	217.00	12.65	(N/A)	(N/A)

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Page 53 of 107

Subsection: Master Network Summary

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
OCS Pond (Reverse)	100 yr 240 hr	100.00	-69.331	9.00	-14.21	(N/A)	(N/A)
OCS Pond (OUT)	100 yr 240 hr	100.00	82.350	202.00	8.78	642.47	0.018

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Page 54 of 107Subsection: Time-Depth Curve
Label: B75 - 100 Year Critical Storm
Scenario: 100 yr 1 hrReturn Event: 100.00 years
Storm Event: 1 hr 100 yr

Time-Depth Curve: 1 hr 100 yr	
Label	1 hr 100 yr
Start Time	0.00 hours
Increment	0.01 hours
End Time	1.00 hours
Return Event	100.00 years

CUMULATIVE RAINFALL (in)

Output Time Increment = 0.01 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)				
0.00	0.00	0.08	0.16	0.24	0.32
0.05	0.41	0.50	0.59	0.68	0.78
0.10	0.88	0.98	1.08	1.18	1.28
0.15	1.38	1.48	1.57	1.66	1.75
0.20	1.84	1.93	2.00	2.08	2.16
0.25	2.24	2.30	2.37	2.43	2.50
0.30	2.55	2.60	2.64	2.69	2.73
0.35	2.77	2.80	2.84	2.87	2.90
0.40	2.94	2.97	3.00	3.03	3.05
0.45	3.08	3.11	3.13	3.16	3.19
0.50	3.22	3.24	3.27	3.30	3.32
0.55	3.35	3.37	3.40	3.42	3.45
0.60	3.47	3.49	3.51	3.53	3.55
0.65	3.57	3.59	3.61	3.63	3.64
0.70	3.66	3.68	3.69	3.71	3.72
0.75	3.74	3.75	3.76	3.77	3.79
0.80	3.80	3.81	3.83	3.84	3.85
0.85	3.86	3.87	3.89	3.90	3.91
0.90	3.92	3.93	3.94	3.95	3.96
0.95	3.97	3.99	4.00	4.01	4.02
1.00	4.03	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve
Label: B75 - 2 Year Critical Storm
Scenario: 2 yr 1 hr

Time-Depth Curve: 1 hr 2 yr

Label	1 hr 2 yr
Start Time	0.00 hours
Increment	0.01 hours
End Time	1.00 hours
Return Event	2.00 years

CUMULATIVE RAINFALL (in)

Output Time Increment = 0.01 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)				
0.00	0.00	0.03	0.06	0.09	0.13
0.05	0.16	0.20	0.23	0.27	0.30
0.10	0.34	0.38	0.42	0.46	0.50
0.15	0.54	0.58	0.61	0.65	0.68
0.20	0.72	0.75	0.78	0.81	0.84
0.25	0.87	0.90	0.92	0.95	0.97
0.30	0.99	1.01	1.03	1.05	1.06
0.35	1.08	1.09	1.11	1.12	1.13
0.40	1.14	1.16	1.17	1.18	1.19
0.45	1.20	1.21	1.22	1.23	1.24
0.50	1.25	1.26	1.27	1.28	1.29
0.55	1.30	1.31	1.32	1.33	1.34
0.60	1.35	1.36	1.37	1.38	1.38
0.65	1.39	1.40	1.41	1.41	1.42
0.70	1.43	1.43	1.44	1.44	1.45
0.75	1.46	1.46	1.47	1.47	1.48
0.80	1.48	1.49	1.49	1.50	1.50
0.85	1.50	1.51	1.51	1.52	1.52
0.90	1.53	1.53	1.54	1.54	1.54
0.95	1.55	1.55	1.56	1.56	1.57
1.00	1.57	(N/A)	(N/A)	(N/A)	(N/A)

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Page 55 of 1072014-Existing Conditions Regional Drainage-10YR BFE.ppc
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Page 56 of 107

Subsection: Time-Depth Curve
Label: B75 - 100 Year Critical Storm
Scenario: 100 yr 10 min

Return Event: 100.00 years
Storm Event: 10 min 100 yr

Time-Depth Curve: 10 min 100 yr					
Label	10 min 100 yr	Start Time	0.00 hours	Increment	0.00 hours
End Time		0.17 hours			
Return Event		100.00 years			

CUMULATIVE RAINFALL (in)

Output Time Increment = 0.00 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)				
0.00	0.00	0.04	0.07	0.11	0.14
0.01	0.18	0.22	0.27	0.31	0.35
0.02	0.39	0.44	0.48	0.53	0.57
0.03	0.62	0.66	0.70	0.74	0.78
0.04	0.82	0.86	0.89	0.93	0.96
0.05	1.00	1.03	1.06	1.09	1.12
0.06	1.14	1.16	1.18	1.20	1.22
0.07	1.24	1.25	1.27	1.28	1.30
0.08	1.31	1.33	1.34	1.35	1.36
0.09	1.38	1.39	1.40	1.41	1.42
0.10	1.44	1.45	1.46	1.47	1.48
0.11	1.50	1.51	1.52	1.53	1.54
0.12	1.55	1.56	1.57	1.58	1.59
0.13	1.60	1.60	1.61	1.62	1.63
0.14	1.63	1.64	1.65	1.66	1.66
0.15	1.67	1.67	1.68	1.69	1.69
0.16	1.70	1.70	1.71	1.71	1.72
0.17	1.73	1.73	1.74	1.74	1.75
0.18	1.76	1.76	1.76	1.77	1.77
0.19	1.78	1.78	1.79	1.79	1.80
0.20	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve
Label: B75 - 2 Year Critical Storm
Scenario: 2 yr 10 min

Return Event: 2.00 years
Storm Event: 10 min 2 yr

Time-Depth Curve: 10 min 2 yr					
Label	10 min 2 yr	Start Time	0.00 hours	Increment	0.00 hours
End Time		0.17 hours			
Return Event		2.00 years			

CUMULATIVE RAINFALL (in)

Output Time Increment = 0.00 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)				
0.00	0.00	0.01	0.03	0.04	0.06
0.01	0.07	0.09	0.10	0.12	0.14
0.02	0.15	0.17	0.19	0.21	0.22
0.03	0.24	0.26	0.27	0.29	0.30
0.04	0.32	0.33	0.35	0.36	0.37
0.05	0.39	0.40	0.41	0.42	0.43
0.06	0.44	0.45	0.46	0.47	0.47
0.07	0.51	0.52	0.52	0.53	0.53
0.08	0.53	0.54	0.54	0.55	0.55
0.09	0.56	0.56	0.57	0.57	0.58
0.10	0.59	0.59	0.59	0.59	0.60
0.11	0.61	0.61	0.61	0.61	0.62
0.12	0.64	0.64	0.64	0.64	0.65
0.13	0.65	0.65	0.65	0.66	0.66
0.14	0.66	0.66	0.66	0.67	0.67
0.15	0.68	0.68	0.68	0.69	0.69
0.16	0.69	0.69	0.69	0.70	0.70
0.17	0.70	(N/A)	(N/A)	(N/A)	(N/A)

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Page 37 of 107

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Page 38 of 107

Subsection: Time-Depth Curve
Label: B75 - 100 Year Critical Storm
Scenario: 100 yr 12 hr

Return Event: 100.00 years
Storm Event: 12 hr 100 yr

Time-Depth Curve: 12 hr 100 yr					
Label	12 hr 100 yr	Start Time	0.00 hours	Increment	0.12 hours
End Time		12.00 hours			
Return Event		100.00 years			

CUMULATIVE RAINFALL (in)

Output Time Increment = 0.12 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)				
0.00	0.00	0.04	0.08	0.12	0.16
0.60	0.21	0.25	0.30	0.34	0.39
1.20	0.45	0.50	0.55	0.61	0.68
1.80	0.74	0.80	0.87	0.95	1.03
2.40	1.11	1.19	1.29	1.40	1.50
3.00	1.60	1.72	1.85	1.97	2.10
3.60	2.24	2.38	2.53	2.67	2.82
4.20	2.98	3.14	3.30	3.46	3.62
4.80	3.78	3.95	4.10	4.25	4.39
5.40	4.53	4.68	4.81	4.94	5.07
6.00	5.20	5.31	5.41	5.51	5.61
6.60	5.70	5.79	5.88	5.97	6.05
7.20	6.13	6.20	6.28	6.35	6.40
7.80	6.46	6.51	6.57	6.61	6.65
8.40	6.69	6.74	6.77	6.81	6.84
9.00	6.88	6.91	6.93	6.96	6.99
9.60	7.02	7.05	7.07	7.10	7.12
10.20	7.15	7.17	7.19	7.21	7.24
10.80	7.26	7.28	7.30	7.32	7.34
11.40	7.36	7.38	7.40	7.42	7.44
12.00	7.46	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve
Label: B75 - 2 Year Critical Storm
Scenario: 2 yr 12 hr

Return Event: 2.00 years
Storm Event: 12 hr 2 yr

Time-Depth Curve: 12 hr 2 yr					
Label	12 hr 2 yr	Start Time	0.00 hours	Increment	0.12 hours
End Time		12.00 hours			
Return Event		2.00 years			

CUMULATIVE RAINFALL (in)

Output Time Increment = 0.12 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)				
0.00	0.00	0.02	0.03	0.05	0.06
0.60	0.08	0.10	0.12	0.13	0.15
1.20	0.17	0.20	0.22	0.24	0.26
1.80	0.29	0.31	0.34	0.37	0.40
2.40	0.43	0.47	0.51	0.54	0.58
3.00	0.62	0.67	0.72	0.77	0.82
3.60	0.87	0.93	0.99	1.04	1.10
4.20	1.16	1.23	1.29	1.35	1.41
4.80	1.48	1.54	1.60	1.66	1.71
5.40	1.77	1.82	1.88	1.93	1.98
6.00	2.03	2.07	2.11	2.15	2.19
6.60	2.22	2.26	2.29	2.33	2.36
7.20	2.39	2.42	2.45	2.48	2.50
7.80	2.52	2.54	2.56	2.58	2.59
8.40	2.61	2.63	2.64	2.65	2.67
9.00	2.68	2.69	2.71	2.72	2.73
9.60	2.74	2.75	2.76	2.77	2.78
10.20	2.79	2.80	2.81	2.81	2.82
10.80	2.83	2.84	2.85	2.85	2.86
11.40	2.87	2.88	2.89	2.89	2.90
12.00	2.91	(N/A)	(N/A)	(N/A)	(N/A)

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Page 39 of 107

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Page 40 of 107

Subsection: Time-Depth Curve
Label: B75 - 100 Year Critical Storm
Scenario: 100 yr 120 hr

Return Event: 100.00 years
Storm Event: 120 hr 100 yr

Time-Depth Curve: 120 hr 100 yr					
Label 120 hr 100 yr					
Start Time	0.00 hours				
Increment	1.20 hours				
End Time	120.00 hours				
Return Event	100.00 years				

CUMULATIVE RAINFALL (in)

Output Time Increment = 1.20 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.00	0.00	0.06	0.12	0.18	0.24
6.00	0.30	0.36	0.43	0.49	0.55
12.00	0.61	0.67	0.73	0.79	0.86
18.00	0.93	1.00	1.07	1.14	1.21
24.00	1.28	1.35	1.42	1.49	1.55
30.00	1.62	1.69	1.76	1.83	1.90
36.00	1.96	2.02	2.08	2.15	2.21
42.00	2.27	2.34	2.40	2.47	2.53
48.00	2.60	2.66	2.73	2.81	2.88
54.00	2.96	3.03	3.11	3.18	3.26
60.00	3.33	3.40	3.47	3.53	3.60
66.00	3.67	3.73	3.79	3.85	3.91
72.00	3.97	4.03	4.09	4.15	4.22
78.00	4.28	4.35	4.43	4.53	4.63
84.00	4.72	4.83	4.99	5.15	5.31
90.00	5.47	5.67	5.88	6.08	6.29
96.00	6.53	6.79	7.04	7.29	7.56
102.00	7.84	8.12	8.39	8.66	8.90
108.00	9.15	9.40	9.62	9.78	9.94
114.00	10.10	10.25	10.36	10.46	10.56
120.00	10.66	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve
Label: B75 - 2 Year Critical Storm
Scenario: 2 yr 120 hr

Return Event: 2.00 years
Storm Event: 120 hr 2 yr

Time-Depth Curve: 120 hr 2 yr					
Label 120 hr 2 yr					
Start Time	0.00 hours				
Increment	1.20 hours				
End Time	120.00 hours				
Return Event	2.00 years				

CUMULATIVE RAINFALL (in)

Output Time Increment = 1.20 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.00	0.00	0.02	0.07	0.10	
6.00	0.12	0.15	0.18	0.20	0.23
12.00	0.25	0.28	0.30	0.33	0.36
18.00	0.39	0.41	0.44	0.47	0.50
24.00	0.53	0.56	0.59	0.62	0.64
30.00	0.67	0.70	0.73	0.76	0.79
36.00	0.81	0.84	0.86	0.89	0.92
42.00	0.94	0.97	1.00	1.02	1.05
48.00	1.08	1.10	1.13	1.16	1.20
54.00	1.23	1.26	1.29	1.32	1.35
60.00	1.38	1.41	1.44	1.47	1.49
66.00	1.52	1.55	1.57	1.60	1.62
72.00	1.65	1.67	1.69	1.72	1.75
78.00	1.78	1.80	1.84	1.88	1.92
84.00	1.96	2.00	2.07	2.14	2.20
90.00	2.27	2.35	2.44	2.52	2.61
96.00	2.71	2.81	2.92	3.02	3.14
102.00	3.25	3.37	3.48	3.59	3.69
108.00	3.79	3.90	3.99	4.05	4.12
114.00	4.19	4.25	4.29	4.34	4.38
120.00	4.42	(N/A)	(N/A)	(N/A)	(N/A)

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[10.02.00.01]
Page 41 of 107

Subsection: Time-Depth Curve
Label: B75 - 100 Year Critical Storm
Scenario: 100 yr 15 min

Return Event: 100.00 years
Storm Event: 15 min 100 yr

Time-Depth Curve: 15 min 100 yr					
Label 15 min 100 yr					
Start Time	0.00 hours				
Increment	0.00 hours				
End Time	0.25 hours				
Return Event	100.00 years				

CUMULATIVE RAINFALL (in)

Output Time Increment = 0.00 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.00	0.00	0.05	0.09	0.14	0.19
0.01	0.24	0.29	0.34	0.39	0.45
0.03	0.51	0.57	0.62	0.68	0.74
0.04	0.79	0.85	0.91	0.96	1.01
0.05	1.06	1.11	1.15	1.20	1.24
0.06	1.29	1.33	1.36	1.40	1.44
0.08	1.47	1.49	1.52	1.55	1.57
0.09	1.59	1.61	1.63	1.65	1.67
0.10	1.69	1.71	1.73	1.74	1.76
0.11	1.77	1.79	1.80	1.82	1.84
0.13	1.85	1.87	1.88	1.90	1.91
0.14	1.93	1.94	1.96	1.97	1.98
0.15	2.00	2.01	2.02	2.03	2.04
0.16	2.06	2.07	2.08	2.09	2.10
0.18	2.11	2.12	2.13	2.13	2.14
0.19	2.15	2.16	2.17	2.17	2.18
0.20	2.19	2.20	2.20	2.21	2.22
0.21	2.22	2.23	2.24	2.24	2.25
0.23	2.26	2.26	2.27	2.28	2.28
0.24	2.29	2.29	2.30	2.31	2.31
0.25	2.32	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve
Label: B75 - 2 Year Critical Storm
Scenario: 2 yr 15 min

Return Event: 2.00 years
Storm Event: 15 min 2 yr

Time-Depth Curve: 15 min 2 yr					
Label 15 min 2 yr					
Start Time	0.00 hours				
Increment	0.00 hours				
End Time	0.25 hours				
Return Event	2.00 years				

CUMULATIVE RAINFALL (in)

Output Time Increment = 0.00 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.00	0.00	0.02	0.04	0.05	0.07
0.01	0.09	0.11	0.13	0.15	0.17
0.03	0.20	0.22	0.24	0.26	0.29
0.04	0.31	0.33	0.35	0.37	0.39
0.05	0.41	0.43	0.45	0.46	0.48
0.06	0.50	0.51	0.53	0.54	0.56
0.08	0.57	0.58	0.59	0.60	0.61
0.09	0.62	0.63	0.63	0.64	0.65
0.10	0.66	0.66	0.67	0.68	0.68
0.11	0.69	0.69	0.70	0.71	0.71
0.13	0.72	0.72	0.73	0.74	0.74
0.14	0.75	0.75	0.76	0.76	0.77
0.15	0.77	0.78	0.78	0.79	0.79
0.16	0.80	0.80	0.81	0.81	0.81
0.18	0.82	0.82	0.82	0.83	0.83
0.19	0.83	0.84	0.84	0.84	0.85
0.20	0.85	0.85	0.85	0.86	0.86
0.21	0.86	0.87	0.87	0.87	0.87
0.23	0.88	0.88	0.88	0.88	0.89
0.24	0.89	0.89	0.89	0.90	0.90
0.25	0.90	(N/A)	(N/A)	(N/A)	(N/A)

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Page 43 of 107

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Page 44 of 107

Subsection: Time-Depth Curve
 Label: B75 - 100 Year Critical Storm
 Scenario: 100 yr 18 hr

Return Event: 100.00 years
 Storm Event: 18 hr 100 yr

Time-Depth Curve: 18 hr 100 yr					
Label	18 hr 100 yr	Start Time	0.00 hours	Increment	0.18 hours
End Time		18.00 hours			
Return Event		100.00 years			

CUMULATIVE RAINFALL (in)

Output Time Increment = 0.18 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)				
0.00	0.00	0.04	0.08	0.12	0.16
0.90	0.20	0.25	0.29	0.33	0.38
1.80	0.42	0.47	0.51	0.56	0.61
2.70	0.66	0.70	0.75	0.80	0.85
3.60	0.90	0.95	1.00	1.05	1.11
4.50	1.16	1.21	1.26	1.31	1.35
5.40	1.41	1.46	1.51	1.57	1.62
6.30	1.68	1.74	1.81	1.87	1.94
7.20	2.01	2.08	2.15	2.24	2.33
8.10	2.42	2.51	2.62	2.72	2.82
9.00	2.93	3.08	3.22	3.37	3.52
9.90	3.67	3.83	3.99	4.15	4.32
10.80	4.49	4.66	4.83	5.00	5.18
11.70	5.35	5.52	5.69	5.85	6.01
12.60	6.17	6.32	6.45	6.58	6.71
13.50	6.84	6.94	7.03	7.12	7.22
14.40	7.29	7.35	7.42	7.48	7.53
15.30	7.58	7.62	7.66	7.70	7.73
16.20	7.77	7.80	7.83	7.86	7.89
17.10	7.92	7.95	7.98	8.00	8.03
18.00	8.06	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve
 Label: B75 - 2 Year Critical Storm
 Scenario: 2 yr 18 hr

Return Event: 2.00 years
 Storm Event: 18 hr 2 yr

Time-Depth Curve: 18 hr 2 yr					
Label	18 hr 2 yr	Start Time	0.00 hours	Increment	0.18 hours
End Time		18.00 hours			
Return Event		2.00 years			

CUMULATIVE RAINFALL (in)

Output Time Increment = 0.18 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)				
0.00	0.00	0.02	0.05	0.08	0.06
0.90	0.08	0.10	0.11	0.13	0.15
1.80	0.16	0.18	0.20	0.22	0.24
2.70	0.26	0.27	0.29	0.31	0.33
3.60	0.35	0.37	0.39	0.41	0.43
4.50	0.45	0.47	0.49	0.51	0.53
5.40	0.55	0.57	0.59	0.61	0.63
6.30	0.66	0.68	0.70	0.73	0.76
7.20	0.78	0.81	0.84	0.87	0.91
8.10	0.94	0.98	1.02	1.06	1.10
9.00	1.14	1.20	1.26	1.31	1.37
9.90	1.43	1.49	1.55	1.62	1.68
10.80	1.75	1.82	1.88	1.95	2.02
11.70	2.08	2.15	2.22	2.28	2.34
12.60	2.40	2.46	2.51	2.57	2.62
13.50	2.67	2.70	2.74	2.78	2.81
14.40	2.84	2.86	2.89	2.92	2.93
15.30	2.95	2.97	2.99	3.00	3.01
16.20	3.03	3.04	3.05	3.06	3.07
17.10	3.09	3.10	3.11	3.12	3.13
18.00	3.14	(N/A)	(N/A)	(N/A)	(N/A)

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 Page 45 of 107

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 Page 46 of 107

Subsection: Time-Depth Curve
 Label: B75 - 100 Year Critical Storm
 Scenario: 100 yr 2 hr

Return Event: 100.00 years
 Storm Event: 2 hr 100 yr

Time-Depth Curve: 2 hr 100 yr					
Label	2 hr 100 yr	Start Time	0.00 hours	Increment	0.02 hours
End Time		2.00 hours			
Return Event		100.00 years			

CUMULATIVE RAINFALL (in)

Output Time Increment = 0.02 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)				
0.00	0.00	0.10	0.20	0.30	0.40
0.10	0.51	0.62	0.73	0.84	0.96
0.20	1.09	1.21	1.34	1.46	1.58
0.30	1.70	1.82	1.94	2.05	2.16
0.40	2.27	2.37	2.47	2.57	2.66
0.50	2.76	2.84	2.92	3.00	3.08
0.60	3.14	3.20	3.26	3.32	3.37
0.70	3.41	3.46	3.50	3.54	3.58
0.80	3.62	3.66	3.70	3.73	3.76
0.90	3.80	3.83	3.86	3.90	3.93
1.00	3.97	4.00	4.03	4.06	4.10
1.10	4.13	4.16	4.19	4.22	4.25
1.20	4.28	4.30	4.33	4.36	4.38
1.30	4.41	4.43	4.45	4.47	4.49
1.40	4.51	4.53	4.55	4.57	4.59
1.50	4.61	4.62	4.64	4.65	4.67
1.60	4.69	4.70	4.72	4.73	4.75
1.70	4.76	4.78	4.79	4.81	4.82
1.80	4.83	4.85	4.86	4.88	4.89
1.90	4.90	4.92	4.93	4.94	4.96
2.00	4.97	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve
 Label: B75 - 2 Year Critical Storm
 Scenario: 2 yr 2 hr

Return Event: 2.00 years
 Storm Event: 2 hr 2 yr

Time-Depth Curve: 2 hr 2 yr					
Label	2 hr 2 yr	Start Time	0.00 hours	Increment	0.02 hours
End Time		2.00 hours			
Return Event		2.00 years			

CUMULATIVE RAINFALL (in)

Output Time Increment = 0.02 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)				
0.00	0.00	0.04	0.08	0.12	0.16
0.10	0.20	0.24	0.29	0.33	0.38
0.20	0.42	0.47	0.52	0.57	0.62
0.30	0.66	0.71	0.76	0.80	0.84
0.40	0.89	0.93	0.96	1.00	1.04
0.50	1.08	1.11	1.14	1.17	1.20
0.60	1.23	1.25	1.27	1.30	1.32
0.70	1.33	1.35	1.37	1.38	1.40
0.80	1.41	1.43	1.44	1.46	1.47
0.90	1.48	1.50	1.51	1.52	1.54
1.00	1.55	1.56	1.57	1.59	1.60
1.10	1.61	1.62	1.64	1.65	1.66
1.20	1.67	1.68	1.69	1.70	1.71
1.30	1.72	1.73	1.74	1.75	1.75
1.40	1.76	1.77	1.78	1.78	1.79
1.50	1.80	1.80	1.81	1.82	1.82
1.60	1.83	1.84	1.84	1.85	1.85
1.70	1.86	1.86	1.87	1.88	1.88
1.80	1.89	1.89	1.90	1.90	1.91
1.90	1.91	1.92	1.92	1.93	1.93
2.00	1.94	(N/A)	(N/A)	(N/A)	(N/A)

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 Page 47 of 107

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 Page 48 of 107

Subsection: Time-Depth Curve
 Label: B75 - 100 Year Critical Storm
 Scenario: 100 yr 24 hr

Return Event: 100.00 years
 Storm Event: 24 hr 100 yr

Time-Depth Curve: 24 hr 100 yr					
Label	24 hr 100 yr	Start Time	0.00 hours	Increment	0.24 hours
End Time		24.00 hours			
Return Event		100.00 years			

CUMULATIVE RAINFALL (in)

Output Time Increment = 0.24 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)				
0.00	0.00	0.04	0.08	0.13	0.17
1.20	0.21	0.26	0.31	0.35	0.40
2.40	0.45	0.50	0.55	0.60	0.65
3.60	0.70	0.75	0.80	0.85	0.91
4.80	0.96	1.01	1.07	1.12	1.18
6.00	1.23	1.28	1.34	1.39	1.44
7.20	1.50	1.55	1.61	1.66	1.73
8.40	1.79	1.86	1.92	1.99	2.06
9.60	2.13	2.21	2.29	2.38	2.48
10.80	2.57	2.67	2.78	2.89	3.00
12.00	3.12	3.27	3.43	3.58	3.74
13.20	3.90	4.07	4.24	4.41	4.59
14.40	4.77	4.95	5.14	5.32	5.50
15.60	5.69	5.87	6.05	6.22	6.39
16.80	6.56	6.72	6.86	7.00	7.14
18.00	7.28	7.38	7.48	7.58	7.67
19.20	7.75	7.82	7.89	7.96	8.01
20.40	8.06	8.10	8.15	8.19	8.22
21.60	8.26	8.29	8.33	8.36	8.39
22.80	8.42	8.45	8.48	8.51	8.54
24.00	8.57	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve
 Label: B75 - 2 Year Critical Storm
 Scenario: 2 yr 24 hr

Return Event: 2.00 years
 Storm Event: 24 hr 2 yr

Time-Depth Curve: 24 hr 2 yr					
Label	24 hr 2 yr	Start Time	0.00 hours	Increment	0.24 hours
End Time		24.00 hours			
Return Event		2.00 years			

CUMULATIVE RAINFALL (in)

Output Time Increment = 0.24 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)				
0.00	0.00	0.02	0.03	0.05	0.07
1.20	0.08	0.10	0.12	0.14	0.16
2.40	0.18	0.19	0.21	0.23	0.25
3.60	0.27	0.29	0.31	0.33	0.35
4.80	0.37	0.39	0.42	0.44	0.46
6.00	0.48	0.50	0.52	0.54	0.56
7.20	0.58	0.60	0.63	0.65	0.67
8.40	0.70	0.72	0.75	0.78	0.80
9.60	0.83	0.86	0.89	0.93	0.97
10.80	1.00	1.04	1.08	1.13	1.17
12.00	1.21	1.27	1.34	1.40	1.46
13.20	1.52	1.59	1.65	1.72	1.79
14.40	1.86	1.93	2.00	2.07	2.14
15.60	2.22	2.29	2.36	2.42	2.49
16.80	2.56	2.62	2.67	2.73	2.78
18.00	2.84	2.87	2.91	2.95	2.99
19.20	3.02	3.05	3.07	3.10	3.12
20.40	3.14	3.16	3.18	3.19	3.21
21.60	3.22	3.23	3.25	3.26	3.27
22.80	3.28	3.29	3.31	3.32	3.33
24.00	3.34	(N/A)	(N/A)	(N/A)	(N/A)

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 Page 49 of 107

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 Page 50 of 107

Subsection: Time-Depth Curve
 Label: B75 - 100 Year Critical Storm
 Scenario: 100 yr 240 hr

Return Event: 100.00 years
 Storm Event: 240 hr 100 yr

Time-Depth Curve: 240 hr 100 yr					
Label	240 hr 100 yr	Start Time	0.00 hours	Increment	2.40 hours
End Time		240.00 hours			
Return Event		100.00 years			

CUMULATIVE RAINFALL (in)

Output Time Increment = 2.40 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)				
0.00	0.00	0.07	0.14	0.21	0.28
12.00	0.35	0.43	0.51	0.58	0.65
24.00	0.72	0.79	0.87	0.94	1.02
36.00	1.10	1.18	1.27	1.35	1.43
48.00	1.52	1.60	1.68	1.76	1.84
60.00	1.93	2.01	2.09	2.17	2.25
72.00	2.33	2.40	2.47	2.55	2.62
84.00	2.70	2.77	2.85	2.93	3.01
96.00	3.08	3.16	3.24	3.33	3.42
108.00	3.51	3.60	3.69	3.78	3.87
120.00	3.95	4.03	4.11	4.19	4.27
132.00	4.35	4.42	4.50	4.57	4.64
144.00	4.71	4.78	4.85	4.92	5.00
156.00	5.08	5.16	5.26	5.37	5.49
168.00	5.61	5.73	5.92	6.11	6.30
180.00	6.49	6.73	6.98	7.22	7.46
192.00	7.75	8.05	8.35	8.65	8.97
204.00	9.30	9.63	9.96	10.27	10.57
216.00	10.86	11.15	11.41	11.60	11.80
228.00	11.99	12.17	12.29	12.41	12.53
240.00	12.65	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve
 Label: B75 - 2 Year Critical Storm
 Scenario: 2 yr 240 hr

Return Event: 2.00 years
 Storm Event: 240 hr 2 yr

Time-Depth Curve: 240 hr 2 yr					
Label	240 hr 2 yr	Start Time	0.00 hours	Increment	2.40 hours
End Time		240.00 hours			
Return Event		2.00 years			

CUMULATIVE RAINFALL (in)

Output Time Increment = 2.40 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)				
0.00	0.00	0.03	0.06	0.09	0.12
12.00	0.16	0.19	0.22	0.26	0.29
24.00	0.32	0.35	0.38	0.42	0.45
36.00	0.49	0.52	0.56	0.60	0.63
48.00	0.67	0.71	0.74	0.78	0.82
60.00	0.85	0.89	0.92	0.96	1.00
72.00	1.03	1.06	1.10	1.13	1.16
84.00	1.19	1.23	1.26	1.30	1.33
96.00	1.37	1.40	1.44	1.48	1.52
108.00	1.55	1.59	1.63	1.67	1.71
120.00	1.75	1.79	1.82	1.86	1.89
132.00	1.93	1.96	1.99	2.02	2.05
144.00	2.09	2.12	2.15	2.18	2.22
156.00	2.25	2.29	2.33	2.38	2.43
168.00	2.48	2.54	2.62	2.71	2.79
180.00	2.87	2.98	3.09	3.20	3.30
192.00	3.43	3.56	3.70	3.83	3.97
204.00	4.12	4.26	4.41	4.55	4.68
216.00	4.81	4.94	5.05	5.14	5.22
228.00	5.31	5.39	5.44	5.49	5.55
240.00	5.60	(N/A)	(N/A)	(N/A)	(N/A)

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 [10.02.00.01]
 Page 51 of 107

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 Page 52 of 107

Subsection: Time-Depth Curve
Label: B75 - 100 Year Critical Storm
Scenario: 100 yr 3 hr

Return Event: 100.00 years
Storm Event: 3 hr 100 yr

Time-Depth Curve: 3 hr 100 yr					
Label	3 hr 100 yr	Start Time	0.00 hours	Increment	0.03 hours
End Time		3.00 hours			
Return Event		100.00 years			

CUMULATIVE RAINFALL (in)

Output Time Increment = 0.03 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)				
0.00	0.00	0.11	0.22	0.33	0.44
0.15	0.56	0.69	0.81	0.93	1.06
0.30	1.20	1.34	1.47	1.61	1.75
0.45	1.88	2.01	2.14	2.26	2.38
0.60	2.50	2.62	2.73	2.83	2.94
0.75	3.05	3.14	3.22	3.31	3.40
0.90	3.47	3.54	3.60	3.67	3.72
1.05	3.77	3.82	3.86	3.91	3.95
1.20	4.00	4.04	4.08	4.12	4.16
1.35	4.19	4.23	4.27	4.31	4.34
1.50	4.38	4.42	4.45	4.49	4.53
1.65	4.56	4.60	4.63	4.66	4.70
1.80	4.73	4.75	4.78	4.81	4.84
1.95	4.87	4.89	4.92	4.94	4.96
2.10	4.99	5.01	5.03	5.05	5.07
2.25	5.09	5.11	5.12	5.14	5.16
2.40	5.18	5.19	5.21	5.23	5.25
2.55	5.26	5.28	5.29	5.31	5.32
2.70	5.34	5.36	5.37	5.39	5.40
2.85	5.41	5.43	5.44	5.46	5.47
3.00	5.49	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve
Label: B75 - 2 Year Critical Storm
Scenario: 2 yr 3 hr

Return Event: 2.00 years
Storm Event: 3 hr 2 yr

Time-Depth Curve: 3 hr 2 yr					
Label	3 hr 2 yr	Start Time	0.00 hours	Increment	0.03 hours
End Time		3.00 hours			
Return Event		2.00 years			

CUMULATIVE RAINFALL (in)

Output Time Increment = 0.03 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)				
0.00	0.00	0.04	0.09	0.13	0.17
0.15	0.22	0.27	0.32	0.36	0.41
0.30	0.47	0.52	0.57	0.63	0.68
0.45	0.73	0.79	0.84	0.88	0.93
0.60	0.98	1.02	1.06	1.11	1.15
0.75	1.19	1.22	1.26	1.29	1.33
0.90	1.35	1.38	1.41	1.44	1.47
1.05	1.47	1.49	1.51	1.53	1.56
1.20	1.56	1.58	1.61	1.64	1.67
1.35	1.64	1.65	1.68	1.71	1.74
1.50	1.71	1.72	1.74	1.77	1.79
1.65	1.78	1.79	1.81	1.82	1.84
1.80	1.84	1.85	1.86	1.88	1.89
1.95	1.90	1.91	1.92	1.93	1.94
2.10	1.94	1.95	1.96	1.97	1.98
2.25	1.98	1.99	2.00	2.01	2.01
2.40	2.02	2.02	2.03	2.04	2.04
2.55	2.05	2.06	2.06	2.07	2.07
2.70	2.08	2.09	2.09	2.10	2.10
2.85	2.11	2.12	2.12	2.13	2.13
3.00	2.14	(N/A)	(N/A)	(N/A)	(N/A)

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Page 53 of 107

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Page 54 of 107

Subsection: Time-Depth Curve
Label: B75 - 2 Year Critical Storm
Scenario: 2 yr 6 hr

Return Event: 2.00 years
Storm Event: 3 hr 2 yr

Time-Depth Curve: 3 hr 2 yr					
Label	3 hr 2 yr	Start Time	0.00 hours	Increment	0.03 hours
End Time		3.00 hours			
Return Event		2.00 years			

CUMULATIVE RAINFALL (in)

Output Time Increment = 0.03 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)				
0.00	0.00	0.04	0.09	0.13	0.17
0.15	0.22	0.27	0.32	0.36	0.41
0.30	0.47	0.52	0.57	0.63	0.68
0.45	0.73	0.79	0.84	0.89	0.93
0.60	0.98	1.02	1.06	1.11	1.15
0.75	1.19	1.22	1.26	1.29	1.33
0.90	1.35	1.38	1.43	1.45	1.47
1.05	1.47	1.49	1.51	1.54	1.56
1.20	1.56	1.58	1.59	1.61	1.62
1.35	1.64	1.65	1.66	1.68	1.69
1.50	1.71	1.72	1.74	1.75	1.76
1.65	1.78	1.79	1.80	1.82	1.83
1.80	1.84	1.85	1.86	1.88	1.89
1.95	1.90	1.91	1.92	1.93	1.94
2.10	1.94	1.95	1.96	1.97	1.98
2.25	1.98	1.99	2.00	2.01	2.01
2.40	2.02	2.02	2.03	2.04	2.04
2.55	2.05	2.06	2.06	2.07	2.08
2.70	2.08	2.09	2.09	2.10	2.10
2.85	2.11	2.12	2.12	2.13	2.13
3.00	2.14	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve
Label: B75 - 100 Year Critical Storm
Scenario: 100 yr 30 min

Return Event: 100.00 years
Storm Event: 30 min 100 yr

Time-Depth Curve: 30 min 100 yr					
Label	30 min 100 yr	Start Time	0.00 hours	Increment	0.01 hours
End Time		3.00 hours			
Return Event		100.00 years			

CUMULATIVE RAINFALL (in)

Output Time Increment = 0.01 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)				
0.00	0.00	0.06	0.13	0.19	0.25
0.03	0.32	0.40	0.47	0.54	0.61
0.05	0.69	0.77	0.85	0.93	1.01
0.08	1.09	1.16	1.24	1.31	1.38
0.10	1.45	1.51	1.58	1.64	1.70
0.13	1.76	1.81	1.86	1.91	1.96
0.15	2.00	2.04	2.08	2.12	2.15
0.18	2.18	2.20	2.23	2.26	2.28
0.20	2.31	2.33	2.36	2.38	2.40
0.23	2.42	2.44	2.47	2.49	2.51
0.25	2.53	2.55	2.57	2.59	2.61
0.28	2.63	2.65	2.67	2.69	2.71
0.30	2.73	2.75	2.76	2.78	2.79
0.33	2.81	2.83	2.84	2.85	2.87
0.35	2.88	2.89	2.90	2.92	2.93
0.38	2.94	2.95	2.96	2.97	2.98
0.40	2.99	3.00	3.01	3.02	3.03
0.43	3.04	3.05	3.06	3.07	3.07
0.45	3.08	3.09	3.10	3.11	3.12
0.48	3.13	3.14	3.14	3.15	3.16
0.50	3.17	(N/A)	(N/A)	(N/A)	(N/A)

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Page 55 of 107

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Page 56 of 107

Subsection: Time-Depth Curve
Label: B75 - 2 Year Critical Storm
Scenario: 2 yr 30 min

Return Event: 2.00 years
Storm Event: 30 min 2 yr

Time-Depth Curve: 30 min 2 yr					
Label	30 min 2 yr	Start Time	0.00 hours	Increment	0.01 hours
Start Time	0.00 hours	End Time	0.50 hours	Return Event	2.00 years

CUMULATIVE RAINFALL (in)

Output Time Increment = 0.01 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)				
0.00	0.00	0.02	0.05	0.07	0.10
0.03	0.13	0.15	0.18	0.21	0.24
0.05	0.27	0.30	0.33	0.36	0.39
0.08	0.42	0.46	0.48	0.51	0.54
0.10	0.57	0.59	0.62	0.64	0.66
0.13	0.69	0.71	0.73	0.75	0.77
0.15	0.78	0.80	0.81	0.83	0.84
0.18	0.85	0.86	0.87	0.88	0.89
0.20	0.90	0.91	0.92	0.93	0.94
0.23	0.95	0.96	0.96	0.97	0.98
0.25	0.99	1.00	1.01	1.01	1.02
0.28	1.03	1.04	1.05	1.05	1.06
0.30	1.07	1.07	1.08	1.09	1.09
0.33	1.10	1.11	1.11	1.12	1.12
0.35	1.13	1.13	1.14	1.14	1.14
0.38	1.15	1.15	1.16	1.16	1.17
0.40	1.17	1.17	1.18	1.18	1.18
0.43	1.19	1.19	1.20	1.20	1.20
0.45	1.21	1.21	1.21	1.22	1.22
0.48	1.22	1.23	1.23	1.23	1.24
0.50	1.24	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve
Label: B75 - 100 Year Critical Storm
Scenario: 100 yr 48 hr

Return Event: 100.00 years
Storm Event: 48 hr 100 yr

Time-Depth Curve: 48 hr 100 yr					
Label	48 hr 100 yr	Start Time	0.00 hours	Increment	0.48 hours
Start Time	0.00 hours	End Time	48.00 hours	Return Event	100.00 years

CUMULATIVE RAINFALL (in)

Output Time Increment = 0.48 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)				
0.00	0.00	0.05	0.10	0.15	0.21
2.40	0.26	0.32	0.37	0.43	0.48
4.80	0.53	0.58	0.63	0.69	0.75
7.20	0.81	0.87	0.93	0.99	1.05
9.60	1.11	1.17	1.23	1.29	1.35
12.00	1.41	1.47	1.53	1.59	1.65
14.40	1.71	1.76	1.81	1.87	1.92
16.80	1.98	2.04	2.09	2.15	2.20
19.20	2.26	2.32	2.38	2.45	2.51
21.60	2.58	2.64	2.71	2.77	2.84
24.00	2.90	2.96	3.02	3.08	3.14
26.40	3.19	3.25	3.30	3.35	3.41
28.80	3.46	3.51	3.56	3.61	3.67
31.20	3.73	3.79	3.86	3.94	4.03
33.60	4.11	4.21	4.34	4.48	4.62
36.00	4.76	4.94	5.12	5.30	5.47
38.40	5.69	5.91	6.13	6.35	6.58
40.80	6.82	7.07	7.31	7.54	7.75
43.20	7.97	8.18	8.37	8.51	8.65
45.60	8.80	8.93	9.02	9.10	9.19
48.00	9.28	(N/A)	(N/A)	(N/A)	(N/A)

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Page 57 of 107

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Page 56 of 107

Subsection: Time-Depth Curve
Label: B75 - 2 Year Critical Storm
Scenario: 2 yr 48 hr

Return Event: 2.00 years
Storm Event: 48 hr 2 yr

Time-Depth Curve: 48 hr 2 yr					
Label	48 hr 2 yr	Start Time	0.00 hours	Increment	0.48 hours
Start Time	0.00 hours	End Time	48.00 hours	Return Event	2.00 years

CUMULATIVE RAINFALL (in)

Output Time Increment = 0.48 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)				
0.00	0.00	0.02	0.04	0.06	0.08
2.40	0.10	0.12	0.15	0.17	0.19
4.80	0.21	0.23	0.25	0.27	0.30
7.20	0.32	0.34	0.37	0.39	0.41
9.60	0.44	0.46	0.49	0.51	0.53
12.00	0.56	0.58	0.60	0.63	0.65
14.40	0.67	0.69	0.72	0.74	0.76
16.80	0.78	0.80	0.82	0.85	0.87
19.20	0.89	0.91	0.94	0.96	0.99
21.60	1.02	1.04	1.07	1.09	1.12
24.00	1.14	1.17	1.19	1.21	1.24
26.40	1.26	1.28	1.30	1.32	1.34
28.80	1.36	1.38	1.40	1.42	1.45
31.20	1.47	1.49	1.52	1.55	1.59
33.60	1.62	1.66	1.71	1.77	1.82
36.00	1.88	1.95	2.02	2.09	2.16
38.40	2.24	2.33	2.42	2.50	2.60
40.80	2.69	2.79	2.88	2.97	3.06
43.20	3.14	3.23	3.30	3.36	3.41
45.60	3.47	3.52	3.56	3.59	3.63
48.00	3.66	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve
Label: B75 - 100 Year Critical Storm
Scenario: 100 yr 5 min

Return Event: 100.00 years
Storm Event: 5 min 100 yr revised

Time-Depth Curve: 5 min 100 yr revised					
Label	5 min 100 yr revised	Start Time	0.00 hours	Increment	0.08 hours
Start Time	0.00 hours	End Time	0.08 hours	Return Event	100.00 years

CUMULATIVE RAINFALL (in)

Output Time Increment = 0.00 hours

Time (hours)	Depth (in)				
0.00	0.00	0.04	0.07	0.11	0.14
0.00	0.18	0.21	0.24	0.27	0.30
0.01	0.32	0.35	0.38	0.40	0.42
0.01	0.44	0.46	0.48	0.50	0.52
0.02	0.54	0.56	0.57	0.59	0.60
0.02	0.62	0.63	0.64	0.66	0.67
0.02	0.68	0.69	0.70	0.71	0.72
0.03	0.73	0.74	0.75	0.76	0.77
0.03	0.77	0.78	0.79	0.80	0.80
0.04	0.81	0.82	0.82	0.83	0.83
0.04	0.84	0.85	0.85	0.86	0.86
0.05	0.87	0.87	0.87	0.88	0.88
0.05	0.89	0.89	0.90	0.90	0.91
0.05	0.91	0.91	0.92	0.92	0.93
0.06	0.93	0.93	0.94	0.94	0.94
0.06	0.95	0.95	0.96	0.96	0.96
0.07	0.97	0.97	0.97	0.98	0.98
0.07	0.98	0.99	0.99	0.99	1.00
0.07	1.00	1.00	1.01	1.01	1.01
0.08	1.01	1.02	1.02	1.02	1.03

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Page 59 of 107

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Page 50 of 107

Subsection: Time-Depth Curve
 Label: B75 - 2 Year Critical Storm
 Scenario: 2 yr 5 min

Return Event: 2.00 years
 Storm Event: 5 min 2 yr

Time-Depth Curve: 5 min 2 yr					
Label	5 min 2 yr	Start Time	0.00 hours	Increment	0.00 hours
End Time	0.00 hours	Return Event	2.00 years		

CUMULATIVE RAINFALL (in)
Output Time Increment = 0.00 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)				
0.00	0.00	0.01	0.02	0.02	0.03
0.00	0.04	0.05	0.06	0.07	0.08
0.01	0.09	0.10	0.11	0.12	0.13
0.01	0.14	0.15	0.16	0.17	
0.02	0.18	0.19	0.20	0.21	0.21
0.02	0.22	0.23	0.23	0.24	0.25
0.02	0.25	0.26	0.26	0.27	0.27
0.03	0.27	0.28	0.28	0.29	
0.03	0.29	0.29	0.30	0.30	0.30
0.04	0.31	0.31	0.31	0.32	
0.04	0.32	0.32	0.33	0.33	0.33
0.05	0.33	0.33	0.34	0.34	0.34
0.05	0.34	0.35	0.35	0.35	0.35
0.05	0.35	0.36	0.36	0.36	0.36
0.06	0.36	0.36	0.37	0.37	
0.06	0.37	0.37	0.37	0.37	0.38
0.07	0.38	0.38	0.38	0.38	0.38
0.07	0.38	0.38	0.39	0.39	0.39
0.07	0.39	0.39	0.39	0.39	0.39
0.08	0.39	0.40	0.40	0.40	0.40

Subsection: Time-Depth Curve
 Label: B75 - 100 Year Critical Storm
 Scenario: 100 yr 6 hr

Return Event: 100.00 years
 Storm Event: 6 hr 100 yr

Time-Depth Curve: 6 hr 100 yr					
Label	6 hr 100 yr	Start Time	0.00 hours	Increment	0.06 hours
End Time	6.00 hours	Return Event	100.00 years		

CUMULATIVE RAINFALL (in)
Output Time Increment = 0.06 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)				
0.00	0.00	0.13	0.26	0.39	0.52
0.30	0.66	0.80	0.95	1.09	1.25
0.60	1.41	1.57	1.73	1.89	2.04
0.90	2.20	2.36	2.51	2.65	2.79
1.20	2.93	3.07	3.20	3.32	3.44
1.50	3.57	3.67	3.78	3.88	3.99
1.80	4.07	4.14	4.22	4.30	4.36
2.10	4.41	4.47	4.53	4.58	4.63
2.40	4.68	4.73	4.78	4.83	4.87
2.70	4.91	4.96	5.00	5.04	5.09
3.00	5.13	5.17	5.22	5.26	5.30
3.30	5.34	5.38	5.42	5.46	5.50
3.60	5.53	5.57	5.60	5.64	5.67
3.90	5.70	5.73	5.76	5.79	5.81
4.20	5.84	5.87	5.89	5.91	5.94
4.50	5.96	5.98	6.00	6.02	6.04
4.80	6.06	6.08	6.10	6.12	6.14
5.10	6.16	6.18	6.20	6.22	6.24
5.40	6.25	6.27	6.29	6.31	6.32
5.70	6.34	6.36	6.38	6.39	6.41
6.00	6.43	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve
 Label: B75 - 100 Year Critical Storm
 Scenario: 100 yr 72 hr

Return Event: 100.00 years
 Storm Event: 72 hr 100 yr

Time-Depth Curve: 72 hr 100 yr					
Label	72 hr 100 yr	Start Time	0.00 hours	Increment	0.72 hours
End Time	72.00 hours	Return Event	100.00 years		

CUMULATIVE RAINFALL (in)
Output Time Increment = 0.72 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)				
0.00	0.00	0.05	0.11	0.16	0.22
3.60	0.28	0.33	0.39	0.45	0.51
7.20	0.56	0.62	0.67	0.73	0.80
10.80	0.86	0.92	0.99	1.05	1.12
14.40	1.18	1.24	1.31	1.37	1.44
18.00	1.50	1.56	1.63	1.69	1.75
21.60	1.81	1.87	1.93	1.98	2.04
25.20	2.10	2.16	2.22	2.28	2.34
28.80	2.40	2.46	2.53	2.60	2.67
32.40	2.73	2.80	2.87	2.94	3.01
36.00	3.08	3.14	3.20	3.27	3.33
39.60	3.39	3.44	3.50	3.56	3.61
43.20	3.67	3.72	3.78	3.83	3.90
46.80	3.96	4.02	4.09	4.18	4.27
50.40	4.36	4.46	4.61	4.76	4.91
54.00	5.05	5.24	5.43	5.62	5.81
57.60	6.04	6.27	6.50	6.74	6.99
61.20	7.24	7.50	7.75	8.00	8.23
64.80	8.46	8.68	8.89	9.04	9.19
68.40	9.34	9.48	9.57	9.66	9.76
72.00	9.85	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time-Depth Curve
 Label: B75 - 2 Year Critical Storm
 Scenario: 2 yr 72 hr

Return Event: 2.00 years
 Storm Event: 72 hr 2 yr

Time-Depth Curve: 72 hr 2 yr					
Label	72 hr 2 yr	Start Time	0.00 hours	Increment	0.72 hours
End Time	72.00 hours	Return Event	2.00 years		

CUMULATIVE RAINFALL (in)
Output Time Increment = 0.72 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)				
0.00	0.00	0.02	0.04	0.07	0.09
3.60	0.11	0.14	0.16	0.18	0.20
7.20	0.23	0.25	0.27	0.30	0.32
10.80	0.35	0.37	0.40	0.42	0.45
14.40	0.48	0.50	0.53	0.55	0.58
18.00	0.60	0.63	0.66	0.68	0.71
21.60	0.73	0.75	0.78	0.80	0.82
25.20	0.85	0.87	0.89	0.92	0.94
28.80	0.97	0.99	1.02	1.05	1.07
32.40	1.10	1.13	1.16	1.19	1.21
36.00	1.24	1.27	1.29	1.32	1.34
39.60	1.37	1.39	1.41	1.43	1.46
43.20	1.48	1.50	1.52	1.55	1.57
46.80	1.60	1.62	1.65	1.69	1.72
50.40	1.76	1.80	1.86	1.92	1.98
54.00	2.04	2.11	2.19	2.27	2.34
57.60	2.43	2.53	2.62	2.72	2.82
61.20	2.92	3.02	3.13	3.22	3.32
64.80	3.41	3.50	3.58	3.64	3.70
68.40	3.76	3.82	3.86	3.89	3.93
72.00	3.97	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Time of Concentration Calculations

Label: CubeSmart Bypass (South)

Scenario: 2 yr 1 hr

Time of Concentration Results

Segment #1: User Defined Tc

Time of Concentration	0.17 hours
-----------------------	------------

Time of Concentration (Composite)

Time of Concentration (Composite)	0.17 hours
--------------------------------------	------------

Return Event: 2.00 years

Storm Event: 1 hr 2 yr

Subsection: Time of Concentration Calculations

Label: CubeSmart Bypass (South)

Scenario: 2 yr 1 hr

==== User Defined

Tc = Value entered by user

Where: Tc= Time of concentration, hours

Return Event: 2.00 years

Storm Event: 1 hr 2 yr

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[10.02.00.01]
Page 65 of 107

20147-Existing Conditions Regional Drainage-
10YR BFE.ppc
11/1/2022

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[10.02.00.01]
Page 66 of 107

Subsection: Time of Concentration Calculations

Label: CubeSmart Tributary

Scenario: 2 yr 1 hr

Time of Concentration Results

Segment #1: User Defined Tc

Time of Concentration	0.17 hours
-----------------------	------------

Time of Concentration (Composite)

Time of Concentration (Composite)	0.17 hours
--------------------------------------	------------

Return Event: 2.00 years

Storm Event: 1 hr 2 yr

Subsection: Time of Concentration Calculations

Label: CubeSmart Tributary

Scenario: 2 yr 1 hr

==== User Defined

Tc = Value entered by user

Where: Tc= Time of concentration, hours

Return Event: 2.00 years

Storm Event: 1 hr 2 yr

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11/1/2022

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[10.02.00.01]
Page 67 of 107

20147-Existing Conditions Regional Drainage-
10YR BFE.ppc
11/1/2022

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[10.02.00.01]
Page 68 of 107

Subsection: Time of Concentration Calculations

Label: North of Deerfield

Scenario: 2 yr 1 hr

Time of Concentration Results

Segment #1: User Defined Tc

Time of Concentration 0.17 hours

Time of Concentration (Composite)

Time of Concentration (Composite) 0.17 hours

Return Event: 2.00 years

Storm Event: 1 hr 2 yr

Subsection: Time of Concentration Calculations

Label: North of Deerfield

Scenario: 2 yr 1 hr

==== User Defined

Tc = Value entered by user

Where: Tc= Time of concentration, hours

Return Event: 2.00 years

Storm Event: 1 hr 2 yr

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10YR BFE.ppc
11/1/2022

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PondPack CONNECT Edition
[10.02.00.01]
Page 69 of 107

20147-Existing Conditions Regional Drainage-
10YR BFE.ppc
11/1/2022

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PondPack CONNECT Edition
[10.02.00.01]
Page 70 of 107

Subsection: Time of Concentration Calculations
Label: Site to 3700 Deerfield (N)
Scenario: 2 yr 1 hr

Time of Concentration Results

Segment #1: User Defined Tc

Time of Concentration 0.17 hours

Time of Concentration (Composite)

Time of Concentration (Composite) 0.17 hours

Return Event: 2.00 years
Storm Event: 1 hr 2 yr

Subsection: Time of Concentration Calculations
Label: Site to 3700 Deerfield (N)
Scenario: 2 yr 1 hr

==== User Defined

Tc = Value entered by user

Where: Tc= Time of concentration, hours

Return Event: 2.00 years
Storm Event: 1 hr 2 yr

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11/1/2022

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PondPack CONNECT Edition
[10.02.00.01]
Page 71 of 107

20147-Existing Conditions Regional Drainage-
10YR BFE.ppc
11/1/2022

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Page 72 of 107

Subsection: Time of Concentration Calculations

Label: Site to 3700 Deerfield (S)

Scenario: 2 yr 1 hr

Time of Concentration Results

Segment #1: User Defined Tc

Time of Concentration	0.17 hours
-----------------------	------------

Time of Concentration (Composite)

Time of Concentration (Composite)	0.17 hours
-----------------------------------	------------

Return Event: 2.00 years

Storm Event: 1 hr 2 yr

Subsection: Time of Concentration Calculations

Label: Site to 3700 Deerfield (S)

Scenario: 2 yr 1 hr

==== User Defined

Tc = Value entered by user

Where: Tc= Time of concentration, hours

Return Event: 2.00 years

Storm Event: 1 hr 2 yr

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11/1/2022

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PondPack CONNECT Edition
[10.02.00.01]
Page 73 of 107

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11/1/2022

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[10.02.00.01]
Page 74 of 107

Subsection: Time of Concentration Calculations

Label: Site to Deerfield Road (E)

Scenario: 2 yr 1 hr

Time of Concentration Results

Segment #1: User Defined Tc

Time of Concentration	0.17 hours
-----------------------	------------

Time of Concentration (Composite)

Time of Concentration (Composite)	0.17 hours
-----------------------------------	------------

Return Event: 2.00 years

Storm Event: 1 hr 2 yr

Subsection: Time of Concentration Calculations

Label: Site to Deerfield Road (E)

Scenario: 2 yr 1 hr

==== User Defined

Tc = Value entered by user

Where: Tc= Time of concentration, hours

Return Event: 2.00 years

Storm Event: 1 hr 2 yr

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[10.02.00.01]
Page 75 of 107

20147-Existing Conditions Regional Drainage-
10YR BFE.ppc
11/1/2022

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[10.02.00.01]
Page 76 of 107

Subsection: Time of Concentration Calculations

Label: Site to Meadowlake

Scenario: 2 yr 1 hr

Time of Concentration Results

Segment #1: User Defined Tc

Time of Concentration 0.17 hours

Time of Concentration (Composite)

Time of Concentration (Composite) 0.17 hours

Return Event: 2.00 years

Storm Event: 1 hr 2 yr

Subsection: Time of Concentration Calculations

Label: Site to Meadowlake

Scenario: 2 yr 1 hr

==== User Defined

Tc = Value entered by user

Where: Tc= Time of concentration, hours

Return Event: 2.00 years

Storm Event: 1 hr 2 yr

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[10.02.00.01]
Page 77 of 107

20147-Existing Conditions Regional Drainage-
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11/1/2022

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PondPack CONNECT Edition
[10.02.00.01]
Page 78 of 107

Subsection: Time of Concentration Calculations
Label: Site Tributary to Basin
Scenario: 2 yr 1 hr

Time of Concentration Results

Segment #1: User Defined Tc

Time of Concentration 0.17 hours

Time of Concentration (Composite)

Time of Concentration (Composite) 0.17 hours

Return Event: 2.00 years
Storm Event: 1 hr 2 yr

Subsection: Time of Concentration Calculations
Label: Site Tributary to Basin
Scenario: 2 yr 1 hr

==== User Defined

Tc = Value entered by user

Where: Tc= Time of concentration, hours

Return Event: 2.00 years
Storm Event: 1 hr 2 yr

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PondPack CONNECT Edition
[10.02.00.01]
Page 79 of 107

20147-Existing Conditions Regional Drainage-
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11/1/2022

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[10.02.00.01]
Page 80 of 107

Subsection: Time of Concentration Calculations

Label: South of Deerfield

Scenario: 2 yr 1 hr

Time of Concentration Results

Segment #1: User Defined Tc

Time of Concentration	0.17 hours
-----------------------	------------

Time of Concentration (Composite)

Time of Concentration (Composite)	0.17 hours
-----------------------------------	------------

Return Event: 2.00 years

Storm Event: 1 hr 2 yr

Subsection: Time of Concentration Calculations

Label: South of Deerfield

Scenario: 2 yr 1 hr

==== User Defined

Tc = Value entered by user

Where: Tc= Time of concentration, hours

Return Event: 2.00 years

Storm Event: 1 hr 2 yr

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[10.02.00.01]
Page 81 of 107

20147-Existing Conditions Regional Drainage-
10YR BFE.ppc
11/1/2022

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[10.02.00.01]
Page 82 of 107

Subsection: Runoff CN-Area
Label: CubeSmart Bypass (South)
Scenario: 2 yr 1 hr

Return Event: 2.00 years
Storm Event: 1 hr 2 yr

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Runoff CN-Area
Label: CubeSmart Tributary
Scenario: 2 yr 1 hr

Return Event: 2.00 years
Storm Event: 1 hr 2 yr

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
COMPOSITE AREA & WEIGHTED CN --->	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)

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11/1/2022

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[10.02.00.01]
Page 83 of 107

20147-Existing Conditions Regional Drainage-
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11/1/2022

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[10.02.00.01]
Page 84 of 107

Subsection: Runoff CN-Area
Label: North of Deerfield
Scenario: 2 yr 1 hr

Return Event: 2.00 years
Storm Event: 1 hr 2 yr

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
COMPOSITE AREA & WEIGHTED CN -->	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Runoff CN-Area
Label: Site to 3700 Deerfield (N)
Scenario: 2 yr 1 hr

Return Event: 2.00 years
Storm Event: 1 hr 2 yr

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
COMPOSITE AREA & WEIGHTED CN -->	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)

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10YR BFE.ppc
11/1/2022

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[10.02.00.01]
Page 85 of 107

20147-Existing Conditions Regional Drainage-
10YR BFE.ppc
11/1/2022

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[10.02.00.01]
Page 86 of 107

Subsection: Runoff CN-Area
Label: Site to 3700 Deerfield (S)
Scenario: 2 yr 1 hr

Return Event: 2.00 years
Storm Event: 1 hr 2 yr

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
COMPOSITE AREA & WEIGHTED CN -->	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Runoff CN-Area
Label: Site to Deerfield Road (E)
Scenario: 2 yr 1 hr

Return Event: 2.00 years
Storm Event: 1 hr 2 yr

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
COMPOSITE AREA & WEIGHTED CN -->	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)

20147-Existing Conditions Regional Drainage-
10YR BFE.ppc
11/1/2022

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PondPack CONNECT Edition
[10.02.00.01]
Page 87 of 107

20147-Existing Conditions Regional Drainage-
10YR BFE.ppc
11/1/2022

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[10.02.00.01]
Page 88 of 107

Subsection: Runoff CN-Area
Label: Site to Meadowlake
Scenario: 2 yr 1 hr

Return Event: 2.00 years
Storm Event: 1 hr 2 yr

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
COMPOSITE AREA & WEIGHTED CN -->	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Runoff CN-Area
Label: Site Tributary to Basin
Scenario: 2 yr 1 hr

Return Event: 2.00 years
Storm Event: 1 hr 2 yr

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
COMPOSITE AREA & WEIGHTED CN -->	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)

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10YR BFE.ppc
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PondPack CONNECT Edition
[10.02.00.01]
Page 89 of 107

20147-Existing Conditions Regional Drainage-
10YR BFE.ppc
11/1/2022

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PondPack CONNECT Edition
[10.02.00.01]
Page 90 of 107

Subsection: Runoff CN-Area
Label: South of Deerfield
Scenario: 2 yr 1 hr

Return Event: 2.00 years
Storm Event: 1 hr 2 yr

Runoff Curve Number Data

Soil/Surface Description	CN	Area (acres)	C (%)	UC (%)	Adjusted CN
COMPOSITE AREA & WEIGHTED CN -->	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Elevation vs. Volume Curve
Label: CubeSmart Storage
Scenario: 2 yr 1 hr

Return Event: 2.00 years
Storm Event: 1 hr 2 yr

Elevation-Volume

Pond Elevation (ft)	Pond Volume (ac-ft)
642.45	0.000
642.50	0.000
643.00	0.069
644.00	0.206
645.00	0.347
645.50	0.416
646.00	0.493
647.00	0.646
648.00	0.826
649.00	0.894

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10YR BFE.ppc
11/1/2022

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PondPack CONNECT Edition
[10.02.00.01]
Page 91 of 107

20147-Existing Conditions Regional Drainage-
10YR BFE.ppc
11/1/2022

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Center
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PondPack CONNECT Edition
[10.02.00.01]
Page 92 of 107

Subsection: Elevation vs. Volume Curve
 Label: Existing Depressional Storage
 Scenario: 2 yr 1 hr

Return Event: 2.00 years
 Storm Event: 1 hr 2 yr

Elevation-Volume

Pond Elevation (ft)	Pond Volume (ac-ft)
637.55	0.000
638.99	0.000
639.00	0.001
640.00	0.027
641.00	0.120
642.00	0.329
643.00	0.916
644.00	2.472
645.00	5.076
645.30	5.079

Subsection: Elevation vs. Volume Curve
 Label: Existing Pond
 Scenario: 2 yr 1 hr

Return Event: 2.00 years
 Storm Event: 1 hr 2 yr

Elevation-Volume

Pond Elevation (ft)	Pond Volume (ac-ft)
637.34	0.000
638.55	0.000
638.00	0.000
639.00	0.805
640.00	1.653
641.00	2.548
642.00	3.498
643.00	4.536
644.00	5.864
645.00	7.589
645.30	8.196

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 10YR BFE.ppc
 11/1/2022

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 Watertown, CT 06795 USA +1-203-755-1666

PondPack CONNECT Edition
 [10.02.00.01]
 Page 53 of 107

20147-Existing Conditions Regional Drainage-
 10YR BFE.ppc
 11/1/2022

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 Center
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 Watertown, CT 06795 USA +1-203-755-1666

PondPack CONNECT Edition
 [10.02.00.01]
 Page 94 of 107

Subsection: Elevation vs. Volume Curve
 Label: OCS Pond
 Scenario: 2 yr 1 hr

Return Event: 2.00 years
 Storm Event: 1 hr 2 yr

Elevation-Volume

Pond Elevation (ft)	Pond Volume (ac-ft)
637.77	0.000
641.07	0.001
642.00	0.007
642.20	0.010
643.00	0.033
644.00	0.093
645.00	0.803
645.30	1.173

Subsection: Outlet Input Data
 Label: 24IN Outfall Sewer
 Scenario: 2 yr 1 hr

Return Event: 2.00 years
 Storm Event: 1 hr 2 yr

Requested Pond Water Surface Elevations

Minimum (Headwater)	637.34 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	645.30 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Culvert-Circular	24IN Sewer	Forward + Reverse	TW	637.34	645.30
Tailwater Settings	Tailwater			(N/A)	(N/A)

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 [10.02.00.01]
 Page 95 of 107

20147-Existing Conditions Regional Drainage-
 10YR BFE.ppc
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 Page 95 of 107

Subsection: Outlet Input Data
Label: 24IN Outfall Sewer
Scenario: 2 yr 1 hr

Return Event: 2.00 years
Storm Event: 1 hr 2 yr

Structure ID: 24IN Sewer	
Structure Type: Culvert-Circular	
Number of Barrels	1
Diameter	24.00 in
Length	724.00 ft
Length (Computed Barrel)	724.00 ft
Slope (Computed)	-0.001 ft/ft

Outlet Control Data	
Manning's n	0.013
Ke	0.200
Kb	0.012
Kr	0.000
Convergence Tolerance	0.00 ft

Inlet Control Data	
Equation Form	Form 1
K	0.0045
M	2.0000
C	0.0317
Y	0.6900
T1 ratio (HW/D)	1.096
T2 ratio (HW/D)	1.197
Slope Correction Factor	-0.500

Use unsubmerged inlet control 0 equation below T1 elevation.
Use submerged inlet control 0 equation above T2 elevation

In transition zone between unsubmerged and submerged inlet control, interpolate between flows at T1 & T2...

T1 Elevation	639.53 ft	T1 Flow	15.55 ft³/s
T2 Elevation	639.73 ft	T2 Flow	17.77 ft³/s

Subsection: Outlet Input Data
Label: CubeSmart OCS
Scenario: 2 yr 1 hr

Return Event: 2.00 years
Storm Event: 1 hr 2 yr

Requested Pond Water Surface Elevations	
Minimum (Headwater)	642.45 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	649.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Orifice-Circular	Orifice 1	Forward + Reverse	TW	642.45	649.00
Rectangular Weir	Weir	Forward + Reverse	TW	648.00	649.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

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10YR BFE.ppc
11/1/2022

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PondPack CONNECT Edition
[10.02.00.01]
Page 57 of 107

20147-Existing Conditions Regional Drainage-
10YR BFE.ppc
11/1/2022

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Center
27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

PondPack CONNECT Edition
[10.02.00.01]
Page 96 of 107

Subsection: Outlet Input Data
Label: CubeSmart OCS
Scenario: 2 yr 1 hr

Return Event: 2.00 years
Storm Event: 1 hr 2 yr

Structure ID: Orifice 1	
Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	642.45 ft
Orifice Diameter	3.00 in
Orifice Coefficient	0.600

Structure ID: Weir	
Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	648.00 ft
Weir Length	6.00 ft
Weir Coefficient	3.00 (ft^0.5)/s

Subsection: Outlet Input Data
Label: Deerfield Rd Culvert
Scenario: 2 yr 1 hr

Return Event: 2.00 years
Storm Event: 1 hr 2 yr

Requested Pond Water Surface Elevations	
Minimum (Headwater)	637.55 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	645.30 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Culvert-Circular	Culvert	Forward + Reverse	TW	637.55	645.30
Irregular Weir	Deerfield Road Weir	Forward + Reverse	TW	644.13	645.30
Tailwater Settings	Tailwater			(N/A)	(N/A)

20147-Existing Conditions Regional Drainage-
10YR BFE.ppc
11/1/2022

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PondPack CONNECT Edition
[10.02.00.01]
Page 99 of 107

20147-Existing Conditions Regional Drainage-
10YR BFE.ppc
11/1/2022

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Center
27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

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[10.02.00.01]
Page 100 of 107

Subsection: Outlet Input Data
Label: Deerfield Rd Culvert
Scenario: 2 yr 1 hr

Return Event: 2.00 years
Storm Event: 1 hr 2 yr

Structure ID: Culvert	
Structure Type: Culvert-Circular	
Number of Barrels	1
Diameter	42.00 in
Length	99.00 ft
Length (Computed Barrel)	99.00 ft
Slope (Computed)	-0.001 ft/ft
Outlet Control Data	
Manning's n	0.013
Ke	0.200
Kb	0.006
Kr	0.000
Convergence Tolerance	0.00 ft
Inlet Control Data	
Equation Form	Form 1
K	0.0045
M	2.0000
C	0.0317
Y	0.6900
T1 ratio (HW/D)	1.096
T2 ratio (HW/D)	1.197
Slope Correction Factor	-0.500

Use unsubmerged inlet control 0 equation below T1 elevation.
Use submerged inlet control 0 equation above T2 elevation

In transition zone between unsubmerged and submerged inlet control, interpolate between flows at T1 & T2...

T1 Elevation	641.38 ft	T1 Flow	63.00 ft³/s
T2 Elevation	641.74 ft	T2 Flow	72.00 ft³/s

Subsection: Outlet Input Data
Label: Deerfield Rd Culvert
Scenario: 2 yr 1 hr

Return Event: 2.00 years
Storm Event: 1 hr 2 yr

Structure ID: Deerfield Road Weir

Structure Type: Irregular Weir

Station (ft)	Elevation (ft)
0.00	1.17
0.01	0.06
14.32	0.05
65.86	0.02
115.17	0.00
165.83	0.25
215.33	0.53
272.94	0.87
315.00	1.17

Lowest Elevation 644.13 ft
Weir Coefficient 3.00 (ft^0.5)/s

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PondPack CONNECT Edition [10.02.00.01]
Page 101 of 107

20147-Existing Conditions Regional Drainage-10YR BFE.ppc
11/1/2022

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27 Siemon Company Drive Suite 200 W Watertown, CT 06795 USA +1-203-755-1666

PondPack CONNECT Edition [10.02.00.01]
Page 102 of 107

Subsection: Outlet Input Data
Label: Existing OCS
Scenario: 2 yr 1 hr

Return Event: 2.00 years
Storm Event: 1 hr 2 yr

Requested Pond Water Surface Elevations	
Minimum (Headwater)	637.77 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	645.30 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Orifice-Circular	Ex Orifice	Forward	TW	638.08	645.30
Irregular Weir	Irregular Weir	Forward	TW	642.23	645.30
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: Existing OCS
Scenario: 2 yr 1 hr

Return Event: 2.00 years
Storm Event: 1 hr 2 yr

Structure ID: Ex Orifice
Structure Type: Orifice-Circular

Number of Openings	1
Elevation	638.08 ft
Orifice Diameter	0.47 in
Orifice Coefficient	0.610

Structure ID: Irregular Weir

Structure Type: Irregular Weir

Station (ft)	Elevation (ft)
0.00	3.07
15.05	1.37
36.45	0.00
73.65	0.12
95.25	0.29
103.15	1.97
108.75	3.07

Lowest Elevation 642.23 ft
Weir Coefficient 3.00 (ft^0.5)/s

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Page 103 of 107

20147-Existing Conditions Regional Drainage-10YR BFE.ppc
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PondPack CONNECT Edition [10.02.00.01]
Page 104 of 107

Index

- 2
24IN Outfall Sewer (Outlet Input Data, 2.00 years (2 yr 1 hr))...96, 97
B
B75 - 100 Year Critical Storm (Time-Depth Curve, 100.00 years (100 yr 1 hr))...35
B75 - 100 Year Critical Storm (Time-Depth Curve, 100.00 years (100 yr 10 min))...37
B75 - 100 Year Critical Storm (Time-Depth Curve, 100.00 years (100 yr 12 hr))...39
B75 - 100 Year Critical Storm (Time-Depth Curve, 100.00 years (100 yr 120 hr))...41
B75 - 100 Year Critical Storm (Time-Depth Curve, 100.00 years (100 yr 15 min))...43
B75 - 100 Year Critical Storm (Time-Depth Curve, 100.00 years (100 yr 18 hr))...45
B75 - 100 Year Critical Storm (Time-Depth Curve, 100.00 years (100 yr 2 hr))...47
B75 - 100 Year Critical Storm (Time-Depth Curve, 100.00 years (100 yr 24 hr))...49
B75 - 100 Year Critical Storm (Time-Depth Curve, 100.00 years (100 yr 240 hr))...51
B75 - 100 Year Critical Storm (Time-Depth Curve, 100.00 years (100 yr 3 hr))...53
B75 - 100 Year Critical Storm (Time-Depth Curve, 100.00 years (100 yr 30 min))...56
B75 - 100 Year Critical Storm (Time-Depth Curve, 100.00 years (100 yr 48 hr))...58
B75 - 100 Year Critical Storm (Time-Depth Curve, 100.00 years (100 yr 5 min))...60
B75 - 100 Year Critical Storm (Time-Depth Curve, 100.00 years (100 yr 6 hr))...62
B75 - 100 Year Critical Storm (Time-Depth Curve, 100.00 years (100 yr 72 hr))...63
B75 - 2 Year Critical Storm (Time-Depth Curve, 2.00 years (2 yr 1 hr))...36
B75 - 2 Year Critical Storm (Time-Depth Curve, 2.00 years (2 yr 10 min))...38
B75 - 2 Year Critical Storm (Time-Depth Curve, 2.00 years (2 yr 12 hr))...40
B75 - 2 Year Critical Storm (Time-Depth Curve, 2.00 years (2 yr 120 hr))...42
B75 - 2 Year Critical Storm (Time-Depth Curve, 2.00 years (2 yr 15 min))...44
B75 - 2 Year Critical Storm (Time-Depth Curve, 2.00 years (2 yr 18 hr))...46
B75 - 2 Year Critical Storm (Time-Depth Curve, 2.00 years (2 yr 2 hr))...48
B75 - 2 Year Critical Storm (Time-Depth Curve, 2.00 years (2 yr 24 hr))...50
B75 - 2 Year Critical Storm (Time-Depth Curve, 2.00 years (2 yr 240 hr))...52
B75 - 2 Year Critical Storm (Time-Depth Curve, 2.00 years (2 yr 3 hr))...54
B75 - 2 Year Critical Storm (Time-Depth Curve, 2.00 years (2 yr 30 min))...57
B75 - 2 Year Critical Storm (Time-Depth Curve, 2.00 years (2 yr 48 hr))...59
B75 - 2 Year Critical Storm (Time-Depth Curve, 2.00 years (2 yr 5 min))...61

20147-Existing Conditions Regional Drainage-
10YR BFE.ppc
11/1/2022

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Center
27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

PondPack CONNECT Edition
[10.02.00.01]
Page 105 of 107

B75 - 2 Year Critical Storm (Time-Depth Curve, 2.00 years (2 yr 6 hr))...55
B75 - 2 Year Critical Storm (Time-Depth Curve, 2.00 years (2 yr 72 hr))...64

C
CubeSmart Bypass (South) (Runoff CN-Area, 2.00 years (2 yr 1 hr))...83
CubeSmart Bypass (South) (Time of Concentration Calculations, 2.00 years (2 yr 1 hr))...65, 66
CubeSmart OCS (Outlet Input Data, 2.00 years (2 yr 1 hr))...98, 99
CubeSmart Storage (Elevation vs. Volume Curve, 2.00 years (2 yr 1 hr))...92
CubeSmart Tributary (Runoff CN-Area, 2.00 years (2 yr 1 hr))...84
CubeSmart Tributary (Time of Concentration Calculations, 2.00 years (2 yr 1 hr))...67, 68

D
Deerfield Rd Culvert (Outlet Input Data, 2.00 years (2 yr 1 hr))...100, 101, 102

E
Existing Depressional Storage (Elevation vs. Volume Curve, 2.00 years (2 yr 1 hr))...93
Existing OCS (Outlet Input Data, 2.00 years (2 yr 1 hr))...103, 104
Existing Pond (Elevation vs. Volume Curve, 2.00 years (2 yr 1 hr))...94

M
Master Network Summary...2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18,
19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34

N
North of Deerfield (Runoff CN-Area, 2.00 years (2 yr 1 hr))...85
North of Deerfield (Time of Concentration Calculations, 2.00 years (2 yr 1 hr))...69,

70
O
OCS Pond (Elevation vs. Volume Curve, 2.00 years (2 yr 1 hr))...95

S
Site to 3700 Deerfield (N) (Runoff CN-Area, 2.00 years (2 yr 1 hr))...86
Site to 3700 Deerfield (N) (Time of Concentration Calculations, 2.00 years (2 yr 1 hr))...71, 72
Site to 3700 Deerfield (S) (Runoff CN-Area, 2.00 years (2 yr 1 hr))...87
Site to 3700 Deerfield (S) (Time of Concentration Calculations, 2.00 years (2 yr 1 hr))...73, 74
Site to Deerfield Road (E) (Runoff CN-Area, 2.00 years (2 yr 1 hr))...88
Site to Deerfield Road (E) (Time of Concentration Calculations, 2.00 years (2 yr 1 hr))...75, 76
Site to Meadowlake (Runoff CN-Area, 2.00 years (2 yr 1 hr))...89
Site to Meadowlake (Time of Concentration Calculations, 2.00 years (2 yr 1 hr))...77, 78

20147-Existing Conditions Regional Drainage-
10YR BFE.ppc
11/1/2022

Bentley Systems, Inc. Haestad Methods Solution
Center
27 Siemon Company Drive Suite 200 W
Watertown, CT 06795 USA +1-203-755-1666

PondPack CONNECT Edition
[10.02.00.01]
Page 106 of 107

Site Tributary to Basin (Runoff CN-Area, 2.00 years (2 yr 1 hr))...90
Site Tributary to Basin (Time of Concentration Calculations, 2.00 years (2 yr 1 hr))...79, 80
South of Deerfield (Runoff CN-Area, 2.00 years (2 yr 1 hr))...91

South of Deerfield (Time of Concentration Calculations, 2.00 years (2 yr 1 hr))...81,
82

100-YEAR CRITICAL DURATION ANALYSIS - EXISTING CONDITIONS 10YR TAILWATER

HAEGER ENGINEERING, LLC

consulting engineers and land surveyors

Project: Lexington Riverwoods
Location: Riverwoods, IL
Project #: 20-147

Prepared: PAC
Reviewed: TAS
Date: 02/01/22
Revised: 11/01/22

Flow Analysis:

Flow	Pond Pack Results	5min Storm Event	10min Storm Event	15min Storm Event	30min Storm Event	1hr Storm Event	2hr Storm Event	3hr Storm Event	6hr Storm Event	12hr Storm Event	18hr Storm Event	24hr Storm Event	48hr Storm Event	72hr Storm Event	5d Storm Event	10d Storm Event	Critical Event
Q-to Des Plaines River	Q Peak (cfs)	5.66	5.66	5.87	3.41	4.56	6.26	7.06	7.64	8.84	9.64	9.41	8.53	8.56	8.81	8.78	9.64
Site Tributary to Basin	Q Peak (cfs)	2.54	13.80	20.54	26.32	27.12	22.21	17.88	11.78	7.77	6.11	4.94	3.41	2.44	1.60	0.97	27.12
North of Deerfield	Q Peak (cfs)	16.08	34.56	42.35	47.80	42.65	31.14	24.22	15.02	8.23	5.92	4.73	3.15	2.24	1.45	0.86	47.80
South of Deerfield	Q Peak (cfs)	9.75	26.53	36.59	41.99	39.72	30.64	24.14	15.42	9.14	6.77	5.43	3.66	2.60	1.70	1.02	41.99
CubeSmart Tributary	Q Peak (cfs)	5.68	12.20	14.95	16.87	15.05	10.99	8.55	5.30	2.91	2.09	1.67	1.11	0.79	0.51	0.31	16.87
CubeSmart Bypass (South)	Q Peak (cfs)	0.61	2.48	3.58	4.41	4.41	3.51	2.81	1.82	1.17	0.90	0.73	0.50	0.35	0.23	0.14	4.41
Q-to Meadowlake	Q Peak (cfs)	0.00	0.05	0.16	0.28	0.32	0.33	0.29	0.21	0.16	0.14	0.12	0.09	0.06	0.04	0.03	0.33
Q-to 3700 Deerfield	Q Peak (cfs)	0.00	0.15	0.47	0.83	0.97	0.98	0.85	0.62	0.47	0.42	0.35	0.26	0.19	0.13	0.08	0.98
Site to 3700 Deerfield (N)	Q Peak (cfs)	0.00	0.10	0.31	0.55	0.64	0.65	0.57	0.41	0.31	0.28	0.23	0.17	0.12	0.08	0.05	0.65
Site to 3700 Deerfield (S)	Q Peak (cfs)	0.00	0.05	0.16	0.28	0.33	0.33	0.29	0.21	0.16	0.14	0.12	0.09	0.06	0.04	0.03	0.33
Q-to Deerfield Road	Q Peak (cfs)	0.00	0.29	0.70	1.08	1.26	1.21	1.04	0.74	0.54	0.48	0.39	0.28	0.21	0.14	0.09	1.26

Basin Analysis:

Basin	Pond Pack Results	5min Storm Event	10min Storm Event	15min Storm Event	30min Storm Event	1hr Storm Event	2hr Storm Event	3hr Storm Event	6hr Storm Event	12hr Storm Event	18hr Storm Event	24hr Storm Event	48hr Storm Event	72hr Storm Event	5d Storm Event	10d Storm Event	Critical Event
Existing Pond	Storage (acft)	2.322	2.322	3.253	3.321	3.890	4.617	4.860	5.053	5.495	5.818	5.725	4.956	4.632	4.313	3.908	5.818
	Elevation (ft)	640.75	640.75	641.74	641.81	642.38	643.06	643.24	643.39	643.72	643.97	643.89	643.32	643.07	642.78	642.40	643.97
	Discharge (cfs)	9.70	9.70	12.20	12.37	12.82	13.17	13.14	13.23	13.12	13.57	13.46	12.65	12.92	12.65	13.57	
OCS Pond	Storage (acft)	0.016	0.016	0.017	0.016	0.016	0.017	0.017	0.017	0.017	0.018	0.018	0.018	0.018	0.018	0.018	0.018
	Elevation (ft)	642.42	642.42	642.43	642.39	642.41	642.43	642.44	642.45	642.47	642.48	642.47	642.46	642.46	642.47	642.47	642.48
	Discharge (cfs)	5.66	5.66	5.87	3.41	4.56	6.26	7.06	7.64	8.84	9.64	9.41	8.53	8.56	8.81	8.78	9.64
Existing Depressional Storage	Storage (acft)	0.096	0.096	0.274	0.288	0.551	1.011	1.300	1.545	2.069	2.434	2.340	1.428	1.029	0.792	0.554	2.434
	Elevation (ft)	640.74	640.74	641.73	641.81	642.38	643.06	643.25	643.40	643.74	643.98	643.91	643.33	643.07	642.79	642.38	643.98
	Discharge (cfs)	8.58	24.04	31.22	36.65	36.33	28.67	23.34	14.26	7.16	5.98	6.55	6.60	7.68	7.75	7.14	36.65
CubeSmart Storage	Storage (acft)	0.080	0.225	0.336	0.529	0.723	0.841	0.844	0.841	0.845	0.844	0.841	0.835	0.828	0.615	0.364	0.845
	Elevation (ft)	643.08	644.12	644.92	646.24	647.43	648.22	648.27	648.22	648.28	648.26	648.22	648.13	648.03	646.80	645.12	648.28
	Discharge (cfs)	0.17	0.29	0.36	0.45	0.52	2.46	3.04	2.42	3.27	2.93	2.37	1.42	0.67	0.48	0.38	3.27

2-YEAR CRITICAL DURATION ANALYSIS - EXISTING CONDITIONS 10YR TAILWATER

HAEGER ENGINEERING, LLC

consulting engineers and land surveyors

Project: Lexington Riverwoods
Location: Riverwoods, IL
Project #: 20-147

Prepared: PAC
Reviewed: TAS
Date: 02/01/22
Revised: 11/01/22

Flow Analysis:

Flow	Pond Pack Results	5min Storm Event	10min Storm Event	15min Storm Event	30min Storm Event	1hr Storm Event	2hr Storm Event	3hr Storm Event	6hr Storm Event	12hr Storm Event	18hr Storm Event	24hr Storm Event	48hr Storm Event	72hr Storm Event	5d Storm Event	10d Storm Event	Critical Event
Q-to Des Plaines River	Q Peak (cfs)	0.00	5.66	5.66	5.66	5.66	5.86	5.86	5.86	6.03	6.06	6.03	8.79	8.46	7.68	7.07	8.79
Site Tributary to Basin	Q Peak (cfs)	0.00	0.16	1.03	2.41	2.77	3.10	2.80	2.80	1.71	1.58	1.31	1.00	0.76	0.53	0.37	3.10
North of Deerfield	Q Peak (cfs)	0.00	6.50	9.20	11.27	10.99	8.67	6.90	6.90	2.80	2.13	1.71	1.18	0.86	0.58	0.37	11.27
South of Deerfield	Q Peak (cfs)	0.00	2.92	4.89	6.85	7.54	6.70	5.55	5.55	2.62	2.16	1.77	1.27	0.94	0.64	0.42	7.54
CubeSmart Tributary	Q Peak (cfs)	0.00	2.29	3.25	3.98	3.88	3.06	2.44	2.44	0.99	0.75	0.60	0.42	0.30	0.21	0.13	3.98
CubeSmart Bypass (South)	Q Peak (cfs)	0.00	0.09	0.27	0.49	0.57	0.58	0.50	0.50	0.28	0.25	0.21	0.15	0.12	0.08	0.05	0.58
Q-to Meadowlake	Q Peak (cfs)	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.02
Q-to 3700 Deerfield	Q Peak (cfs)	0.00	0.00	0.00	0.00	0.02	0.04	0.04	0.04	0.06	0.07	0.06	0.05	0.04	0.03	0.02	0.07
Site to 3700 Deerfield (N)	Q Peak (cfs)	0.00	0.00	0.00	0.00	0.01	0.03	0.03	0.03	0.04	0.04	0.04	0.03	0.03	0.02	0.02	0.04
Site to 3700 Deerfield (S)	Q Peak (cfs)	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.02
Q-to Deerfield Road	Q Peak (cfs)	0.00	0.00	0.00	0.01	0.04	0.07	0.07	0.07	0.08	0.08	0.07	0.06	0.05	0.04	0.03	0.08

Basin Analysis:

Basin	Pond Pack Results	5min Storm Event	10min Storm Event	15min Storm Event	30min Storm Event	1hr Storm Event	2hr Storm Event	3hr Storm Event	6hr Storm Event	12hr Storm Event	18hr Storm Event	24hr Storm Event	48hr Storm Event	72hr Storm Event	5d Storm Event	10d Storm Event	Critical Event
Existing Pond	Storage (acft)	0.000	2.322	2.322	2.322	2.322	2.372	2.372	2.372	3.524	3.679	3.751	3.522	2.444	2.223	2.056	3.751
	Elevation (ft)	637.77	640.75	640.75	640.75	640.75	640.80	640.80	640.80	642.03	642.17	642.24	642.02	640.88	640.64	640.45	642.24
	Discharge (cfs)	0.00	9.70	9.70	9.70	9.70	9.85	9.85	9.85	12.72	13.06	13.20	11.68	9.34	8.55	7.96	13.20
OCS Pond	Storage (acft)	0.000	0.016	0.016	0.016	0.016	0.017	0.017	0.017	0.017	0.017	0.017	0.018	0.018	0.017	0.017	0.018
	Elevation (ft)	637.77	642.42	642.42	642.42	642.42	642.43	642.43	642.43	642.43	642.43	642.43	642.47	642.46	642.45	642.44	642.47
	Discharge (cfs)	0.00	5.66	5.66	5.66	5.66	5.86	5.86	5.86	6.03	6.06	6.03	8.79	8.46	7.68	7.07	8.79
Existing Depressional Storage	Storage (acft)	0.000	0.096	0.096	0.096	0.096	0.101	0.101	0.101	0.338	0.418	0.463	0.338	0.108	0.086	0.068	0.463
	Elevation (ft)	637.77	640.74	640.74	640.74	640.74	640.79	640.80	640.80	642.02	642.15	642.23	642.02	640.88	640.63	640.44	642.23
	Discharge (cfs)	0.00	2.68	4.88	6.95	7.60	6.82	5.69	5.69	3.57	6.37	6.54	3.58	2.81	2.00	2.12	7.60
CubeSmart Storage	Storage (acft)	0.000	0.035	0.061	0.115	0.170	0.227	0.250	0.250	0.299	0.316	0.304	0.243	0.200	0.142	0.084	0.316
	Elevation (ft)	642.45	642.75	642.94	643.33	643.72	644.14	644.30	644.30	644.65	644.78	644.69	644.25	643.94	643.53	643.11	644.78
	Discharge (cfs)	0.00	0.10	0.14	0.21	0.25	0.30	0.31	0.31	0.34	0.35	0.34	0.31	0.28	0.23	0.17	0.35



Reference Documents

MEMORANDUM

To: Lexington Homes
John Agenlian, Vice President Operation
Nate Wynsma, Vice President

From: Todd A. Shaffer, P.E., CFM, S.I.T.

Date: October 31, 2022

RE: Riverwoods Reserve, Lexington Homes, Riverwoods, Illinois ("Subject Property")
Review of Deerfield Road Culvert, Flap Gate Structure in NE Corner of Site & Normal Water Elevation
Haeger File No.: 20-147

Haeger Engineering LLC (Haeger) has performed some additional field investigations and reviewed additional documents related to the following items:

1. Deerfield Road Culvert
2. Flap Gate Structure in Northeast Corner of Site
3. Normal Water Elevation

Below is a summary of our findings:

DEERFIELD ROAD CULVERT:

On October 27, 2022, Haeger was at the Subject Property and reviewed the upstream and downstream ends of the culvert running under Deerfield Road. Below is a summary of my findings:

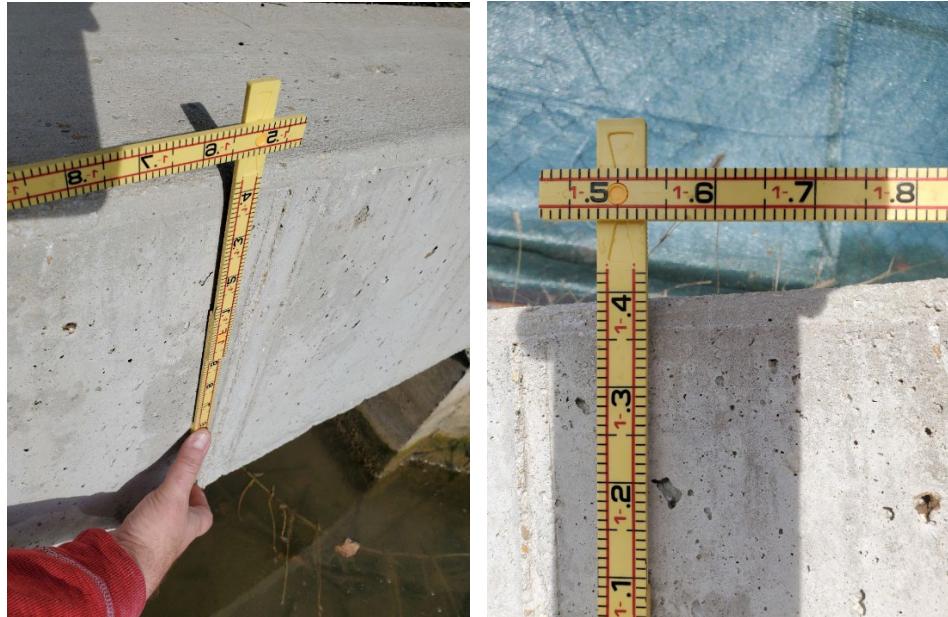
- Upstream End of Culvert:

- Width = 4.0'

Direct Measure with 6' Rhino Engineer's Folding Ruler = 4.0' (See Photos)

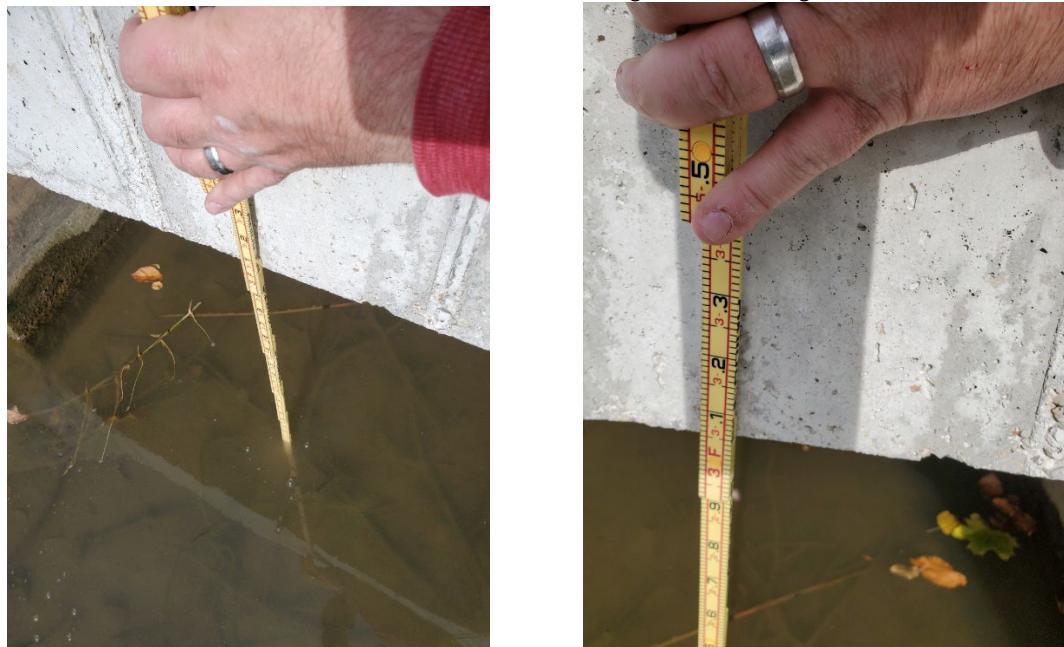


- Height = 3.06'
 - T/Headwall = 642.00
 - Measurement from T/Headwall to Inside Top of Culvert = 1.39' (640.61')



- Invert of Box Culvert from Survey = 637.55'
- Height = 640.61' – 637.55' = 3.06'

Additional Check with Direct Measure with 6' Rhino Engineer's Folding Ruler:



- Downstream End of Culvert:

The downstream end of the culvert was difficult to measure due to steep slope of pond and vegetation. In addition, the culvert was corrugated metal. Haeger was able to direct measure the height (See Photo) and width (No Photo)



- Height = +/-36" (Direct Measure)



- Width = +/-56" (Direct Measure) – No Photo

Deerfield Road Culvert Summary:

- The upstream end of the culvert is a 3' x 4' concrete box culvert (12 SF) with an invert of 637.55'
- The downstream end of the culvert is +/-56" x +/-36" CMP having an invert of 637.60'. The dimensions of a 42" Equivalent Round Size pipe for Elliptical per IDOT Standard Specifications is 53" x 34". A 42" Equivalent Round Size pipe has an area of 9.6 SF < 12 SF, so the downstream end of the roadway culvert is controlling for flow calculations.
- Haeger will update the topographic survey & existing conditions drainage study to reflect the above information.

FLAP GATE STRUCTURE IN NORTHEAST CORNER OF SITE:

On October 17, 2022, Haeger was at the Subject Property with representatives of PirTano Construction. PirTano Construction pumped the drainage structure in the northeast corner of the site that discharged to a flared end section near the east property line to document the submerged conditions at the structure. The flap gate functions and is not water tight with water discharging between the invert of the restrictor and downstream receiving 24" diameter sewer/FES and areas DS of the FES. Below is a summary of the findings of Haeger:

- Elevation of Flat Top at Point of Measurement obtained via level = 640.93'
- Invert of Inside Bottom of Flap Gate = $640.93' - 3.19' = 637.74'$



- Restrictor Diameter = 0.47" (Direct Measurement)



- Invert of 0.47" Diameter Restrictor = $640.93' - 2.85' = 638.08'$



- Top of Flap Gate = $640.93' - 1.19' = 639.74'$



- Top of Restrictor Hole = $640.93' - 2.37' = 638.56'$

Note:

Diameter of Restrictor based on height = $638.56' - 638.08' = 0.48"$



Flap Gate Summary:

- Invert of Inside Bottom of Flap Gate = $637.74'$
- Restrictor Diameter = $0.47"$
- Invert of $0.47"$ Diameter Restrictor = $638.08'$

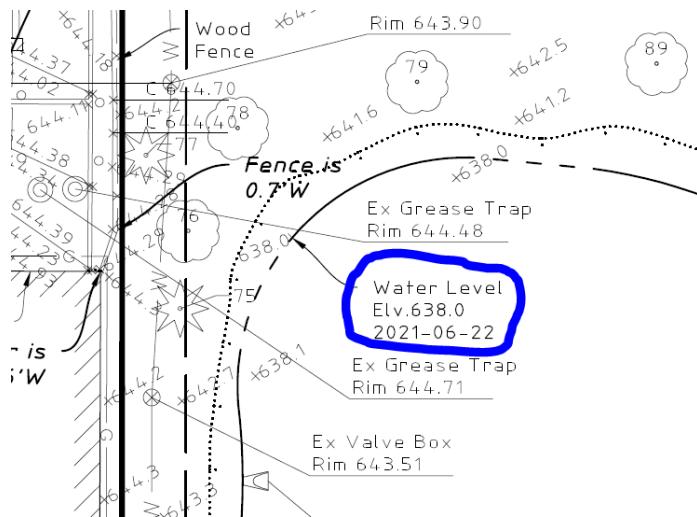
Note:

Although the invert of the $0.47'$ diameter restrictor in the flap gate has an invert elevation of $638.08'$, the perimeter of the flap gate allows a low flow rate to discharge to the receiving water below $638.08'$.

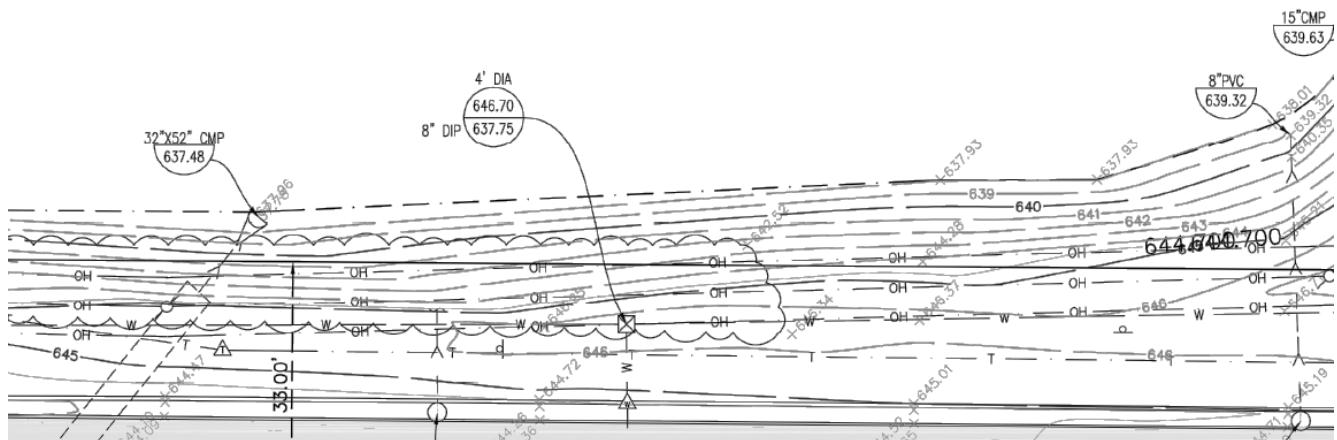


NORMAL WATER ELEVATION (NWE) OF EXISTING POND:

- The water surface elevation of the pond in the southwest quad of the site was measured on 06/22/2021 as 638.0'



- The edge of water noted on the "ALTA Survey Off-Site" prepared by SIGHT ON SOLUTIONS, INC. (Plat Date June 21, 2021) from the Thorntons at Riverwoods plan set (Sheet V1.1) varies from 637.93' to 638.01'.



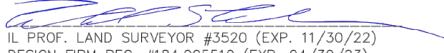
NOTES

- PREPARED FOR THORNTONS, LLC. FOR ROADWAY DESIGN PURPOSES.
- RIGHT-OF-WAY LINES OF DEERFIELD ROAD BASED ON BEST AVAILABLE RECORDS.
- VERIFY DIMENSIONS, LEGAL DESCRIPTION AND CORNERS AND NOTIFY SURVEYOR OF ANY DISCREPANCIES PRIOR TO ANY CONSTRUCTION ON THE PROPERTY. DIMENSIONS SHALL NOT BE ASSUMED BY SCALE.
- UTILITIES, LANDSCAPE FEATURES, AND IMPROVEMENTS COVERED BY EARTH, LANDSCAPING, OTHER MATERIALS OR OBSTRUCTIONS, IF ANY, ARE NOT SHOWN HEREON.

SURVEYOR

WE, SIGHT ON SOLUTIONS, INC., DO HEREBY DECLARE THAT WE HAVE SURVEYED THE PROPERTY SHOWN HEREON.

PLAT DATE: JUNE 21, 2021


IL PROF. LAND SURVEYOR #3520 (EXP. 11/30/22)
DESIGN FIRM REG. #184.005510 (EXP. 04/30/23)
FIELD WORK COMPLETED 06/09/2021





- The water surface elevation noted in an email from Matt Huffman, P.E. of CBBEL dated 09/16/2022 (attached) that included a memorandum dated August 30, 2022 prepared by CBBEL states:

"We wanted to follow-up with you and your team pertaining the Fed Life property. We have prepared a brief memo summarizing the proposed drainage volumes to be placed on the Fed Life property associated with the Lake County Deerfield Road reconstruction project. **We are in agreement with the NWL of 638.00**; 10-year = 642.25; 100-year = 645.00. Given the change from NWL of 639.00 to 638.00, there is an increase in fill between the NWL and 10-year elevations, which translates to an increase in required compensatory storage. Based on the current design, as documented in the attached memo, a total of 3.13 AC-FT of volume is required for the Deerfield Road recon project. As you are aware, we are still in design so there is potential for minor changes still, and would like to request you to provide 3.25 AC-FT in your design for this project."

BFE Note:

The 10-YR and 100-YR FEMA BFE at Deerfield Road vs NE Corner of the Site is summarized in Table 1-2 below that illustrates a sloping BFE from North to South as the Des Plaines River flows from north to south:

Table 1-2: Floodplain Elevation

Location	10-Year Flood Elevation	100-Year Flood Elevation
North Property Line	642.35	645.30
South Property Line / Deerfield ROW	642.25	645.00

Per the Village Preliminary Review Memo dated September 30, 2022 prepared by Carissa A. Smith, P.E. of Gewalt Hamilton Associates, Inc. (GHA) it states:

"Based on the FEMA FIRM map, the Des Plaines River floodplain within the project site is a result of backwater conditions from the north end of the site. Thus, the 10-year FE and the BFE of the whole project site and the Deerfield ROW should have the same flood elevations as the northern portion of the site. The 10-year FE and BFE for the FedLife and Deerfield Road projects shall use the higher elevations of 642.35 and 645.30, respectively. Compensatory storage calculations shall be updated accordingly."

Note:

Subject to the approval of the Village of Riverwoods and Lake County, the BFE slopes from North to South. Haeger is in agreement that the compensatory storage calculations for the Subject Property and Deerfield Road Project should be:

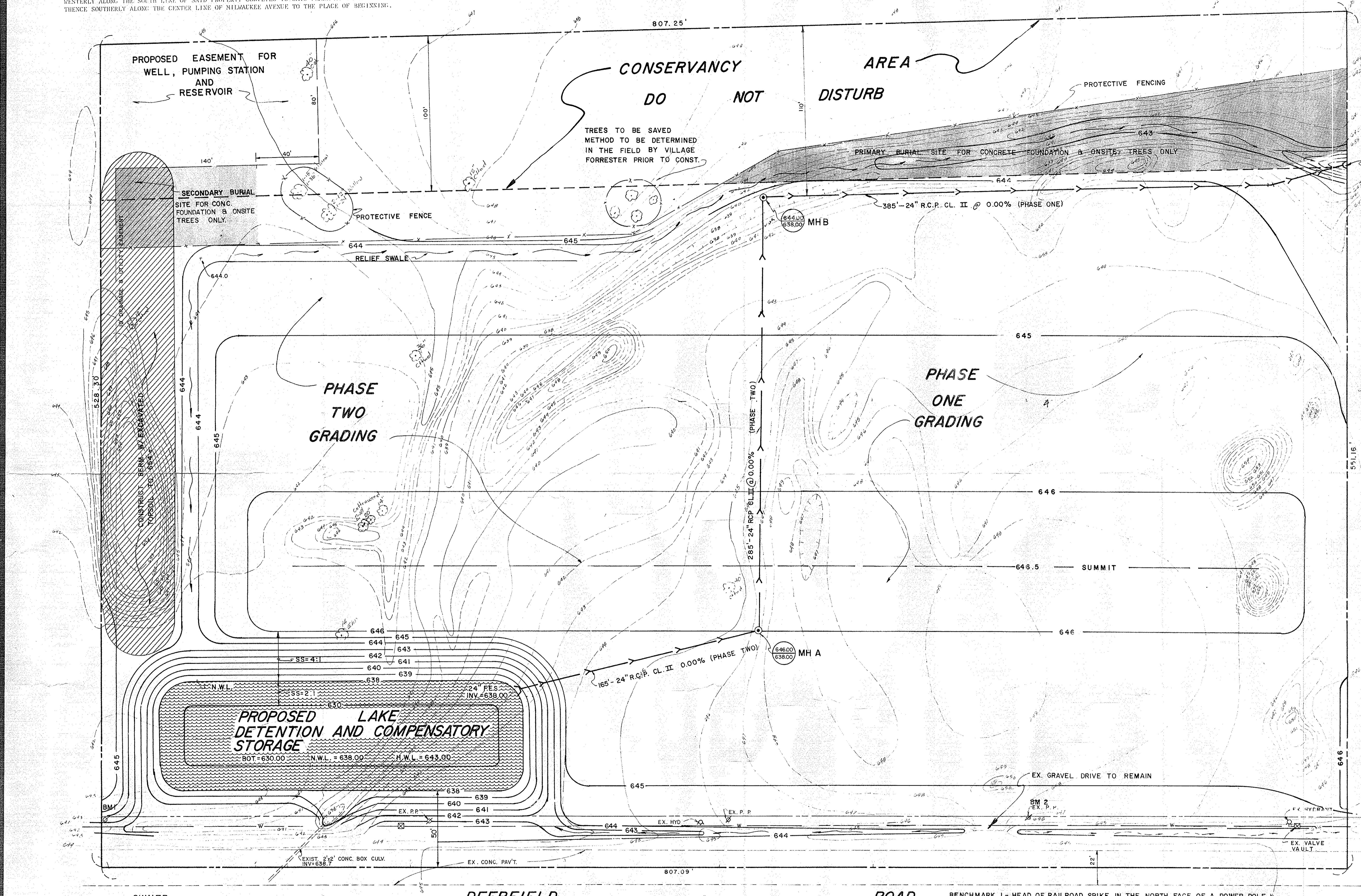
- Subject Property BFE:
Compensatory storage should either be based on a sloping BFE from north to south or a constant BFE based on the more conservative BFE (i.e. no-sloped constant elevation) using the elevations noted in the GHA Memo.
- Deerfield Road Project BFE:
Compensatory storage should be based on the BFE at Deerfield Road

Summary of Normal Water Elevation (NWE) of Existing Pond in SW Quad:

Based on survey work from Haeger, Sight on Solutions, Inc. (Surveyor for Thorntons), and CBBEL, the Normal Water Elevation of the existing pond in the SW quad of the Subject Property is 638.0'.

LEGAL DESCRIPTION

THE WEST 807.09 FEET OF THE EAST 1453.50 FEET OF THAT PART OF THE SOUTH HALF OF SECTION 26, TOWNSHIP 53 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN LAKE COUNTY, ILLINOIS, DESCRIBED AS FOLLOWS: COMMENCING AT THE INTERSECTION OF THE CENTER LINE OF MILWAUKEE AVENUE WITH THE CENTER LINE OF DEERFIELD ROAD; THENCE EAST ALONG THE CENTER LINE OF DEERFIELD ROAD TO THE WEST LINE OF PROPERTY CONVEYED TO FREDERICK A. PRESTON BY WARRANTY DEED RECORDED AS DOCUMENT NO. 228057; THENCE NORTH ALONG SAID WEST LINE TO THE SOUTHEAST CORNER OF PREMISES CONVEYED TO FRANK A. O'DONNELL BY WARRANTY DEED RECORDED AS DOCUMENT NO. 342582; THENCE WESTERLY ALONG THE SOUTH LINE OF SAID PROPERTY CONVEYED TO SAID FRANK A. O'DONNELL TO THE CENTER LINE OF MILWAUKEE AVENUE; THENCE SOUTHERLY ALONG THE CENTER LINE OF MILWAUKEE AVENUE TO THE PLACE OF BEGINNING.



0 25 50 100

24" FES
INV=638.00 SITE DEVELOPMENT PLAN NOTES

- In order to prevent Soil Erosion all areas disturbed during construction shall be seeded, sodded, or planted in some approved type of ground cover within thirty days after grading is completed (weather permitting).
- Topography was prepared by Blackledge & Associates.
- Prior to commencement of any work on this site the protective fencing shall be installed.
- No construction equipment shall be operated or construction materials or excavated material stored within the conservancy area.
- This permit does not cover any building construction on this site. A separate grading plan and landscaping plan shall be provided prior to the issuance of a building permit. Site shall be reforested as per Village Forester.
- A permit is required from the State of Illinois Department of Transportation Div. of Highways prior to any work in the Deerfield Road Right of Way and from the Div. of Waterways prior to working on this site.
- Upon completion of burial of concrete foundation and trees, burial sites shall receive 12" minimum clay cover.

CERTIFICATES

- Federal Life Insurance Co., owners of the property shown on this drawing in Riverwoods, Illinois, do hereby certify that I am familiar with the plan and certify that all work shall be done in accordance with the said plan.

NAME DATE

- Approved:

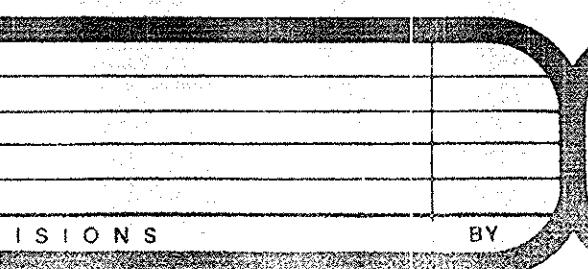
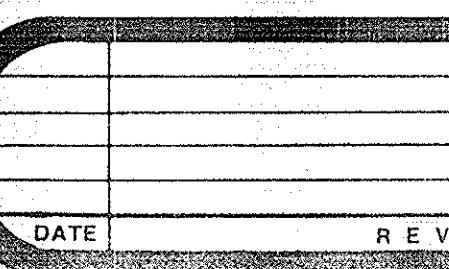
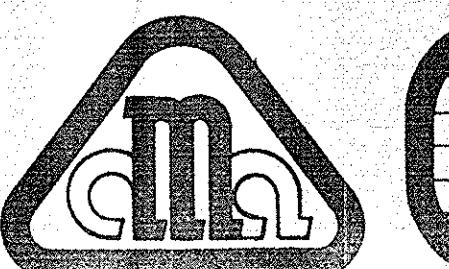
DONALD E. MANHARD-VILLE, ENGR. DATE

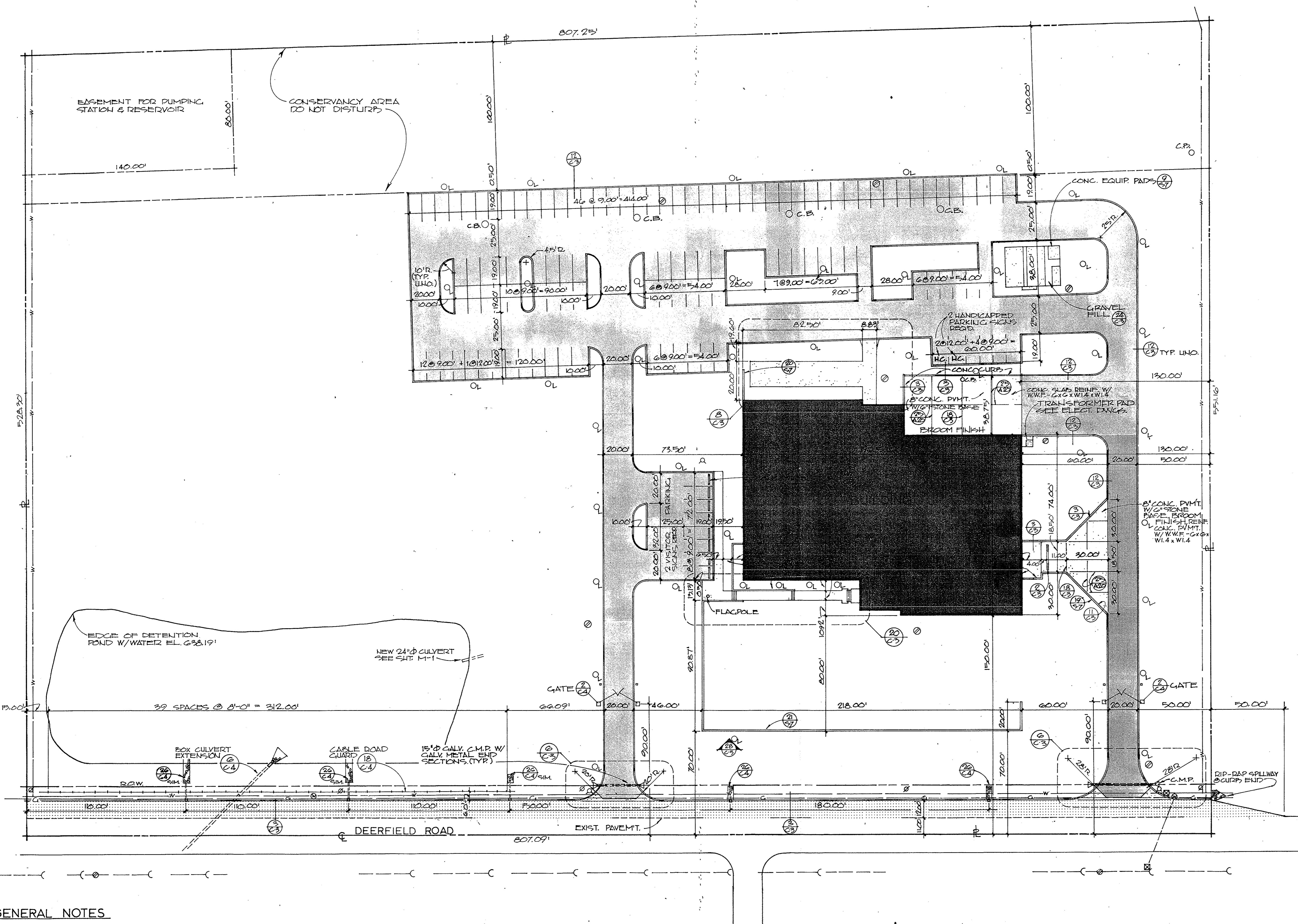
- Approved:

CHARLES STEWART-VILLE, FOREST. DATE

- W.L. Mielke have prepared this Site Development Plan and hereby attest to its accuracy.

W.L. Mielke
WATERMASTER
DATE





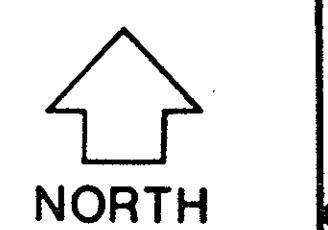
1"=30' 4 SITE PLAN

0 10' 20' 40'
SCALE 1/16=1'-0"0 5' 10' 20'
1/8=1'-0"0 2' 4' 8' 12'
1/4=1'-0"0 1' 2' 4' 6'
1/2=1'-0"0 1' 2' 4' 3'
3/4=1'-0"0 1' 2' 3'
1=1'-0"0 1' 2' 3'
1 1/2=1'-0"IF THIS SHEET IS NOT 30"X42" IT IS A
REDUCED PRINT. SCALE ACCORDINGLYFOR ARCHITECTURAL REVIEW
DATE ISSUED: OCT 27 1980C-2
OF SHEETS

4	3	
5	2	
6	1	
7	2	
8	1	

Globe Engineering Company
222 N Dearborn Street
Chicago, Illinois 60601
(312) 431-6800

DESIGNED:
DRAWN:
CHECKED:
APPROVED:
J. J. Jackson



Federal Life Insurance Company (Mutual)
100 West Lake Avenue • Glenview, Illinois 60025

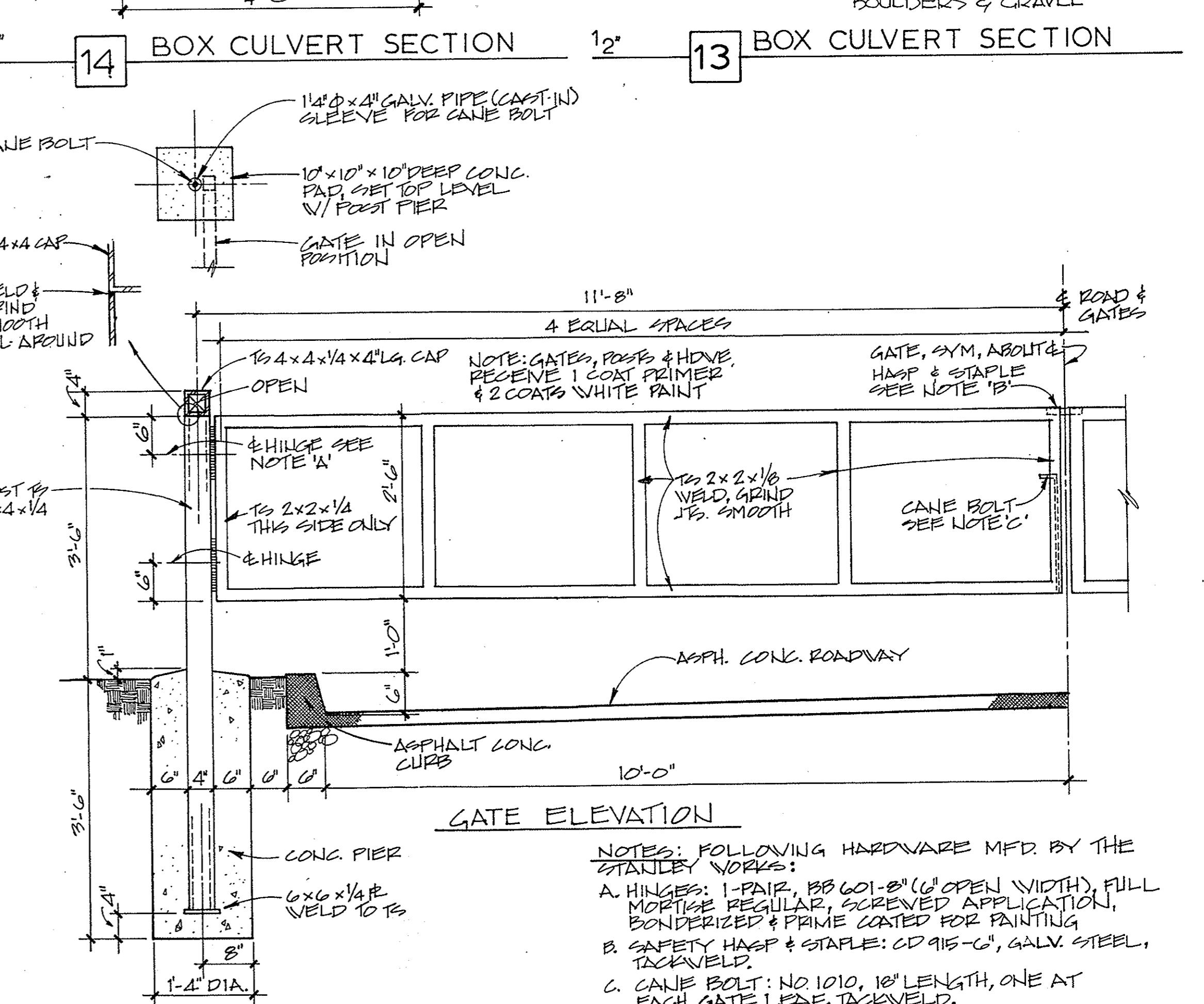
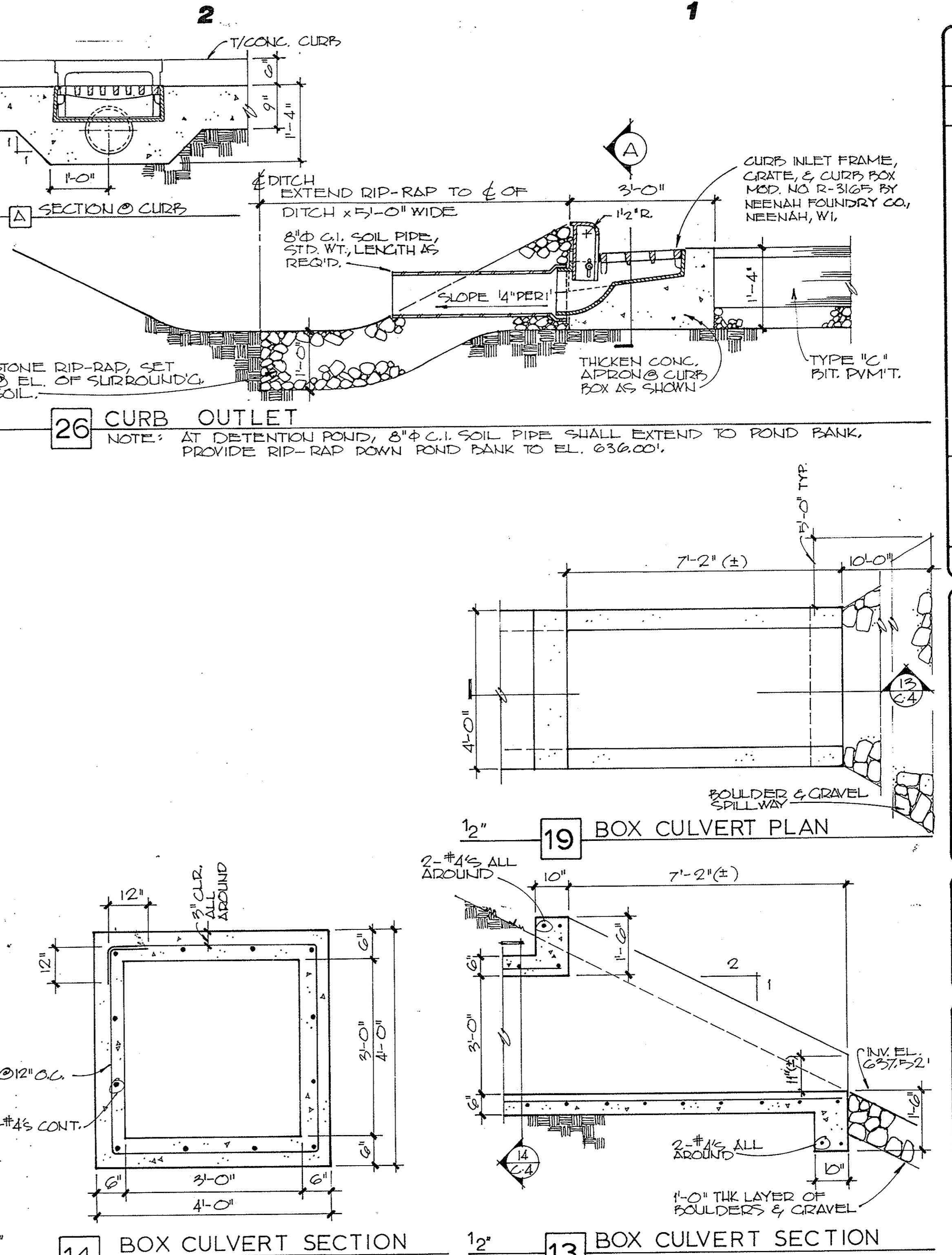
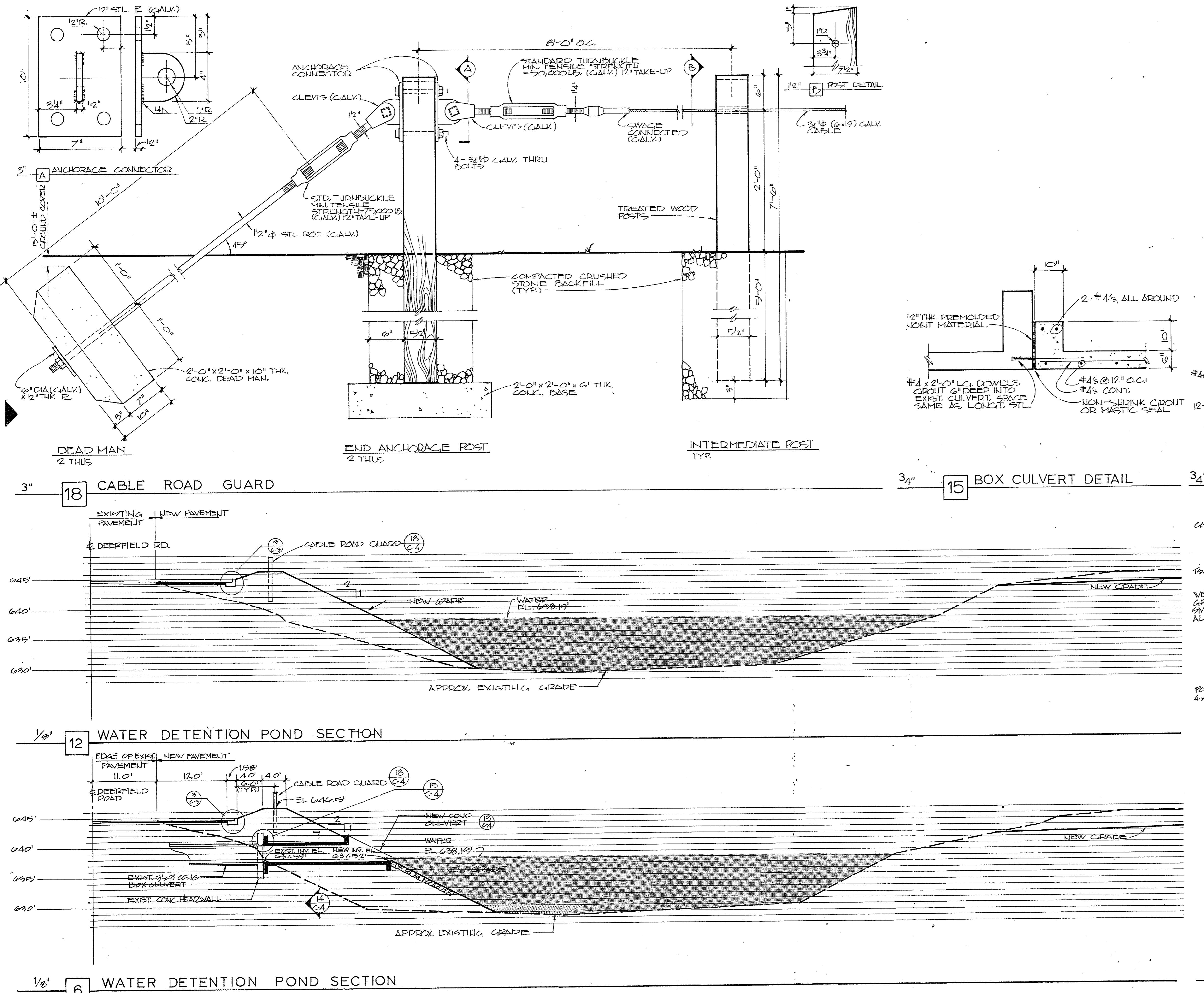
SITE PLAN
NEW OFFICE BUILDING
RIVERWOODS, ILLINOIS

PROJECT NO.
A0905

DRAWING NUMBER
OF SHEETS

C-2

3=1'-0"



FOR ARCHITECTURAL REVIEW
DATE ISSUED: OCT 27 1980

4				
3				
2				
1	10/22/30	ADD CURB OUTLET	C.D&J FEN	
		REVISION		
0	10-17-80	CONSTRUCTION	RJP	
00	8-29-80	BID	RJP	
NO.	DATE	ISSUED FOR	BY	APPD

**Globe
Engineering
Company**

222 N. Dearborn Street
Chicago, Illinois 60601
(312) 431-6800

The logo for Federal Life Insurance Company features a stylized, jagged mountain peak graphic on the left. To the right of the peak, the words "FEDERAL LIFE INSURANCE COMPANY" are stacked vertically in a bold, serif font. Below the company name is a small, rectangular emblem containing the word "MUTUAL".

MISCELLANEOUS SITE DETAILS

NEW OFFICE BUILDING
RIVERWOODS, ILLINOIS

PROJECT NO.
A0905

DRAWING NUMBER
C - 4
OF SHEET

IF THIS SHEET IS NOT 30"X42" IT IS A
REDUCED PRINT. SCALE ACCORDINGLY.

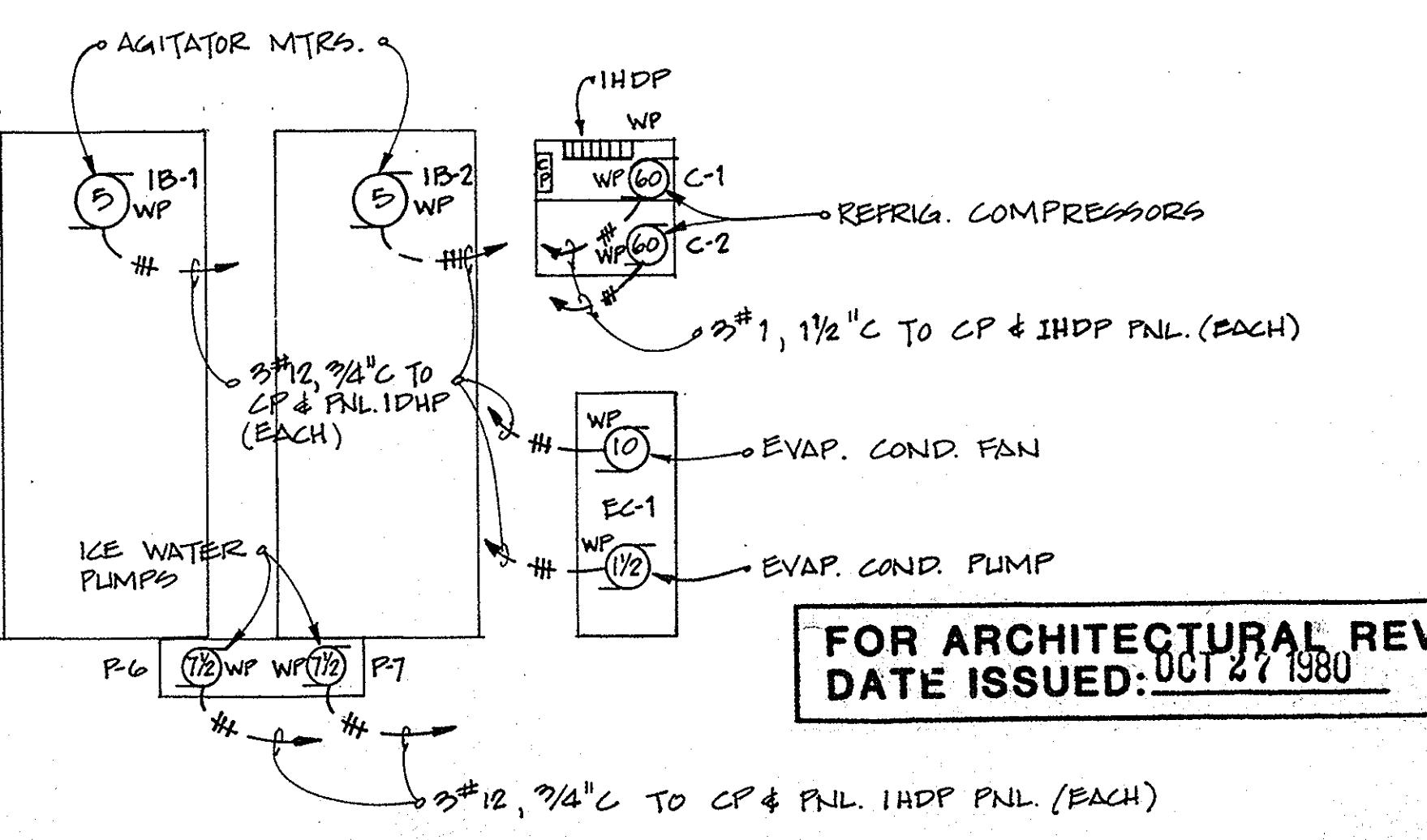
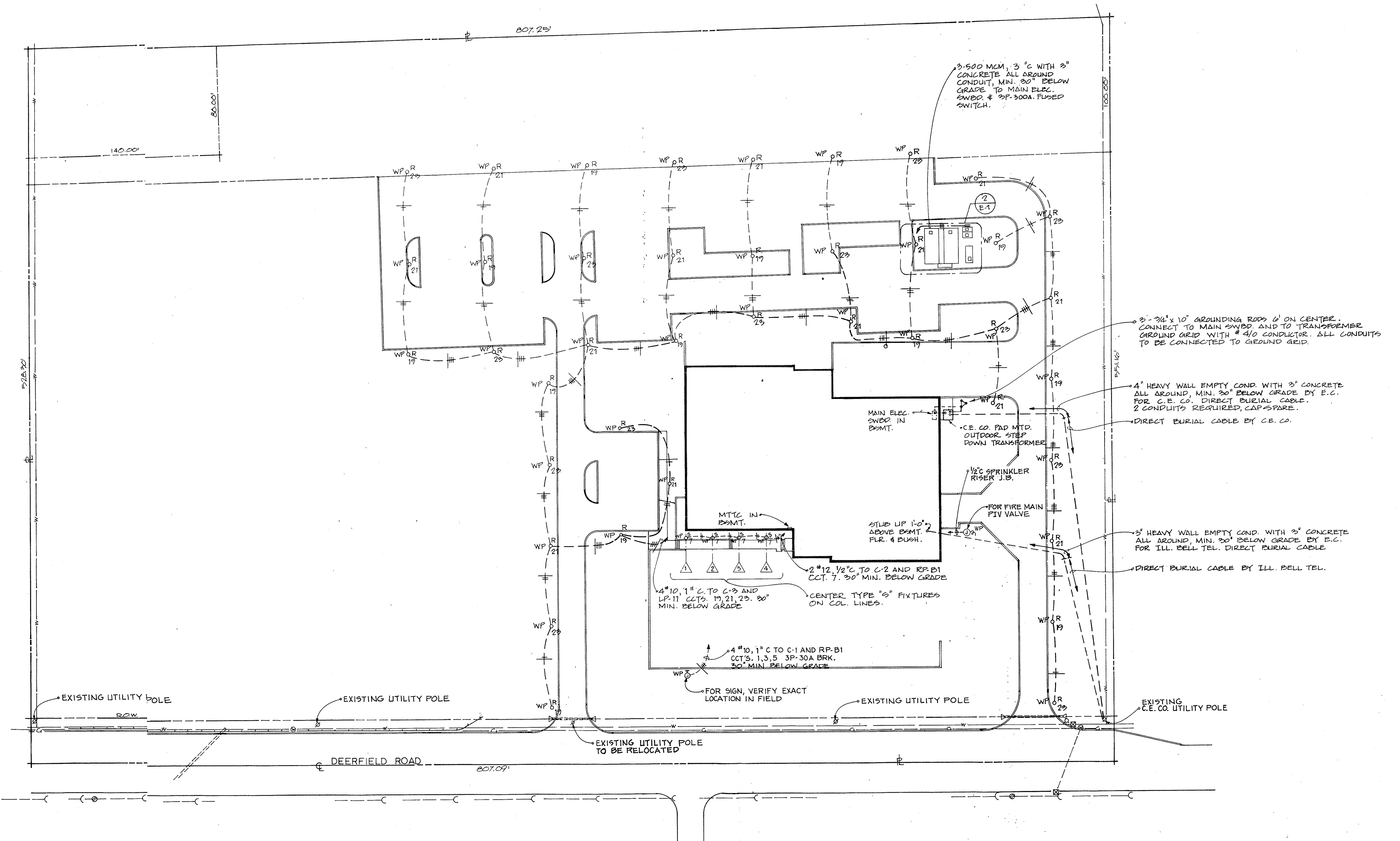
1

2

4

3

2



OR ARCHITECTURAL REVIEW
DATE ISSUED: OCT 27 1980

IF THIS SHEET IS NOT 30" X 42" IT IS A
REDUCED PRINT SCALE ACCORDINGLY

SCALE $1/16'' = 1'-0''$

$1/4 = 1\text{'}-0\text{"}$

$1/2 = 1\text{'}-0\text{"}$

$1\frac{1}{2} = 1-0$ "

PROJECT N

1-0005

ANSWER

1000

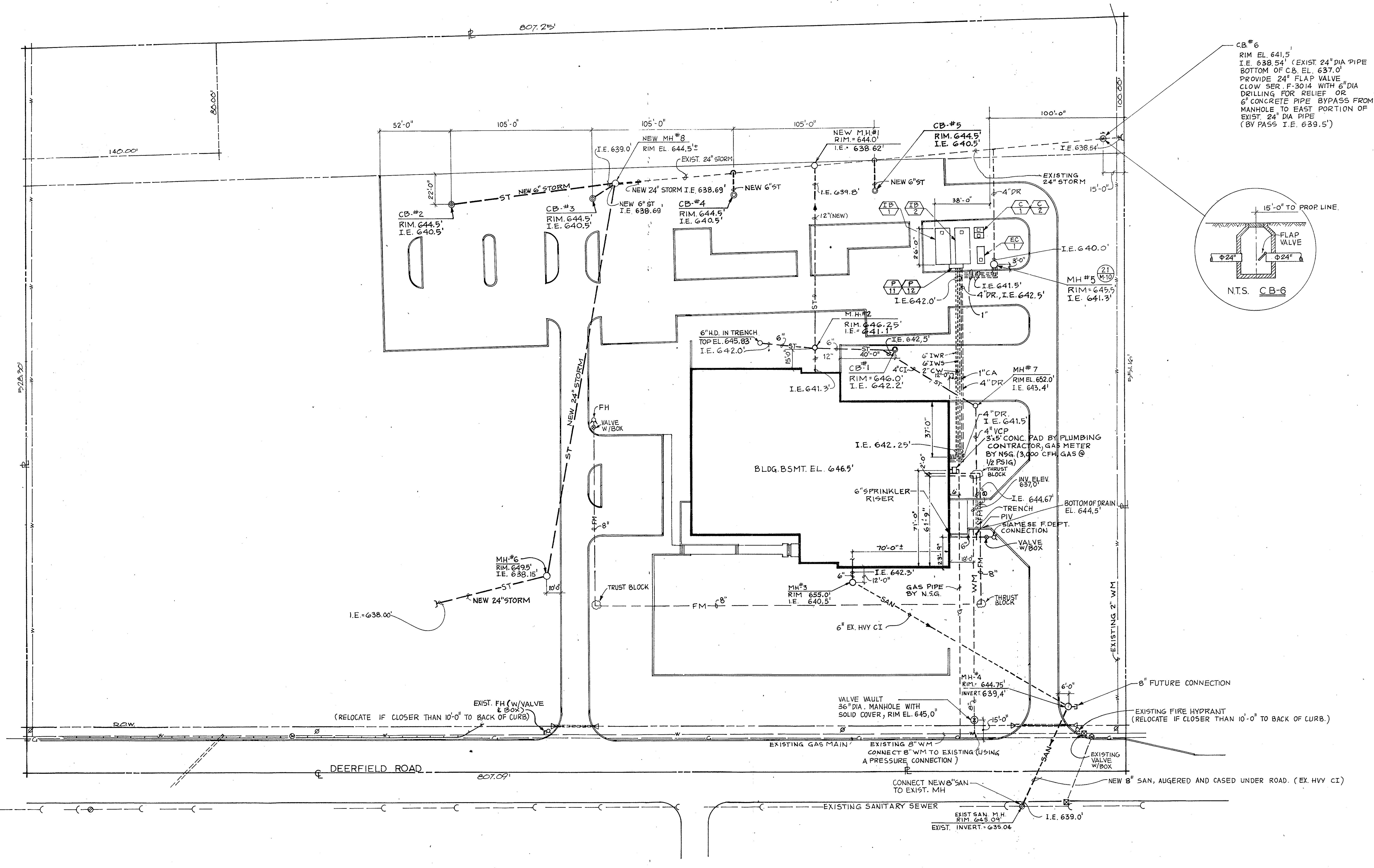
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OF SHE

3"

10. *Leucosia* sp. (Diptera: Syrphidae) (♂) (L. 1.5 mm.)



M-1	3	1
M-1	3	1
PROJECT NO.		
A0905		
DRAWING NUMBER		
M-1		
OF SHEETS		
IF THIS SHEET IS NOT 30"X42" IT IS A REDUCED PRINT SCALE ACCORDINGLY		
0 10' 20' 40'	0 5' 10' 20'	0 2' 4' 8' 12'
1/16"=1'-0"	1/8"=1'-0"	1/4"=1'-0"
0 1' 2' 4' 6'	0 1' 2' 4'	0 1' 2' 3'
1/2"=1'-0"	3/4"=1'-0"	1"-0"
0 1' 2' 3'	0 1' 2' 3'	0 1' 2'
1 1/2"=1'-0"	1 1/2"=1'-0"	3"=1'-0"
0 1' 2' 3'	0 1' 2' 3'	0 1' 2'

D E S I G N E D : T. Z. T A B A
R. A. W E I N E R
D. W. W I L L I A M S
C H E C K E D : T. C. S U T A B A
A P P R O V E D :

Globe Engineering Company
222 N. Dearborn Street
Chicago, Illinois 60601
(312) 431-6800

NORTH

Federal Life Insurance Company (Mutual)
3003 West Lake Avenue • Glenview, Illinois 60065

SITE PLAN
NEW OFFICE BUILDING
RIVERWOODS, ILLINOIS

GENERAL REVISIONS
REVISION
CONSTRUCTION
BID
ISSUED FOR

RJD BY APPD

Table 2-2a Runoff curve numbers for urban areas ^{1/}

Cover type and hydrologic condition	Cover description	Curve numbers for hydrologic soil group				
		A	B	C	D	
Fully developed urban areas (vegetation established)						
Open space (lawns, parks, golf courses, cemeteries, etc.) ^{3/} :						
Poor condition (grass cover < 50%)		68	79	86	89	
Fair condition (grass cover 50% to 75%)		49	69	79	84	
Good condition (grass cover > 75%)		39	61	74	80	
Impervious areas:						
Paved parking lots, roofs, driveways, etc. (excluding right-of-way)		98	98	98	98	
Streets and roads:						
Paved; curbs and storm sewers (excluding right-of-way)		98	98	98	98	
Paved; open ditches (including right-of-way)		83	89	92	93	
Gravel (including right-of-way)		76	85	89	91	
Dirt (including right-of-way)		72	82	87	89	
Western desert urban areas:						
Natural desert landscaping (pervious areas only) ^{4/}		63	77	85	88	
Artificial desert landscaping (impervious weed barrier, desert shrub with 1- to 2-inch sand or gravel mulch and basin borders)		96	96	96	96	
Urban districts:						
Commercial and business		85	89	92	94	
Industrial		72	81	88	91	
Residential districts by average lot size:						
1/8 acre or less (town houses)		65	77	85	90	
1/4 acre		38	61	75	83	
1/3 acre		30	57	72	81	
1/2 acre		25	54	70	80	
1 acre		20	51	68	79	
2 acres		12	46	65	77	
Developing urban areas						
Newly graded areas (pervious areas only, no vegetation) ^{5/}						
		77	86	91	94	
Idle lands (CN's are determined using cover types similar to those in table 2-2c).						

¹ Average runoff condition, and $I_a = 0.2S$.² The average percent impervious area shown was used to develop the composite CN's. Other assumptions are as follows: impervious areas are directly connected to the drainage system, impervious areas have a CN of 98, and pervious areas are considered equivalent to open space in good hydrologic condition. CN's for other combinations of conditions may be computed using figure 2-3 or 2-4.³ CN's shown are equivalent to those of pasture. Composite CN's may be computed for other combinations of open space cover type.⁴ Composite CN's for natural desert landscaping should be computed using figures 2-3 or 2-4 based on the impervious area percentage (CN = 98) and the pervious area CN. The pervious area CN's are assumed equivalent to desert shrub in poor hydrologic condition.⁵ Composite CN's to use for the design of temporary measures during grading and construction should be computed using figure 2-3 or 2-4 based on the degree of development (impervious area percentage) and the CN's for the newly graded pervious areas.