

Gravel Pit Solar

Windsorville Road & Plantation Road
East Windsor, Connecticut

PREPARED FOR



Gravel Pit Solar, LLC
Gravel Pit Solar II, LLC
Gravel Pit Solar III, LLC
Gravel Pit Solar IV, LLC

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PREPARED BY



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Table of Contents

Project Summary	1
Project Description.....	1
Site Description.....	1
Methodology	2
Existing Drainage Conditions	5
Summary	5
Hydrologic Information.....	5
Proposed Drainage Conditions.....	6
Summary	6
Hydrologic Information.....	6
Hydrologic Analysis	8
Hydrologic Analysis	8
Floodplain Information / Analysis.....	8
Water Quality Volume.....	9
Water Quality Flow	9



List of Appendices

Appendix A:

- FEMA Flood Insurance Rate Map
- NOAA Rainfall Depth Estimates
- CTDEEP Groundwater Classification Map
- Aquifer Protection Area Mapping

Appendix B

- NRCS Soil Survey Information

Appendix C

- Erosion and Sedimentation Control Checklist
- Long Term Stormwater Operation and Maintenance Measures

Appendix D

- HydroCAD: Existing Conditions
- HydroCAD: Proposed Conditions



1

Project Summary

Project Description

The Applicant, Gravel Pit Solar, LLC, Gravel Pit Solar II, LLC, Gravel Pit Solar III, LLC, and Gravel Pit Solar IV, LLC (collectively Gravel Pit Solar or the Applicant), is proposing to construct a ±120 MW alternating current ground-mounted solar photovoltaic system, along with all associated utilities, access paths, fencing, and landscaping (the Project), on undeveloped gravel pit and farm fields in East Windsor, Connecticut. When the Project reaches its useful life the improvements constructed as part of the Project will be removed and the land will be restored in accordance with the decommissioning plan.

Site Description

The approximately ±737 acre Project Site is comprised of eight parcels, (Map, Block, Lots: 057-65-001, 057-65-002, 048-65-007, 037-65-005A, 027-49-017C, 025-49-17A, 016-49-007, and 016-50-001) in East Windsor, Connecticut (see Figure 1). The Project Site is bounded by Apothecaries Hall Road to the north and Windsorville Road to the east and south. The development parcels are zoned R-3, A-1, and M-1, and are bisected by Ketch Brook, a railroad right-of-way (ROW) and an Eversource electric transmission line ROW. The Project development (the Project Area) will encompass approximately 485 acres of the Project Site.

The farm field portions of the Project Area within lots 057-65-001, 025-49-017C, 025-49-017A, 016-49-007 and 016-50-001 have been planted mostly in tobacco or silage corn. Portions of the two gravel mining operations in the Project Area within lots 027-49-17C, 057-65-001, 057-65-002, 048-65-007 and 037-65-005A are active. The southern portion of the site includes areas of ice contact stratified drift with features including kame hills, kettle holes, and glacial meltwater valleys. Under existing conditions, runoff from the northern parcels (057-65-001, 057-65-002, 048-65-007 and 037-65-005A) is generally self-contained within the parcel boundaries without discharge to a watercourse. Runoff from the central parcels north of Plantation Road (027-49-017C, 025-49-017A and 016-49-007) generally flows east towards the



railroad tracks or north or west to Ketch Brook. Runoff from the southern parcel south of Plantation Road (016-50-001) generally flows to the south towards one of two large glacial meltwater valleys where runoff infiltrates or flows offsite to wetlands in the Scantic River watershed.

According to available Natural Resource Conservation Service (NRCS) soil mapping¹, the majority of on-Site soils within the Project Area belong to the Hydrologic Soil Group "B", indicating that the soils have a relatively-high infiltration rate when thoroughly wet. Hydrologic soil group investigations have taken place at the Site, and geotechnical investigations for stormwater design are ongoing. Geotechnical borings and test pits have been performed as well. See Appendix B for NRCS Web Soil Survey output.

According to available Connecticut Department of Energy and Environmental Protection (CTDEEP) Groundwater Classification maps, the majority of groundwater at the Project Site is GA with a small portion of the northern part of the Project listed as GB (see Appendix A). The presence of GB Groundwater Quality Classification in this area is likely due to the adjacent closed NORCAP landfill which straddles the railroad south of Ketch Brook.

Mapping from the CTDEEP Aquifer Protection Areas Mapping website portrays that a portion of the northern array lies within an Aquifer Protection Area (see Appendix A).

Methodology

The Project was designed to incorporate measures provided in the Connecticut Stormwater Quality Manual (CTDEEP 2004) as well as the CTDEEP guidance document Guidance Regarding Solar Arrays dated January 8, 2020 to prevent potential erosion and sedimentation during construction and to properly manage post-development runoff. The conclusion of this analysis is that the proposed improvements will not increase the post-development peak runoff rates in comparison to existing pre-development rates at any of the critical design points analyzed and the Project will provide the required water quality mitigation of stormwater runoff prior to discharge from the Site.

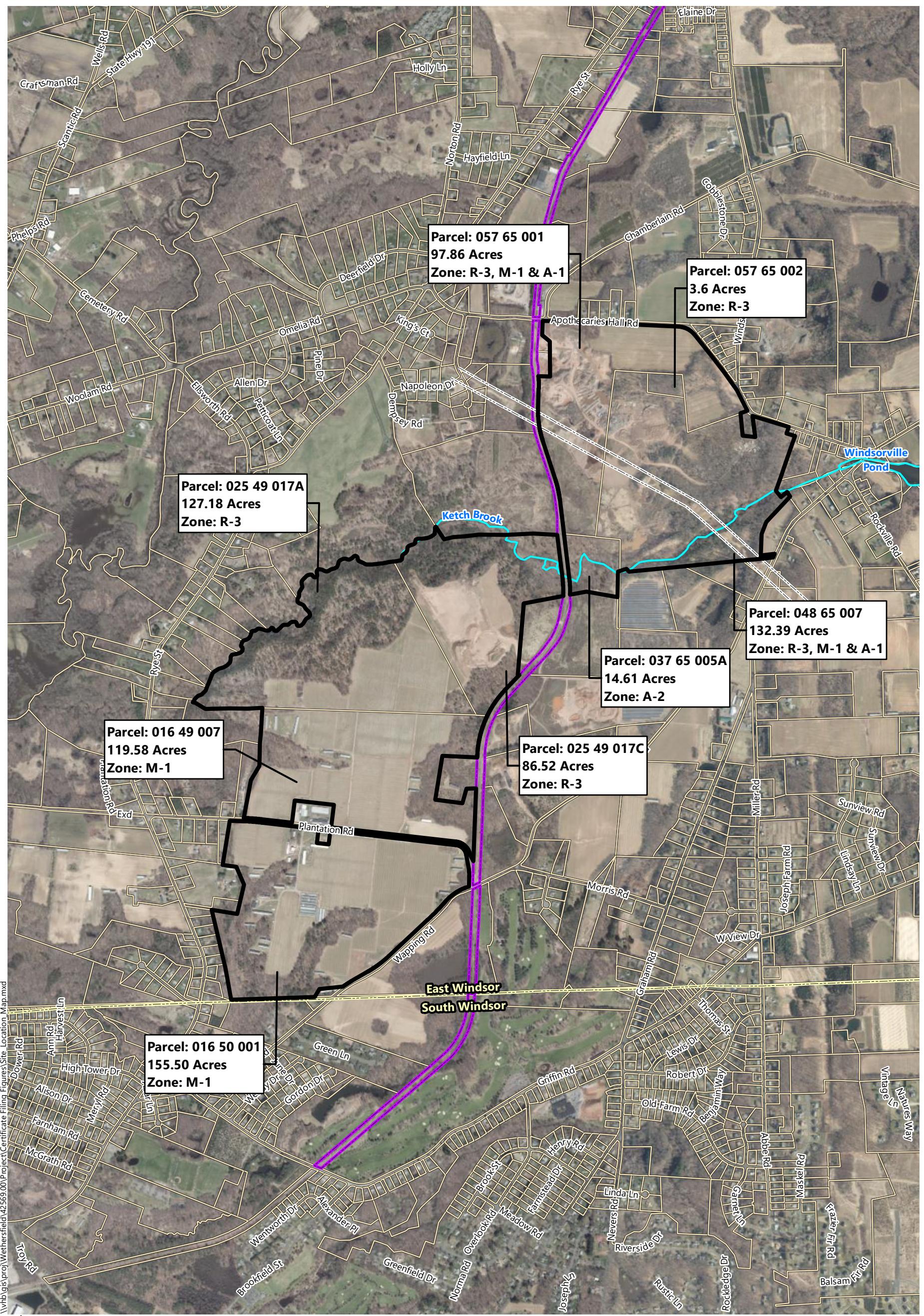
¹ <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>



Figure 1: Site Location Map



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Existing Drainage Conditions

Summary

The Project Area consists primarily of gravel pits and cultivated farm fields. Farm fields are mostly near level with slopes ranging from one to five percent. Gravel mine areas have much more variable slopes as a result of mining and reclamation activities. The Project also includes some forested areas that are flat to gradually sloping.

The Project Site has been broken up into three study areas: the Northern Array along Apothecaries Hall Road and Windsorville Road, the Central Array north of Plantation Road and south and east of Ketch Brook, and the Southern Array south of Plantation Road.

Under existing conditions, stormwater runoff from the Northern Array is generally contained on site by a system of depressions created by gravel extraction. Stormwater runoff from the Central Array generally flows to the east towards the railroad tracks where it is captured by natural depressions, or to the north or west towards Ketch Brook where other natural depressions trap some of the runoff. Stormwater runoff from the Southern Array flows to one of two glacial meltwater valleys which infiltrate runoff and convey the rest off-site to wetlands south of the site in the watershed of the Scantic River.

Hydrologic Information

The Project Area has been divided into three existing conditions hydrologic analysis study areas and 69 drainage sub-watersheds. Sub-watersheds were designated as areas at the Project limits where flow begins to concentrate naturally. Figure 2 illustrates the existing drainage patterns on the Site. All portions of the Project Site and tributary offsite areas have been considered in the hydrologic analysis.

Drainage Area 2A - This ±205-acre area (parcels 057-65-001, 057-65-002, 048-65-007 and 037-65-005A) is located along Windsorville Road near its intersection with



Apothecaries Hall Road, bordered to the south by Ketch Brook but separated by a large berm. The majority of this area is gravel pit with smaller portions consisting of farm fields and forested blocks. This area is self-contained within the gravel pit floor and discharges to constructed process water ponds and the groundwater.

Drainage Area 2B - This ±200-acre area (Parcels 027-49-017C, 025-49-017A and 016-49-007) is located to the north of Plantation Road and is bordered to the east by the railroad ROW and to the north and west by Ketch Brook. Stormwater in this area flows in all directions off the farm fields and gravel pit areas including to kettle holes upgradient of Ketch Brook, through steeply sloping drainage swales and to the railroad ROW.

Drainage Area 2C - This ±145-acre area (Parcel 016-50-001) is located to the south of Plantation Road and is bordered to the west and south by residential development and to the east by Windsorville Road. Stormwater in this area generally flows to one of two glacial meltwater valleys which slope towards the Town boundary with South Windsor to enter off-site wetlands in the Scantic River watershed.



Figure 2: Existing Drainage Areas



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Legend

SYMBOLS

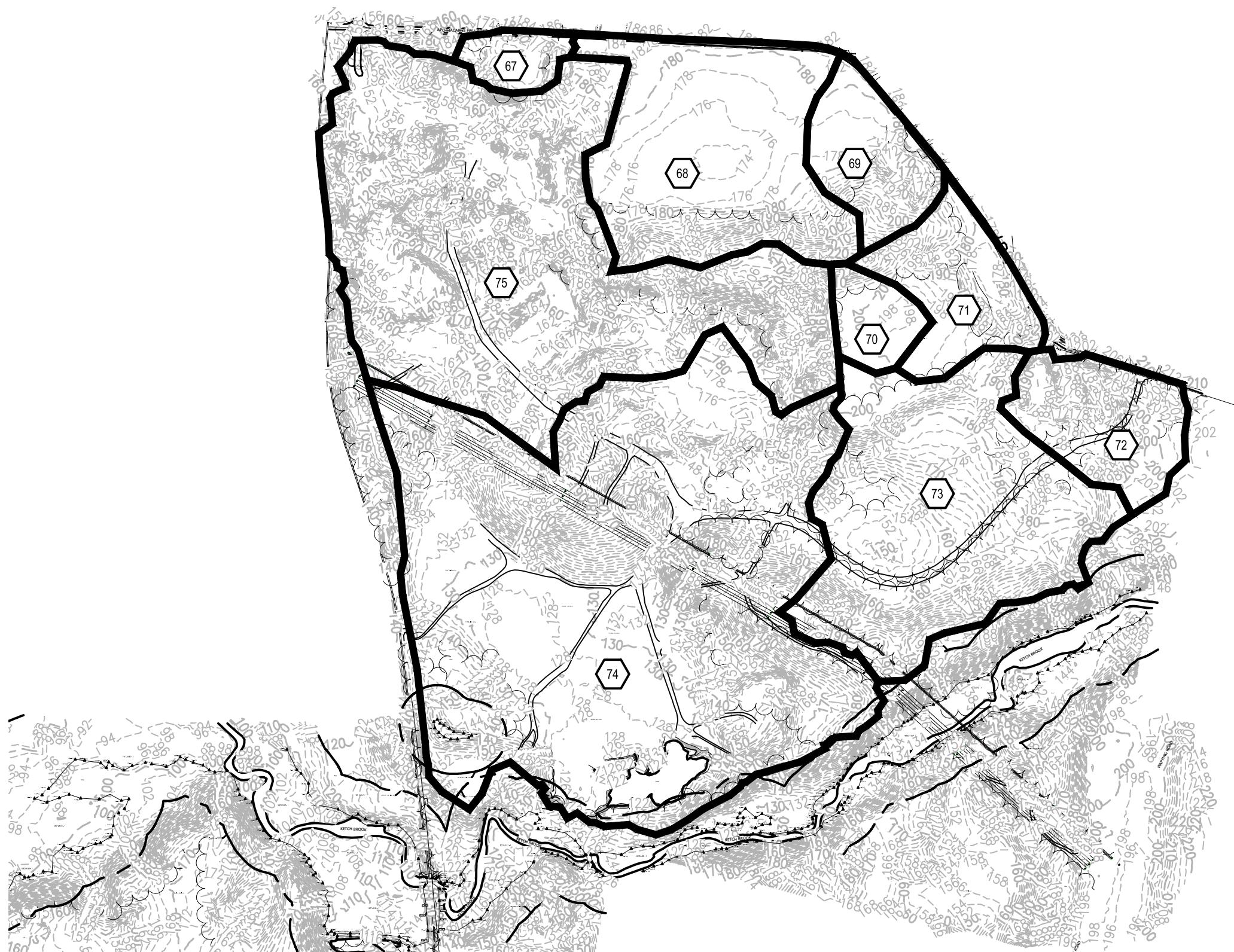


DRAINAGE AREA
DESIGNATION

LINETYPES



DRAINAGE AREA
BOUNDARY



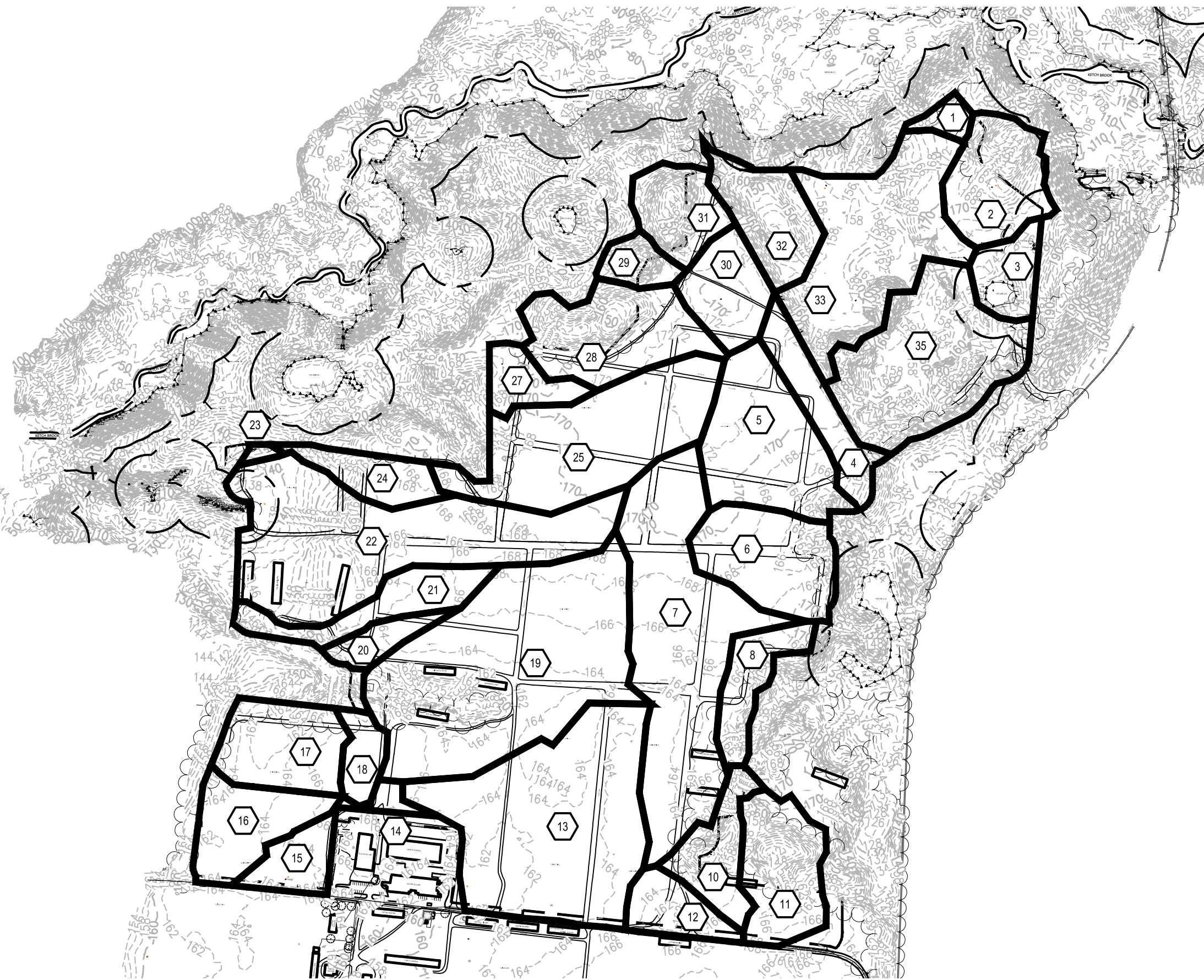
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Existing Drainage Areas
Northern Array Area
Gravel Pit Solar
Windsorville Road - East Windsor, CT

Figure 2A

7/24/20



Legend

SYMBOLS



DRAINAGE AREA DESIGNATION



LINETYPES

DRAINAGE AREA BOUNDARY



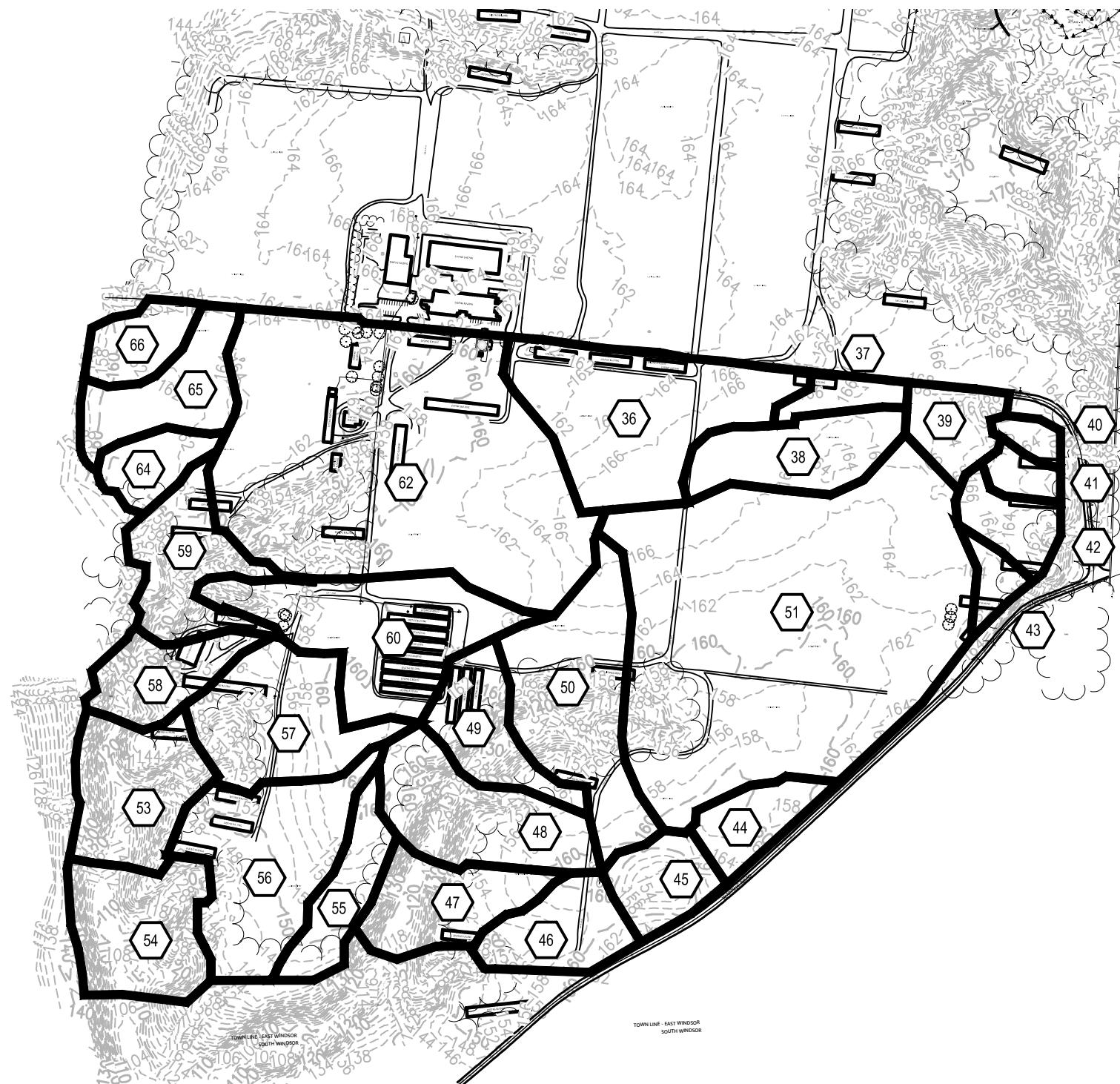
Existing Drainage Areas
Central Array Area
Gravel Pit Solar
North of Plantation Road - East Windsor, CT

Figure 2B



0 250 500 Feet

7/24/20



Legend

SYMBOLS



DRAINAGE AREA
DESIGNATION



DRAINAGE AREA
BOUNDARY



0 250 500 Feet



Existing Drainage Areas
Southern Array Area
Gravel Pit Solar
South of Plantation Road - East Windsor, CT

Figure 2C

7/24/20

Proposed Drainage Conditions

Summary

The Site has been designed to maintain existing topography and mimic existing drainage patterns to the maximum extent practicable. In the majority of the Project Area, permanent turf-forming grasses will be planted to stabilize the soil, cycle nutrients and sequester any residual contaminants remaining from past farming activities. These grasses will improve soil structure and promote infiltration which will lower runoff rates from the operational facility. Existing forest vegetation has been preserved to the maximum extent practicable. Majority of the tree clearing is proposed to protect Project assets from damage and minimize shading. The Project will cut approximately 91 acres of woodland across the entire Project Area.

The only impervious surfaces proposed to be constructed are access roads and small pads for utility equipment. Once operational, vehicular access to the Project will be limited to infrequent maintenance visits. The use of natural depressions and vegetated buffers as well as the proposed stormwater basins will provide water quality treatment for the Project.

Hydrologic Information

Natural drainage patterns will be maintained throughout the Site so that the proposed hydrologic conditions will closely match existing conditions at each of the modelled discharge points. The proposed conditions analysis utilizes the same three (3) analysis areas and 69 sub-watersheds from existing conditions.

Learning from experience designing and constructing other solar projects in Connecticut, the Project approach to stormwater management has emphasized the use of non-structural controls such as pre-seeding and establishing permanent vegetation cover before construction starts. In this case site preparation is anticipated in the summer and fall of the year preceding the spring start of construction. Similarly, the Project will mitigate increases in peak discharge rates by promoting infiltration into the sandy soils present at various depths below finer textured soil



mantles. The Project will utilize the natural terrain of upland depressions (kettle holes) and upland glacial meltwater valleys to retain and infiltrate stormwater runoff. This infiltration will also provide the water quality treatment required under the CTDEEP regulations and guidance documents. This approach has been developed in consultation with CTDEEP personnel.

Drainage Area 3A - This ±205-acre area is located along Windsorville Road near its intersection with Apothecaries Hall Road, bordered to the south by Ketch Brook but separated by a large berm. It is proposed to modify the grades within the gravel pit areas but generally maintain that all stormwater runoff will discharge to groundwater from the area.

Drainage Area 3B - This ±200-acre area is located to the north of Plantation Road and is bordered to the east by the railroad tracks and to the north and west by Ketch Brook. The Project will regrade the gravel pit area but existing grades within the farm fields will generally not be modified. Existing drainage patterns will be maintained.

Drainage Area 3C - This ±145-acre area is located to the south of Plantation Road and is bordered to the west and south by residential development and to the east by Wapping Road. Almost no regrading is proposed within this area and existing drainage patterns from the existing farm fields will be maintained.



Figure 3: Proposed Drainage Areas



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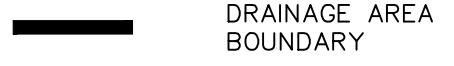
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DRAINAGE AREA DESIGNATION

LINETYPES



DRAINAGE AREA BOUNDARY



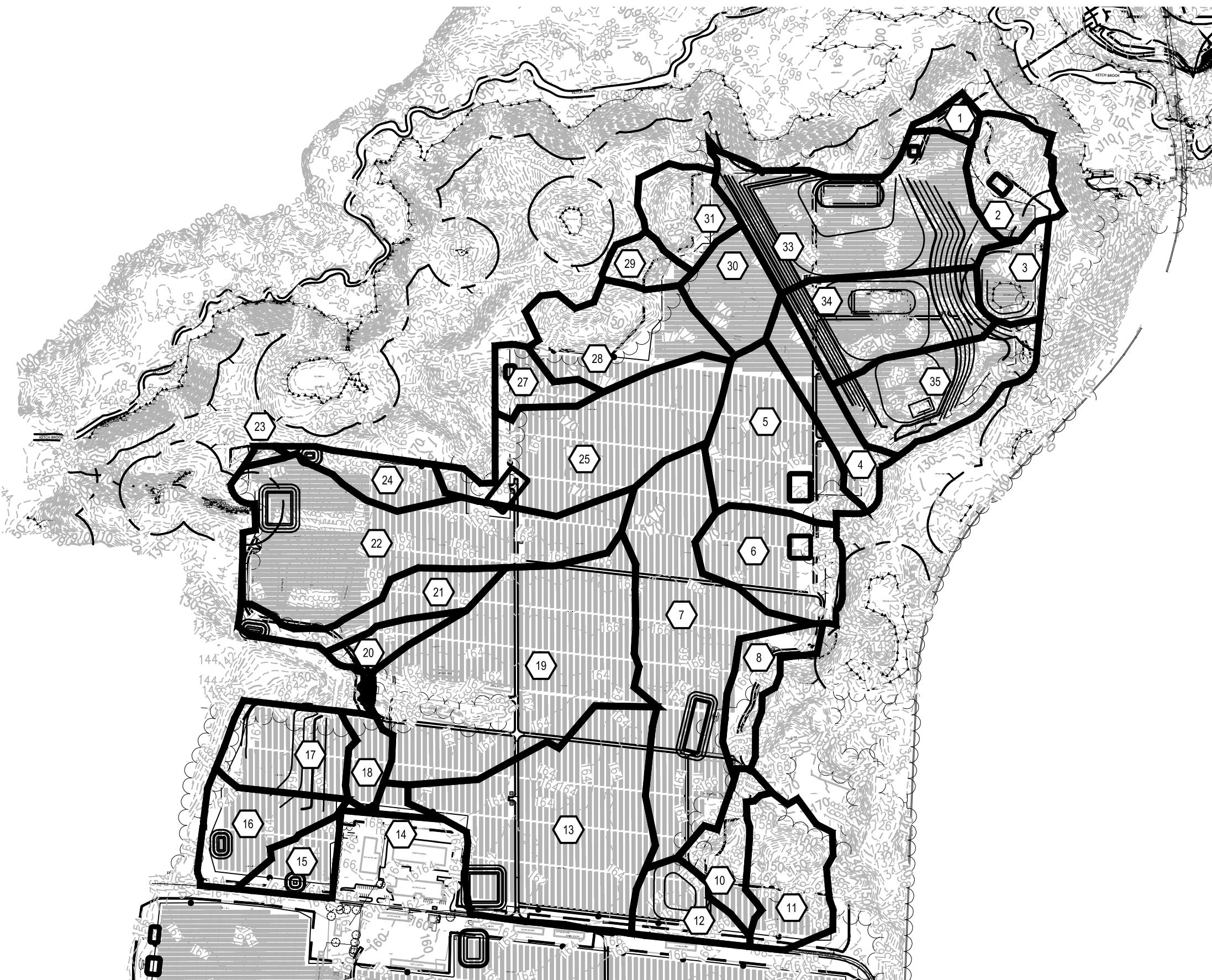
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Proposed Drainage Areas
Northern Array Area
Gravel Pit Solar
Windsorville Road - East Windsor, CT

Figure 3A

7/24/20



Legend

SYMBOLS



DRAINAGE AREA DESIGNATION



DRAINAGE AREA BOUNDARY



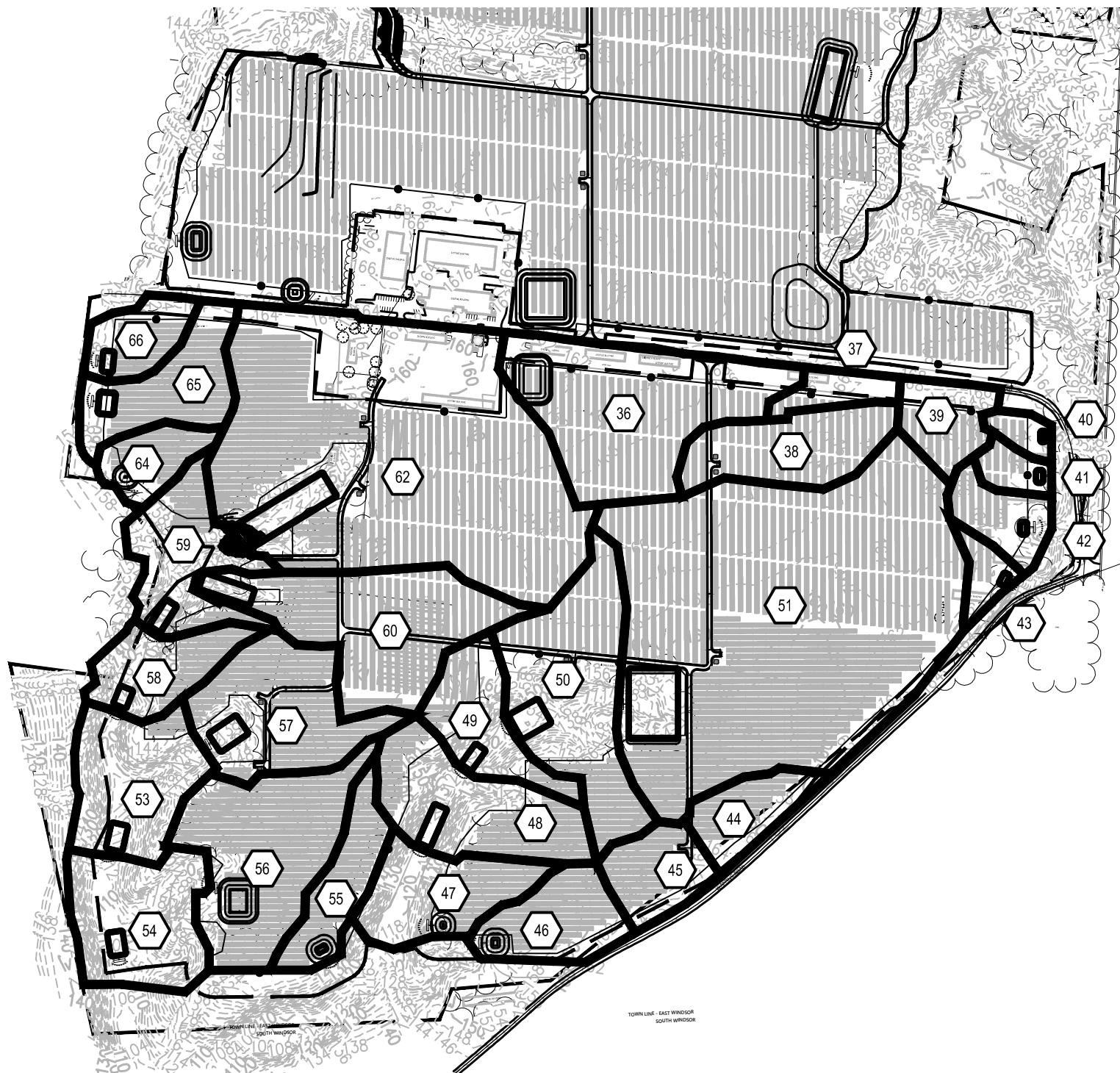
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Proposed Drainage Areas
Central Array Area
Gravel Pit Solar
North of Plantation Road - East Windsor, CT

Figure 3B

7/24/20



Legend

SYMBOLS



DRAINAGE AREA DESIGNATION

LINETYPES

DRAINAGE AREA BOUNDARY



0 250 500 Feet



Proposed Drainage Areas
Southern Array Area
Gravel Pit Solar
South of Plantation Road - East Windsor, CT

Figure 3C

7/24/20

4

Hydrologic Analysis

Hydrologic Analysis

The rainfall-runoff was evaluated for the 2-, 25-, 50-, and 100-year storm recurrence intervals. Rainfall volumes used for this analysis were based on the National Weather Service NOAA Hydrometeorological Design Studies Center, Type III, 24-hour storm event for the Site. Rainfall depths were 3.16, 6.18, 7.02, 7.96 inches respectively. Runoff coefficients for the pre- and post- development conditions provided in the tables below were determined using NRCS Technical Release 55 (TR-55) methodology as provided in the HydroCAD reports found in Appendix D. Under proposed conditions, the majority of Project Area soils (approximately 395 acres) are considered hydrologic soil group "B" based on confirmation of NRCS mapping units as confirmed by onsite soil evaluation and in-situ constant head permeameter testing.

The results of the pre- and post-development hydrologic models indicate that peak runoff rates from the Site will be reduced at all design points for all design storms with the implementation of the proposed permanent stormwater basins. The ongoing field soil test data will be used to advance the design of the stormwater basins. One-half of the lowest field-tested infiltration rate for each infiltration basin will be assumed in the hydrologic model, to be conservative. It is anticipated that high infiltration rates can be expected at all basin locations due to the boring pit logs depicting a consistent sandy substrate across the site.

Floodplain Information / Analysis

The only portion of the Site which includes a 100-year floodplain area is associated with Ketch Brook (included in Appendix A). Impacts to Ketch Brook and its' associated floodplain will be avoided by utilizing a horizontal direction drill crossing method and the development limits are kept well beyond the floodplain limits.



Water Quality Volume

Water Quality Volume (WQV) is based upon the first inch of rainfall, or a 1-inch rainfall event, over the acreage of proposed impervious surfaces for the development. Neither the solar panels nor the equipment pads will be subject to vehicular access nor will they contribute any pollutants to stormwater runoff. The crushed stone access paths will be trafficked infrequently and the grassy meadows downstream of the paths will provide residence time of stormwater runoff to remove the small amount of sediment from runoff.

Water quality treatment for all areas of the site which do not discharge completely to groundwater will be treated by stormwater management basins prior to discharge from the site. Final design of the stormwater management basins and preparation of WQV computations will be prepared upon completion of onsite stormwater geotechnical testing.

Water Quality Flow

Water Quality Flow (WQF) is a rate of stormwater runoff based upon the first inch of rainfall, or a 1-inch rainfall event. This alternative to WQV storage is generally followed for "flow-through" treatment devices. As the proposed development does not incorporate any "flow-through" water quality treatment devices, WQF is not applicable to this project.



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Appendix A:

- FEMA Flood Insurance Rate Map
- NOAA Rainfall Depth Estimates
- CTDEEP Groundwater Classification Map
- Aquifer Protection Area Mapping



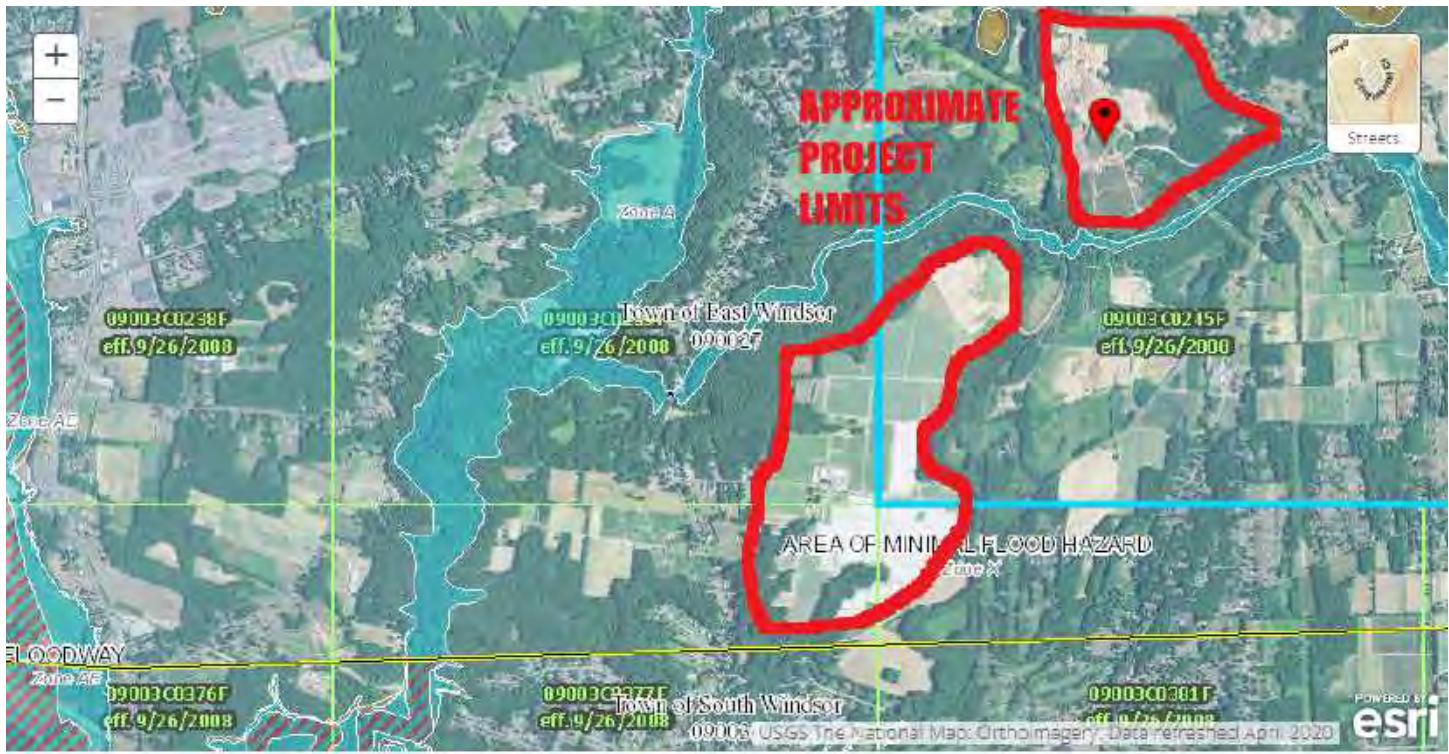
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FEMA Flood Insurance Rate Map



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PIN	Approximate location based on user input and does not represent an authoritative property location	SPECIAL FLOOD HAZARD AREAS	Without Base Flood Elevation (BFE) Zone A, V, A90 With BFE or Depth Regulatory Floodway Zone AE, M, AH, VE, VR	OTHER FEATURES
MAP PANELS	<ul style="list-style-type: none"> ■ Selected FloodMap Boundary ■ Digital Data Available ■ No Digital Data Available ■ Unmapped 	OTHER AREAS OF FLOOD HAZARD	<p>■ 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X</p> <p>■ Future Conditions 1% Annual Chance Flood Hazard Zone X</p> <p>■ Area with Reduced Flood Risk due to Levee. See Notes, Zone D</p> <p>■ Area with Flood Risk due to Levee Zone D</p>	■ 20.2 Cross Sections with 1% Annual Chance 17.2 Water Surface Elevation ○ — Coastal Transect ○ — Base Flood Elevation Line (BFE) ■ — Limit of Study ■ — Jurisdiction Boundary — — Coastal Transect Baseline — — Profile Baseline ■ — Hydrographic Feature — — Channel, Culvert, or Storm Sewer — Levee, Dike, or Floodwall
OTHER AREAS	■ NO SCREEN Area of Minimal Flood Hazard Zone X ■ Effective LOHRS Effective LOHRS ■ Area of Undetermined Flood Hazard Zone D Area of Undetermined Flood Hazard Zone D ■ Otherwise Protected Area Otherwise Protected Area ■ Coastal Barrier Resource System Area Coastal Barrier Resource System Area			



NOAA Rainfall Depth Estimates



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NOAA Atlas 14, Volume 10, Version 3
Location name: Broad Brook, Connecticut, USA*
Latitude: 41.8887°, Longitude: -72.5547°
Elevation: 118.51 ft**



* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sandra Pavlovic, Michael St. Laurent, Carl Trypaluk, Dale Unruh, Orlan Wilhite

NOAA, National Weather Service, Silver Spring, Maryland

[PF_tabular](#) | [PF_graphical](#) | [Maps & aerials](#)

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.338 (0.259-0.441)	0.409 (0.313-0.533)	0.524 (0.400-0.686)	0.620 (0.470-0.816)	0.751 (0.554-1.03)	0.850 (0.615-1.20)	0.954 (0.673-1.39)	1.07 (0.718-1.60)	1.24 (0.801-1.91)	1.38 (0.872-2.17)
10-min	0.479 (0.367-0.624)	0.579 (0.443-0.755)	0.742 (0.566-0.972)	0.878 (0.666-1.16)	1.06 (0.785-1.47)	1.21 (0.872-1.69)	1.35 (0.953-1.97)	1.52 (1.02-2.26)	1.76 (1.14-2.71)	1.95 (1.24-3.07)
15-min	0.563 (0.432-0.734)	0.681 (0.521-0.889)	0.873 (0.666-1.14)	1.03 (0.784-1.36)	1.25 (0.923-1.72)	1.42 (1.03-1.99)	1.59 (1.12-2.32)	1.79 (1.20-2.66)	2.07 (1.34-3.19)	2.30 (1.45-3.62)
30-min	0.758 (0.581-0.989)	0.920 (0.704-1.20)	1.18 (0.904-1.55)	1.40 (1.06-1.85)	1.70 (1.25-2.34)	1.93 (1.40-2.71)	2.17 (1.53-3.16)	2.43 (1.63-3.63)	2.82 (1.82-4.35)	3.13 (1.98-4.93)
60-min	0.953 (0.730-1.24)	1.16 (0.886-1.51)	1.49 (1.14-1.96)	1.77 (1.34-2.33)	2.15 (1.59-2.96)	2.44 (1.77-3.43)	2.74 (1.93-4.00)	3.08 (2.07-4.59)	3.57 (2.31-5.51)	3.96 (2.51-6.24)
2-hr	1.23 (0.946-1.59)	1.48 (1.14-1.92)	1.90 (1.46-2.47)	2.25 (1.71-2.94)	2.72 (2.02-3.73)	3.07 (2.24-4.32)	3.45 (2.46-5.05)	3.90 (2.62-5.79)	4.57 (2.97-7.02)	5.14 (3.26-8.05)
3-hr	1.41 (1.09-1.83)	1.71 (1.32-2.21)	2.18 (1.68-2.83)	2.58 (1.97-3.37)	3.13 (2.33-4.28)	3.53 (2.59-4.95)	3.97 (2.84-5.80)	4.50 (3.03-6.65)	5.31 (3.45-8.12)	6.00 (3.82-9.35)
6-hr	1.78 (1.38-2.28)	2.15 (1.67-2.77)	2.77 (2.14-3.58)	3.28 (2.53-4.26)	3.99 (2.99-5.44)	4.50 (3.32-6.30)	5.07 (3.66-7.40)	5.78 (3.90-8.49)	6.88 (4.48-10.5)	7.83 (5.00-12.1)
12-hr	2.18 (1.70-2.79)	2.67 (2.09-3.42)	3.48 (2.71-4.46)	4.15 (3.21-5.35)	5.07 (3.82-6.88)	5.74 (4.26-7.99)	6.49 (4.71-9.43)	7.42 (5.03-10.8)	8.88 (5.80-13.4)	10.2 (6.50-15.6)
24-hr	2.54 (2.00-3.23)	3.16 (2.48-4.03)	4.18 (3.27-5.33)	5.02 (3.90-6.44)	6.18 (4.69-8.36)	7.02 (5.24-9.75)	7.96 (5.83-11.6)	9.16 (6.23-13.3)	11.1 (7.26-16.6)	12.8 (8.19-19.5)
2-day	2.85 (2.25-3.60)	3.59 (2.83-4.55)	4.81 (3.78-6.10)	5.81 (4.54-7.42)	7.20 (5.50-9.71)	8.20 (6.17-11.4)	9.33 (6.90-13.6)	10.8 (7.38-15.6)	13.2 (8.71-19.8)	15.4 (9.93-23.4)
3-day	3.11 (2.46-3.91)	3.92 (3.10-4.94)	5.25 (4.14-6.64)	6.35 (4.98-8.08)	7.87 (6.03-10.6)	8.97 (6.77-12.4)	10.2 (7.58-14.8)	11.9 (8.10-17.1)	14.6 (9.59-21.7)	17.0 (11.0-25.7)
4-day	3.35 (2.66-4.20)	4.21 (3.34-5.30)	5.63 (4.45-7.11)	6.81 (5.35-8.64)	8.43 (6.47-11.3)	9.60 (7.26-13.2)	10.9 (8.12-15.8)	12.7 (8.68-18.2)	15.6 (10.3-23.1)	18.2 (11.7-27.4)
7-day	4.00 (3.19-5.00)	4.98 (3.97-6.24)	6.59 (5.23-8.28)	7.92 (6.25-10.0)	9.75 (7.51-13.0)	11.1 (8.40-15.2)	12.6 (9.36-18.0)	14.5 (9.99-20.8)	17.7 (11.7-26.2)	20.6 (13.3-30.9)
10-day	4.65 (3.72-5.80)	5.70 (4.55-7.11)	7.40 (5.90-9.27)	8.82 (6.98-11.1)	10.8 (8.30-14.3)	12.2 (9.24-16.6)	13.8 (10.2-19.6)	15.8 (10.9-22.5)	19.1 (12.6-28.0)	21.9 (14.2-32.9)
20-day	6.70 (5.39-8.31)	7.81 (6.28-9.70)	9.62 (7.71-12.0)	11.1 (8.86-13.9)	13.2 (10.2-17.3)	14.7 (11.2-19.7)	16.4 (12.1-22.8)	18.4 (12.7-25.9)	21.4 (14.2-31.2)	24.0 (15.6-35.6)
30-day	8.45 (6.82-10.4)	9.58 (7.72-11.9)	11.4 (9.18-14.2)	13.0 (10.4-16.2)	15.1 (11.7-19.6)	16.7 (12.6-22.1)	18.3 (13.5-25.2)	20.2 (14.1-28.4)	22.9 (15.3-33.3)	25.1 (16.4-37.2)
45-day	10.6 (8.61-13.1)	11.8 (9.55-14.6)	13.7 (11.0-17.0)	15.3 (12.3-19.0)	17.5 (13.5-22.5)	19.1 (14.5-25.1)	20.8 (15.2-28.1)	22.5 (15.7-31.5)	24.8 (16.7-35.9)	26.6 (17.3-39.2)
60-day	12.5 (10.1-15.3)	13.7 (11.1-16.8)	15.7 (12.6-19.3)	17.3 (13.9-21.4)	19.5 (15.1-25.0)	21.3 (16.1-27.7)	23.0 (16.7-30.8)	24.6 (17.2-34.2)	26.6 (17.9-38.3)	28.0 (18.3-41.2)

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

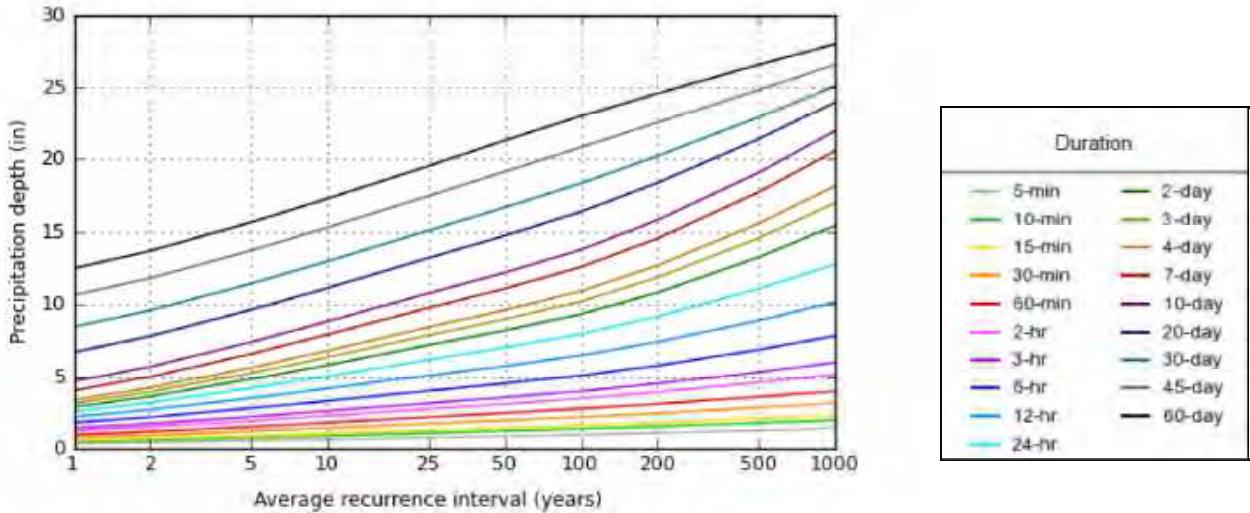
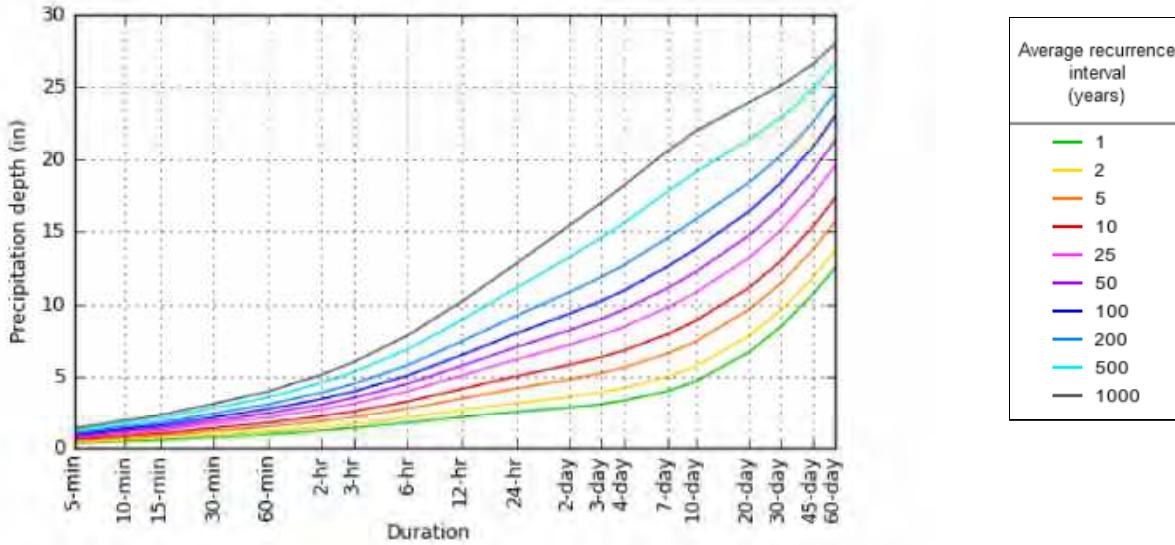
Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper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

Please refer to NOAA Atlas 14 document for more information.

[Back to Top](#)

PF graphical

PDS-based depth-duration-frequency (DDF) curves
Latitude: 41.8887°, Longitude: -72.5547°



Maps & aerials

Small scale terrain



Large scale terrain



Large scale map





[Back to Top](#)

[US Department of Commerce](#)
[National Oceanic and Atmospheric Administration](#)
[National Weather Service](#)
[National Water Center](#)
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

[Disclaimer](#)



CTDEEP Groundwater Classification Map



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WATER QUALITY CLASSIFICATIONS EAST WINDSOR, CT

SURFACE WATER QUALITY CLASSES

A	A
AA	AA
B, B*	B, B*
SA	SA
SB	SB

NOTES:
Surface Water Classifications beginning with S refer to Coastal and Marine Surface Water.
B* is a subset of Class B where no direct wastewater discharges are allowed other than those consistent with Class AA, A and SA surface waters.

GROUND WATER QUALITY CLASSES

GA (white background)	Area of Contribution to Public Supply Well
GAA, GAs	
GA, GAA may not meet current standards	
GB	
GC	

Final Aquifer Protection Area (Level A)
— Major Basin Boundary

EXPLANATION

WATER QUALITY CLASSIFICATIONS (WQC) MAPS are one of the elements of the Water Quality Standards (WQS) for the State of Connecticut. The WQS are a set of Connecticut's clean water laws that assess and protect surface and groundwater quality. The WQS follow the principles of Connecticut's Clean Water Act which is in Chapter 446K of the Connecticut General Statutes. The WQS provide policy guidance in many areas, for example decisions on acceptable discharges to water resources, streamlining landfill permitting, and protection of water bodies from sewage and oil spills. The first two elements of the WQS are the Standards, which set an overall policy for management of water quality, and the Criteria, which are descriptive and numerical standards that describe the allowable parameters and goals for various water quality uses. A discussion of these two elements is found in the Water Quality Standards document available on the CT DEEP website. The third element is the Classifications and the Water Quality Classification Maps which show the classification assigned to each surface and groundwater resource throughout the State. The WQS are adopted using a public participation process. The WQC are also adopted using a public participation process to go through use of water suitable for drinking without treatment and baseline for hydraulically-connected surface water bodies. All ground waters not specifically classified are considered as Class GA. Class GB designated uses are industrial process water and cooling waters and hollow for hydraulic fracturing related uses. All other uses of ground water not meeting the GA or GAA standards are represented on the WQC maps by tan colored land areas. Class GC is represented by green colored land areas. Class GC is represented by magenta colored land areas.

On the WQC map GA is represented by white colored land areas. Class GAA is a subclass of GAA for ground water that is tributary to a public water supply reservoir. The area of contribution to a public water supply well is represented by a 500-foot radius around the well and is assumed to be Class GAA unless otherwise classified. Class GA designated uses are potential point sources or point supplies of water suitable for drinking without treatment and baseline for hydraulically-connected surface water bodies. All ground waters not specifically classified are considered as Class GA. Class GB designated uses are industrial process water and cooling waters and hollow for hydraulic fracturing related uses. All other uses of ground water not meeting the GA or GAA standards are represented on the WQC maps by tan colored land areas. Class GC is represented by green colored land areas. Class GC is represented by magenta colored land areas.

SURFACE WATERS IN CONNECTICUT ARE DIVIDED INTO FRESHWATER CLASSIFIED AS AA, A, B OR B* AND SALINE WATERS CLASSIFIED AS SB. CLASS AA DESIGNATED USES ARE HABITAT FOR FISH AND WILDLIFE, RECREATION, AND WATER SUPPLY FOR INDUSTRY AND AGRICULTURE. CLASS A DESIGNATED USES ARE HABITAT FOR FISH AND OTHER AQUATIC LIFE AND WILDLIFE, POTENTIAL DRINKING WATER SUPPLY; RECREATION; NAVIGATION; AND WATER SUPPLY FOR INDUSTRY AND AGRICULTURE. CLASS SA DESIGNATED USES ARE HABITAT FOR FISH AND OTHER AQUATIC LIFE AND WILDLIFE, COMMERCIAL SHELLFISH HARVESTING; RECREATION; INDUSTRIAL WATER SUPPLY; AND NAVIGATION. CLASS B DESIGNATED USES ARE HABITAT FOR FISH AND AQUATIC LIFE AND WILDLIFE; RECREATION; NAVIGATION; AND INDUSTRIAL AND AGRICULTURAL WATER SUPPLY. CLASS B*, APPLICABLE TO CANTONFORD LAKE, IS A SUBSET OF CLASS B AND IS IDENTICAL TO THE B CLASSIFICATION EXCEPT THAT IT ALSO INCLUDES FOR CLASS B WATERS EXCEPT FOR THE RESTRICTION ON DIRECT DISCHARGES. CLASS SB DESIGNATED USES ARE HABITAT FOR MARINE FISH AND AQUATIC LIFE AND WILDLIFE; COMMERCIAL SHELLFISH HARVESTING; RECREATION; INDUSTRIAL WATER SUPPLY; AND NAVIGATION.

FINAL AQUIFER PROTECTION AREAS (Level A) are included on the WQC maps for informational purposes. These areas are anticipated to be reclassified GAA during the next major basin update, subject to public participation. The Aquifer Protection Program helps protect Connecticut's public drinking water resources and ensure that aquifer protection areas (also called headwater protection areas) for public supply wells are established under regulations within these areas. These areas represent the land area contributing ground water to active public water supply wells or well fields that serve more than 1000 people and are set in sand and gravel aquifers (stratified drift deposits).

The individual water companies owning the well fields and shall submit to the CT DEEP for review. Preliminary mapping provides a general estimate of the area contributing ground water to the well field. Final mapping is based on extensive, site-specific detailed modeling of the ground water flow system. CT DEEP may adjust final area boundaries to be consistent with 1:24,000 scale topography and base map data where appropriate during the approval process.

MAJOR DRAINAGE BASIN DATA – Major drainage basins shown on this map are from Major Basin Line data developed by CT DEEP and intended to be used at 1:24,000 scale.

BASE MAP DATA – Based on data originally from 1:24,000-scale USGS 7.5 minute topographic quadrangle maps published between 1969 and 1992. It includes political boundaries, railroads, airports, hydrography, geographic names and geographic places. Streets and street names are from Tele Atlas® copyrighted data. Base map information is neither current nor complete.

RELATED INFORMATION
This map is intended to be printed at its original dimensions in order to maintain the 1:24,000 scale (1 inch = 2000 feet).
WATER QUALITY STANDARDS – Go to the CT DEEP website for a copy of the Water Quality Standards or the "Water Quality Standards" for other information on water quality.

AQUIFER PROTECTION AREAS – Go to the CT DEEP website for more information.

ADOPTED DATES	
Water Quality Standards	February 25, 2011
Thames River, Pawcatuck River and Southeast Coastal Basins	December 1986
Connecticut River and South Central Coastal Basins:	February 1993
Housatonic River, Hudson River and Southwest Coastal Basins	March 1999


MAP LOCATION
Major Basins
1 Pawcatuck
2 Southeast Coast
3 Thames
4 Connecticut
5 South Central Coast
6 Housatonic
7 Southwest Coast
8 Hudson
State Plane Coordinate System of 1983, Zone 30N
Lambert Conformal Conic Projection
North American Datum of 1983

SCALE 1:24,000 (1 inch = 2000 feet) when map is printed at original size



STATE OF CONNECTICUT
DEPARTMENT OF
ENERGY & ENVIRONMENTAL PROTECTION
79 Elm Street
Hartford, CT 06106-5127

Map created by CT DEEP
October 2018
Map is not colorfast
Protect from light and moisture





Aquifer Protection Area Mapping



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AQUIFER PROTECTION AREAS

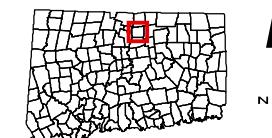
East Windsor, CT

August 26, 2019

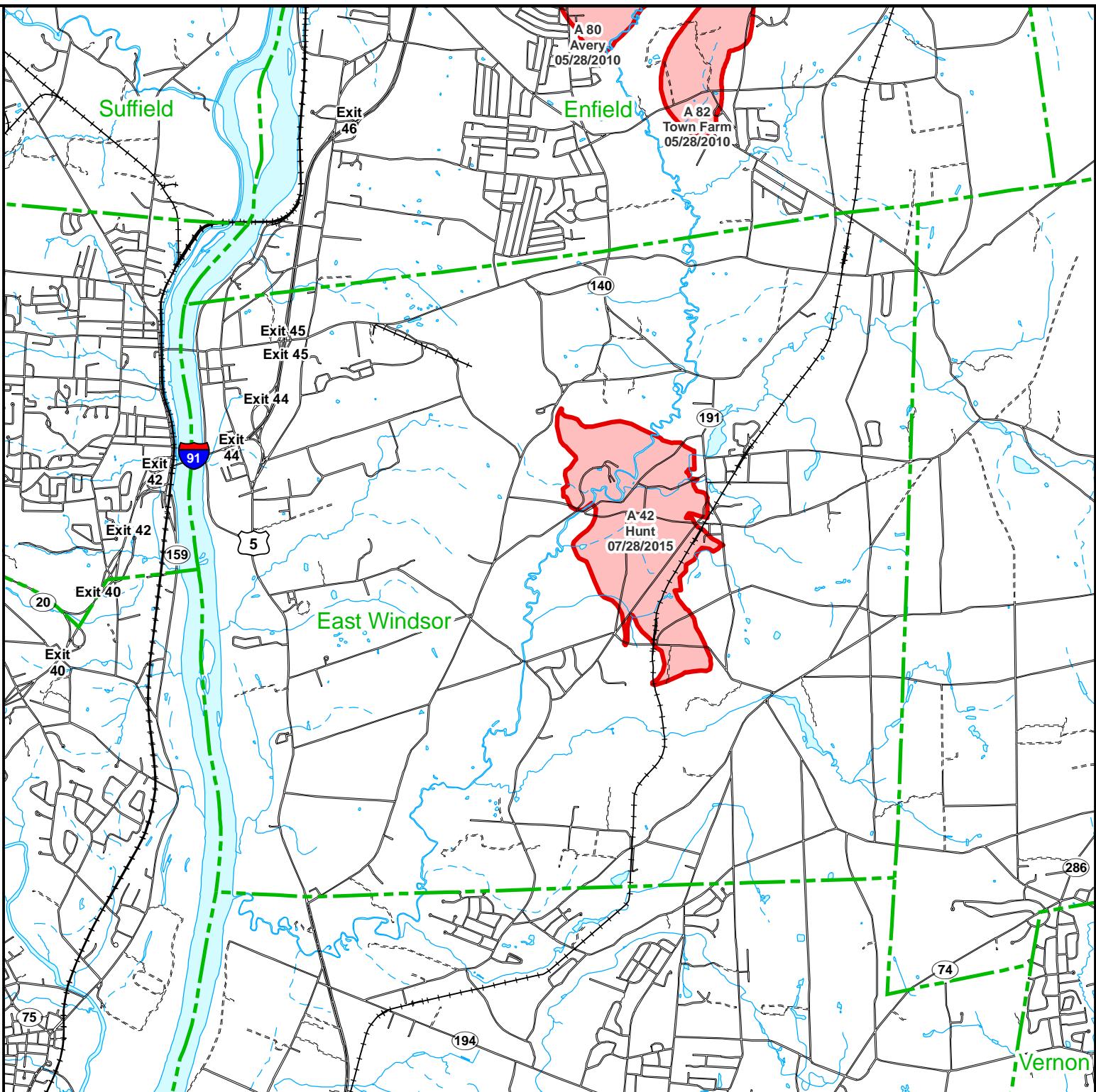
- Level A APA (Final Adopted)
- Level A APA (Final)
- Level B APA (Preliminary)
- Town Boundary

NOTE: The Aquifer Protection Areas were delineated through Connecticut's Level A and Level B Mapping Processes. Aquifer Protection Areas are delineated for active public water supply wells in stratified drift that serve more than 1000 people, in accordance with Sections 22a-354c and 22a-354z of the Connecticut General Statutes. Level B Mapping delineates a preliminary aquifer protection area, providing an estimate of the land area from which the well draws its water. Level A Mapping delineates the final Aquifer Protection Area, which becomes the regulatory boundary for land use controls designed to protect the well from contamination. As Level A Mapping is completed for each well field and approved by DEEP, it replaces the Level B Mapping. Final Adopted Level A Areas are those where towns have land use regulations for them. Massachusetts and Rhode Island Wellhead Protection Areas may be shown for informational purposes.

QUESTIONS:
Bureau of Water Protection and Land Reuse
Planning and Standards Division
Phone: (860) 424-3020
www.ct.gov/deep/aquiferprotection



STATE OF CONNECTICUT
DEPARTMENT OF
ENERGY & ENVIRONMENTAL PROTECTION
79 Elm Street
Hartford, CT 06106-5127





■

Appendix B: NRCS Soil Survey Information



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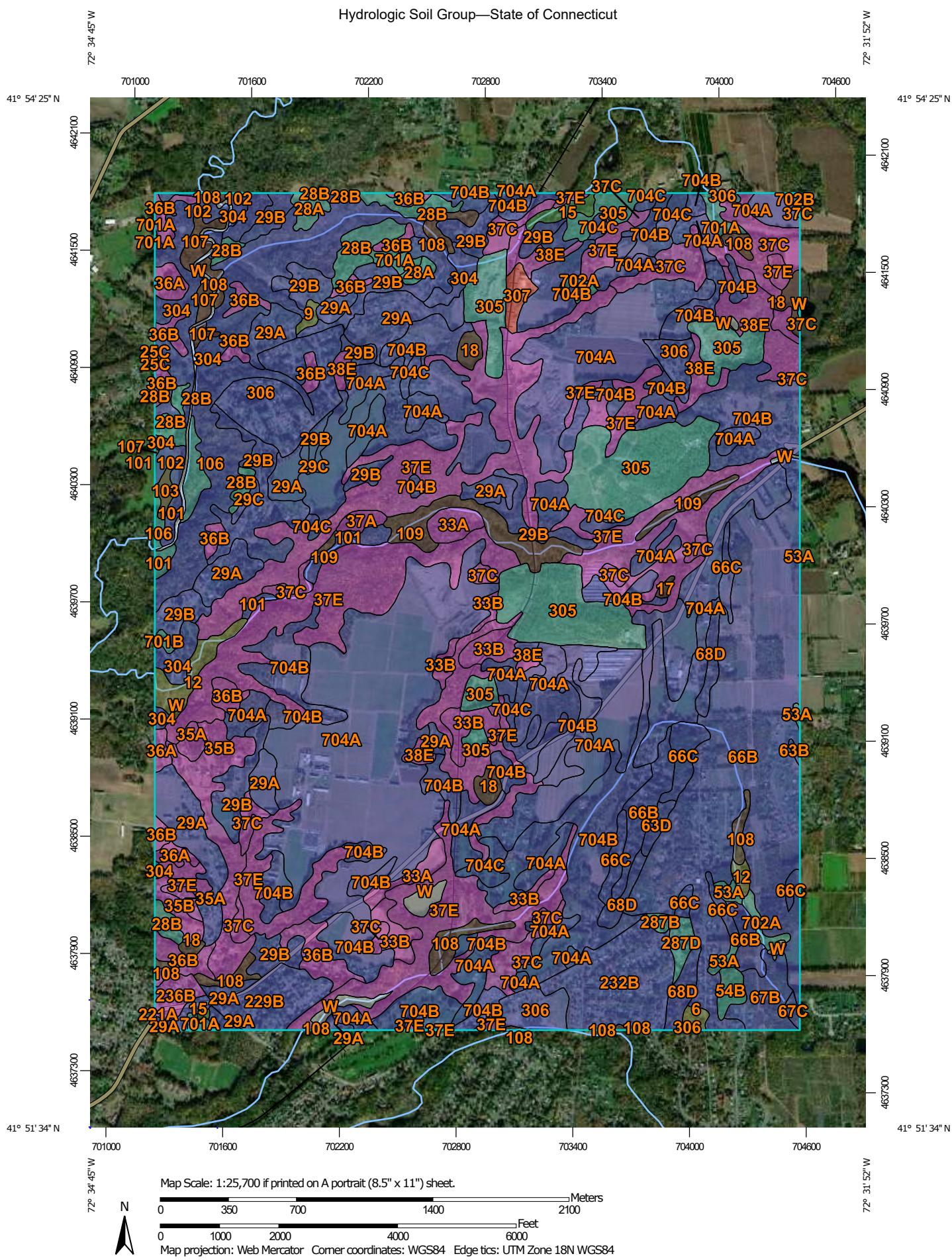


NRCS Soil Survey Information



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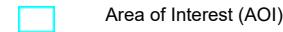
Hydrologic Soil Group—State of Connecticut



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

1/20/2020
Page 1 of 6

MAP LEGEND**Area of Interest (AOI)****Soils****Soil Rating Polygons**

	A
	A/D
	B
	B/D
	C
	C/D
	D
	Not rated or not available

Soil Rating Lines

	A
	A/D
	B
	B/D
	C
	C/D
	D
	Not rated or not available

Soil Rating Points

	A
	A/D
	B
	B/D

C**C/D****D****Not rated or not available****Water Features****Streams and Canals****Transportation****Rails****Interstate Highways****US Routes****Major Roads****Local Roads****Background****Aerial Photography****MAP INFORMATION**

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

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

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

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

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

Soil Survey Area: State of Connecticut

Survey Area Data: Version 19, Sep 13, 2019

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

Date(s) aerial images were photographed: Aug 27, 2016—Oct 30, 2017

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

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
6	Wilbraham and Menlo soils, 0 to 8 percent slopes, extremely stony	C/D	3.0	0.1%
9	Scitico, Shaker, and Maybid soils	C/D	2.5	0.1%
12	Raypol silt loam	C/D	17.5	0.5%
15	Scarboro muck, 0 to 3 percent slopes	A/D	6.6	0.2%
17	Timakwa and Natchaug soils, 0 to 2 percent slopes	B/D	1.4	0.0%
18	Catden and Freetown soils, 0 to 2 percent slopes	B/D	17.3	0.5%
25C	Brancroft silt loam, 8 to 15 percent slopes	C	0.1	0.0%
28A	Elmridge fine sandy loam, 0 to 3 percent slopes	C	10.0	0.3%
28B	Elmridge fine sandy loam, 3 to 8 percent slopes	C	40.7	1.2%
29A	Agawam fine sandy loam, 0 to 3 percent slopes	B	128.5	3.6%
29B	Agawam fine sandy loam, 3 to 8 percent slopes	B	150.1	4.3%
29C	Agawam fine sandy loam, 8 to 15 percent slopes	B	6.4	0.2%
33A	Hartford sandy loam, 0 to 3 percent slopes	A	19.0	0.5%
33B	Hartford sandy loam, 3 to 8 percent slopes	A	39.7	1.1%
35A	Penwood loamy sand, 0 to 3 percent slopes	A	8.6	0.2%
35B	Penwood loamy sand, 3 to 8 percent slopes	A	53.2	1.5%
36A	Windsor loamy sand, 0 to 3 percent slopes	A	13.9	0.4%
36B	Windsor loamy sand, 3 to 8 percent slopes	A	67.5	1.9%

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
37A	Manchester gravelly sandy loam, 0 to 3 percent slopes	A	5.0	0.1%
37C	Manchester gravelly sandy loam, 3 to 15 percent slopes	A	90.9	2.6%
37E	Manchester gravelly sandy loam, 15 to 45 percent slopes	A	470.8	13.4%
38E	Hinckley loamy sand, 15 to 45 percent slopes	A	51.6	1.5%
53A	Wapping very fine sandy loam, 0 to 3 percent slopes	C	6.6	0.2%
54B	Wapping very fine sandy loam, 2 to 8 percent slopes, very stony	C	6.7	0.2%
63B	Cheshire fine sandy loam, 3 to 8 percent slopes	B	0.9	0.0%
63D	Cheshire fine sandy loam, 15 to 25 percent slopes	B	5.2	0.1%
66B	Narragansett silt loam, 2 to 8 percent slopes	B	315.5	9.0%
66C	Narragansett silt loam, 8 to 15 percent slopes	B	33.5	1.0%
67B	Narragansett silt loam, 3 to 8 percent slopes, very stony	B	21.5	0.6%
67C	Narragansett silt loam, 8 to 15 percent slopes, very stony	B	2.3	0.1%
68D	Narragansett silt loam, 15 to 25 percent slopes, extremely stony	B	24.4	0.7%
101	Occum fine sandy loam	B	14.8	0.4%
102	Pootatuck fine sandy loam	B	13.4	0.4%
103	Rippowam fine sandy loam	B/D	3.8	0.1%
106	Winooski silt loam	C	13.7	0.4%
107	Limerick and Lim soils	B/D	12.6	0.4%
108	Saco silt loam	B/D	32.9	0.9%
109	Fluvaquents-Udifluvents complex, frequently flooded	B/D	36.1	1.0%

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
221A	Ninigret-Urban land complex, 0 to 5 percent slopes	B	0.6	0.0%
229B	Agawam-Urban land complex, 0 to 8 percent slopes	B	34.7	1.0%
232B	Haven-Urban land complex, 0 to 8 percent slopes	B	63.9	1.8%
236B	Windsor-Urban land complex, 0 to 8 percent slopes	A	10.0	0.3%
287B	Wethersfield-Urban land complex, 3 to 8 percent slopes	C	2.5	0.1%
287D	Wethersfield-Urban land complex, 15 to 25 percent slopes	C	7.2	0.2%
304	Udorthents, loamy, very steep	B	190.4	5.4%
305	Udorthents-Pits complex, gravelly	C	189.8	5.4%
306	Udorthents-Urban land complex	B	82.2	2.3%
307	Urban land	D	7.9	0.2%
701A	Ninigret fine sandy loam, 0 to 3 percent slopes	C	13.3	0.4%
701B	Ninigret fine sandy loam, 3 to 8 percent slopes	C	1.7	0.0%
702A	Tisbury silt loam, 0 to 3 percent slopes	C	8.1	0.2%
702B	Tisbury silt loam, 3 to 8 percent slopes	C	0.9	0.0%
704A	Enfield silt loam, 0 to 3 percent slopes	B	647.3	18.4%
704B	Enfield silt loam, 3 to 8 percent slopes	B	445.5	12.6%
704C	Enfield silt loam, 8 to 15 percent slopes	B	47.4	1.3%
W	Water		22.2	0.6%
Totals for Area of Interest			3,523.6	100.0%

Description

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

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

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

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

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

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

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

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher



Appendix C:

- Erosion and Sedimentation Control Checklist
- Long Term Stormwater Operation and Maintenance Measures



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Erosion and Sedimentation Control Checklist



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Gravel Pit Solar – East Windsor, CT – Windsorville Road & Plantation Road

Best Management Practices – Maintenance/ Evaluation Checklist

Construction Practices

Best Management Practice	Inspection Frequency	Date Inspected	Inspector	Minimum Maintenance and Key Items to Check	Cleaning/Repair Needed <input type="checkbox"/> yes <input type="checkbox"/> no (List Items)	Date of Cleaning/Repair	Performed by
Silt Fencing	Once per week or after a 0.5" or greater storm event						
Compost Filter Sock	Once per week or after a 0.5" or greater storm event						
Straw Wattles	Once per week or after a 0.5" or greater storm event						
Stabilized Construction Exit	Once per week or after a 0.5" or greater storm event						
Temporary Sediment Trap/Basin & Diversion Swales	Once per week or after a 0.5" or greater storm event						
Vegetated Slope Stabilization	Once per week or after a 0.5" or greater storm event						
Energy Dissipators	Once per week or after a 0.5" or greater storm event						

Stormwater Control Manager _____



Long Term Stormwater Operation and Maintenance Measures



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Project Information

Site

Project Name:	Gravel Pit Solar
Address or Locus:	Windsorville Road & Plantation Road
City, State & Zip:	East Windsor, CT 06016

Developer

Client Name:	Gravel Pit Solar, LLC
Client Address:	1166 Avenue of the Americas, 9 th Floor
Client City, State & Zip:	New York, NY 10036
Client Telephone No.:	
Client Cell Phone:	(207) 233-3644
Client E-Mail:	aaron@nleservices.com

Site Supervisor

Site Manager Name:	To be determined
Site Manager Address:	
Site Manager City, State & Zip:	
Site Manager Telephone No.:	
Site Manager Cell Phone:	
Site Manager E-Mail:	

Gravel Pit Solar – East Windsor, CT – Windsorville Road & Plantation Road

Best Management Practices – Maintenance/ Evaluation Checklist

Long Term Practices

Best Management Practice	Inspection Frequency	Date Inspected	Inspector	Minimum Maintenance and Key Items to Check	Cleaning/Repair Needed <input type="checkbox"/> yes <input type="checkbox"/> no (List Items)	Date of Cleaning/Repair	Performed by
Trash/Litter	Routinely pick up and remove litter from entire property as required.						
Vegetated Areas	Inspect bi-annually. Replant bare areas upon identification.						
Energy Dissipators	Inspect monthly for the first 3 months and after any rain event exceeding 0.5". Inspect 2x per year thereafter.						
Diversion Swales	Inspect monthly for the first 3 months and after any rain event exceeding 0.5". Inspect 2x per year thereafter.						
Infiltration Basin	Inspect monthly for the first 3 months and after any rain event exceeding 0.5". Inspect 2x per year thereafter.						

Stormwater Control Manager _____



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Appendix D:

- HydroCAD: Existing Conditions
- HydroCAD: Proposed Conditions



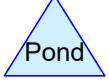
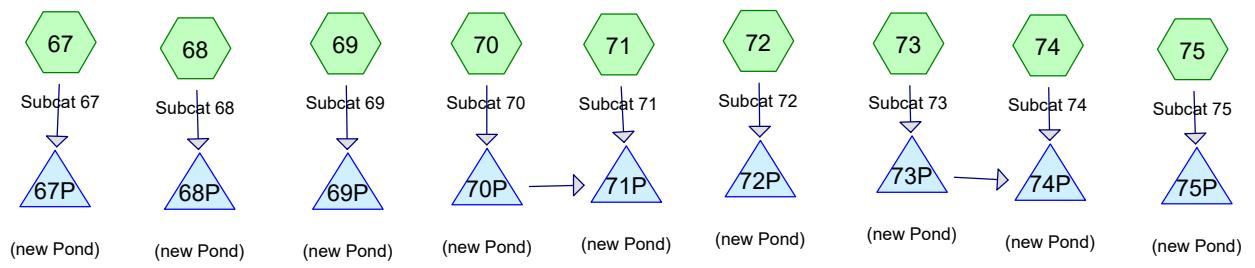
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HydroCAD Analysis: Existing Conditions



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Routing Diagram for Existing Conditions - Windsorville
 Prepared by VHB, Printed 7/22/2020
 HydroCAD® 10.00-22 s/n 01038 © 2018 HydroCAD Software Solutions LLC

Existing Conditions - Windsorville

Prepared by VHB

HydroCAD® 10.00-22 s/n 01038 © 2018 HydroCAD Software Solutions LLC

Printed 7/22/2020

Page 2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.000	0	, HSG B (72)
0.000	0	, HSG C (72, 74)
0.210	70	1/2 acre lots, 25% imp, HSG B (72)
1.640	49	50-75% Grass cover, Fair, HSG A (74, 75)
6.478	69	50-75% Grass cover, Fair, HSG B (74, 75)
4.061	79	50-75% Grass cover, Fair, HSG C (74)
10.203	39	>75% Grass cover, Good, HSG A (74)
11.877	61	>75% Grass cover, Good, HSG B (74)
11.563	74	>75% Grass cover, Good, HSG C (74)
1.440	35	Brush, Fair, HSG A (74, 75)
0.093	56	Brush, Fair, HSG B (74, 75)
5.348	70	Brush, Fair, HSG C (73, 74, 75)
14.115	77	Fallow, bare soil, HSG A (74, 75)
31.311	86	Fallow, bare soil, HSG B (67, 68, 74, 75)
11.233	91	Fallow, bare soil, HSG C (72, 73, 74)
0.103	83	Paved roads w/open ditches, 50% imp, HSG A (71)
2.527	89	Paved roads w/open ditches, 50% imp, HSG B (67, 68, 69, 71, 72)
0.236	92	Paved roads w/open ditches, 50% imp, HSG C (72)
0.298	67	Row crops, straight row, Good, HSG A (68, 69, 70, 73)
24.451	78	Row crops, straight row, Good, HSG B (67, 68, 69, 70, 71, 73, 75)
13.272	36	Woods, Fair, HSG A (68, 69, 70, 71, 73, 74, 75)
19.322	60	Woods, Fair, HSG B (67, 68, 69, 70, 71, 72, 73, 74, 75)
36.001	73	Woods, Fair, HSG C (71, 72, 73, 74, 75)
205.781	71	TOTAL AREA

Exisiting Conditions - Windsorville

Prepared by VHB

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Printed 7/22/2020

Page 3

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
41.071	HSG A	68, 69, 70, 71, 73, 74, 75
96.267	HSG B	67, 68, 69, 70, 71, 72, 73, 74, 75
68.443	HSG C	71, 72, 73, 74, 75
0.000	HSG D	
0.000	Other	
205.781		TOTAL AREA

Existing Conditions - Windsorville

Prepared by VHB

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Page 4

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatch Numbers
0.000	0.000	0.000	0.000	0.000	0.000		
0.000	0.210	0.000	0.000	0.000	0.210	1/2 acre lots, 25% imp	
1.640	6.478	4.061	0.000	0.000	12.179	50-75% Grass cover, Fair	
10.203	11.877	11.563	0.000	0.000	33.643	>75% Grass cover, Good	
1.440	0.093	5.348	0.000	0.000	6.881	Brush, Fair	
14.115	31.311	11.233	0.000	0.000	56.659	Fallow, bare soil	
0.103	2.527	0.236	0.000	0.000	2.865	Paved roads w/open ditches, 50% imp	
0.298	24.451	0.000	0.000	0.000	24.749	Row crops, straight row, Good	
13.272	19.322	36.001	0.000	0.000	68.594	Woods, Fair	
41.071	96.267	68.443	0.000	0.000	205.781	TOTAL AREA	

Existing Conditions - Windsorville

Prepared by VHB

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Type III 24-hr 2 year Rainfall=3.16"

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Page 5

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment67: Subcat 67Runoff Area=2.473 ac 5.83% Impervious Runoff Depth>0.77"
Flow Length=286' Tc=10.4 min CN=71 Runoff=1.91 cfs 0.159 af**Subcatchment68: Subcat 68**Runoff Area=21.623 ac 2.26% Impervious Runoff Depth>0.68"
Flow Length=931' Tc=21.4 min CN=69 Runoff=10.88 cfs 1.218 af**Subcatchment69: Subcat 69**Runoff Area=6.832 ac 3.28% Impervious Runoff Depth>0.48"
Flow Length=664' Tc=10.8 min CN=64 Runoff=2.65 cfs 0.271 af**Subcatchment70: Subcat 70**Runoff Area=3.224 ac 0.00% Impervious Runoff Depth>0.87"
Flow Length=425' Tc=10.2 min CN=73 Runoff=2.89 cfs 0.233 af**Subcatchment71: Subcat 71**Runoff Area=8.154 ac 4.96% Impervious Runoff Depth>0.48"
Flow Length=616' Tc=15.8 min CN=64 Runoff=2.79 cfs 0.323 af**Subcatchment72: Subcat 72**Runoff Area=8.312 ac 2.69% Impervious Runoff Depth>0.72"
Flow Length=983' Tc=15.3 min CN=70 Runoff=5.15 cfs 0.501 af**Subcatchment73: Subcat 73**Runoff Area=28.689 ac 0.00% Impervious Runoff Depth>0.97"
Flow Length=1,079' Tc=21.5 min CN=75 Runoff=22.25 cfs 2.315 af**Subcatchment74: Subcat 74**Runoff Area=74.807 ac 0.00% Impervious Runoff Depth>0.59"
Flow Length=2,328' Tc=35.2 min CN=67 Runoff=25.61 cfs 3.653 af**Subcatchment75: Subcat 75**Runoff Area=51.667 ac 0.00% Impervious Runoff Depth>1.02"
Flow Length=1,192' Tc=16.5 min CN=76 Runoff=47.30 cfs 4.412 af**Pond 67P: (new Pond)**Peak Elev=172.71' Storage=6,915 cf Inflow=1.91 cfs 0.159 af
Outflow=0.00 cfs 0.000 af**Pond 68P: (new Pond)**Peak Elev=174.83' Storage=52,987 cf Inflow=10.88 cfs 1.218 af
Outflow=0.00 cfs 0.000 af**Pond 69P: (new Pond)**Peak Elev=171.46' Storage=11,810 cf Inflow=2.65 cfs 0.271 af
Outflow=0.00 cfs 0.000 af**Pond 70P: (new Pond)**Peak Elev=198.25' Storage=10,161 cf Inflow=2.89 cfs 0.233 af
Outflow=0.00 cfs 0.000 af**Pond 71P: (new Pond)**Peak Elev=178.16' Storage=14,054 cf Inflow=2.79 cfs 0.323 af
Outflow=0.00 cfs 0.000 af**Pond 72P: (new Pond)**Peak Elev=174.81' Storage=21,784 cf Inflow=5.15 cfs 0.501 af
Outflow=0.00 cfs 0.000 af**Pond 73P: (new Pond)**Peak Elev=153.36' Storage=100,746 cf Inflow=22.25 cfs 2.315 af
Outflow=0.00 cfs 0.000 af

Existing Conditions - Windsorville

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Type III 24-hr 2 year Rainfall=3.16"

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Page 6

Pond 74P: (new Pond)Peak Elev=124.21' Storage=158,962 cf Inflow=25.61 cfs 3.653 af
Outflow=0.00 cfs 0.000 af**Pond 75P: (new Pond)**Peak Elev=124.47' Storage=192,042 cf Inflow=47.30 cfs 4.412 af
Outflow=0.00 cfs 0.000 af**Total Runoff Area = 205.781 ac Runoff Volume = 13.085 af Average Runoff Depth = 0.76"
99.28% Pervious = 204.296 ac 0.72% Impervious = 1.485 ac**

Existing Conditions - Windsorville

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Type III 24-hr 25 year Rainfall=6.18"

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Page 34

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment67: Subcat 67Runoff Area=2.473 ac 5.83% Impervious Runoff Depth>2.82"
Flow Length=286' Tc=10.4 min CN=71 Runoff=7.52 cfs 0.581 af**Subcatchment68: Subcat 68**Runoff Area=21.623 ac 2.26% Impervious Runoff Depth>2.63"
Flow Length=931' Tc=21.4 min CN=69 Runoff=46.87 cfs 4.732 af**Subcatchment69: Subcat 69**Runoff Area=6.832 ac 3.28% Impervious Runoff Depth>2.19"
Flow Length=664' Tc=10.8 min CN=64 Runoff=15.77 cfs 1.249 af**Subcatchment70: Subcat 70**Runoff Area=3.224 ac 0.00% Impervious Runoff Depth>3.01"
Flow Length=425' Tc=10.2 min CN=73 Runoff=10.51 cfs 0.808 af**Subcatchment71: Subcat 71**Runoff Area=8.154 ac 4.96% Impervious Runoff Depth>2.19"
Flow Length=616' Tc=15.8 min CN=64 Runoff=16.33 cfs 1.488 af**Subcatchment72: Subcat 72**Runoff Area=8.312 ac 2.69% Impervious Runoff Depth>2.72"
Flow Length=983' Tc=15.3 min CN=70 Runoff=21.36 cfs 1.887 af**Subcatchment73: Subcat 73**Runoff Area=28.689 ac 0.00% Impervious Runoff Depth>3.19"
Flow Length=1,079' Tc=21.5 min CN=75 Runoff=75.42 cfs 7.621 af**Subcatchment74: Subcat 74**Runoff Area=74.807 ac 0.00% Impervious Runoff Depth>2.43"
Flow Length=2,328' Tc=35.2 min CN=67 Runoff=120.79 cfs 15.168 af**Subcatchment75: Subcat 75**Runoff Area=51.667 ac 0.00% Impervious Runoff Depth>3.29"
Flow Length=1,192' Tc=16.5 min CN=76 Runoff=155.15 cfs 14.166 af**Pond 67P: (new Pond)**Peak Elev=173.70' Storage=25,307 cf Inflow=7.52 cfs 0.581 af
Outflow=0.00 cfs 0.000 af**Pond 68P: (new Pond)**Peak Elev=175.92' Storage=206,003 cf Inflow=46.87 cfs 4.732 af
Outflow=0.00 cfs 0.000 af**Pond 69P: (new Pond)**Peak Elev=173.77' Storage=54,384 cf Inflow=15.77 cfs 1.249 af
Outflow=0.00 cfs 0.000 af**Pond 70P: (new Pond)**Peak Elev=198.49' Storage=17,111 cf Inflow=10.51 cfs 0.808 af
Outflow=3.60 cfs 0.472 af**Pond 71P: (new Pond)**Peak Elev=179.38' Storage=48,054 cf Inflow=16.25 cfs 1.960 af
Outflow=3.14 cfs 0.898 af**Pond 72P: (new Pond)**Peak Elev=178.70' Storage=82,127 cf Inflow=21.36 cfs 1.887 af
Outflow=0.00 cfs 0.000 af**Pond 73P: (new Pond)**Peak Elev=154.40' Storage=180,807 cf Inflow=75.42 cfs 7.621 af
Outflow=20.19 cfs 4.103 af

Existing Conditions - Windsorville

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Type III 24-hr 25 year Rainfall=6.18"

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Page 35

Pond 74P: (new Pond)Peak Elev=127.95' Storage=838,716 cf Inflow=126.11 cfs 19.271 af
Outflow=0.00 cfs 0.000 af**Pond 75P: (new Pond)**Peak Elev=130.43' Storage=616,698 cf Inflow=155.15 cfs 14.166 af
Outflow=0.00 cfs 0.000 af**Total Runoff Area = 205.781 ac Runoff Volume = 47.701 af Average Runoff Depth = 2.78"
99.28% Pervious = 204.296 ac 0.72% Impervious = 1.485 ac**

Existing Conditions - Windsorville

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Type III 24-hr 50 year Rainfall=7.02"

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Page 63

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment67: Subcat 67Runoff Area=2.473 ac 5.83% Impervious Runoff Depth>3.48"
Flow Length=286' Tc=10.4 min CN=71 Runoff=9.26 cfs 0.717 af**Subcatchment68: Subcat 68**Runoff Area=21.623 ac 2.26% Impervious Runoff Depth>3.26"
Flow Length=931' Tc=21.4 min CN=69 Runoff=58.32 cfs 5.876 af**Subcatchment69: Subcat 69**Runoff Area=6.832 ac 3.28% Impervious Runoff Depth>2.78"
Flow Length=664' Tc=10.8 min CN=64 Runoff=20.14 cfs 1.582 af**Subcatchment70: Subcat 70**Runoff Area=3.224 ac 0.00% Impervious Runoff Depth>3.68"
Flow Length=425' Tc=10.2 min CN=73 Runoff=12.84 cfs 0.990 af**Subcatchment71: Subcat 71**Runoff Area=8.154 ac 4.96% Impervious Runoff Depth>2.77"
Flow Length=616' Tc=15.8 min CN=64 Runoff=20.87 cfs 1.884 af**Subcatchment72: Subcat 72**Runoff Area=8.312 ac 2.69% Impervious Runoff Depth>3.37"
Flow Length=983' Tc=15.3 min CN=70 Runoff=26.45 cfs 2.334 af**Subcatchment73: Subcat 73**Runoff Area=28.689 ac 0.00% Impervious Runoff Depth>3.88"
Flow Length=1,079' Tc=21.5 min CN=75 Runoff=91.45 cfs 9.269 af**Subcatchment74: Subcat 74**Runoff Area=74.807 ac 0.00% Impervious Runoff Depth>3.05"
Flow Length=2,328' Tc=35.2 min CN=67 Runoff=151.69 cfs 18.983 af**Subcatchment75: Subcat 75**Runoff Area=51.667 ac 0.00% Impervious Runoff Depth>3.99"
Flow Length=1,192' Tc=16.5 min CN=76 Runoff=187.39 cfs 17.173 af**Pond 67P: (new Pond)**Peak Elev=173.93' Storage=31,194 cf Inflow=9.26 cfs 0.717 af
Outflow=0.00 cfs 0.000 af**Pond 68P: (new Pond)**Peak Elev=176.17' Storage=255,813 cf Inflow=58.32 cfs 5.876 af
Outflow=0.00 cfs 0.000 af**Pond 69P: (new Pond)**Peak Elev=174.35' Storage=68,873 cf Inflow=20.14 cfs 1.582 af
Outflow=0.00 cfs 0.000 af**Pond 70P: (new Pond)**Peak Elev=198.54' Storage=18,425 cf Inflow=12.84 cfs 0.990 af
Outflow=6.24 cfs 0.652 af**Pond 71P: (new Pond)**Peak Elev=179.46' Storage=50,730 cf Inflow=24.88 cfs 2.536 af
Outflow=8.37 cfs 1.471 af**Pond 72P: (new Pond)**Peak Elev=179.58' Storage=101,596 cf Inflow=26.45 cfs 2.334 af
Outflow=0.00 cfs 0.000 af**Pond 73P: (new Pond)**Peak Elev=154.58' Storage=199,832 cf Inflow=91.45 cfs 9.269 af
Outflow=36.20 cfs 5.734 af

Existing Conditions - Windsorville

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Type III 24-hr 50 year Rainfall=7.02"

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Page 64

Pond 74P: (new Pond)Peak Elev=128.49' Storage=1,075,871 cf Inflow=178.58 cfs 24.717 af
Outflow=0.00 cfs 0.000 af**Pond 75P: (new Pond)**Peak Elev=131.84' Storage=747,654 cf Inflow=187.39 cfs 17.173 af
Outflow=0.00 cfs 0.000 af**Total Runoff Area = 205.781 ac Runoff Volume = 58.808 af Average Runoff Depth = 3.43"
99.28% Pervious = 204.296 ac 0.72% Impervious = 1.485 ac**

Existing Conditions - Windsorville

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Type III 24-hr 100 year Rainfall=7.96"

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Page 92

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment67: Subcat 67Runoff Area=2.473 ac 5.83% Impervious Runoff Depth>4.24"
Flow Length=286' Tc=10.4 min CN=71 Runoff=11.26 cfs 0.873 af**Subcatchment68: Subcat 68**Runoff Area=21.623 ac 2.26% Impervious Runoff Depth>4.00"
Flow Length=931' Tc=21.4 min CN=69 Runoff=71.49 cfs 7.207 af**Subcatchment69: Subcat 69**Runoff Area=6.832 ac 3.28% Impervious Runoff Depth>3.47"
Flow Length=664' Tc=10.8 min CN=64 Runoff=25.23 cfs 1.974 af**Subcatchment70: Subcat 70**Runoff Area=3.224 ac 0.00% Impervious Runoff Depth>4.46"
Flow Length=425' Tc=10.2 min CN=73 Runoff=15.49 cfs 1.199 af**Subcatchment71: Subcat 71**Runoff Area=8.154 ac 4.96% Impervious Runoff Depth>3.46"
Flow Length=616' Tc=15.8 min CN=64 Runoff=26.28 cfs 2.352 af**Subcatchment72: Subcat 72**Runoff Area=8.312 ac 2.69% Impervious Runoff Depth>4.12"
Flow Length=983' Tc=15.3 min CN=70 Runoff=32.30 cfs 2.853 af**Subcatchment73: Subcat 73**Runoff Area=28.689 ac 0.00% Impervious Runoff Depth>4.67"
Flow Length=1,079' Tc=21.5 min CN=75 Runoff=109.64 cfs 11.163 af**Subcatchment74: Subcat 74**Runoff Area=74.807 ac 0.00% Impervious Runoff Depth>3.76"
Flow Length=2,328' Tc=35.2 min CN=67 Runoff=187.46 cfs 23.444 af**Subcatchment75: Subcat 75**Runoff Area=51.667 ac 0.00% Impervious Runoff Depth>4.79"
Flow Length=1,192' Tc=16.5 min CN=76 Runoff=224.70 cfs 20.621 af**Pond 67P: (new Pond)**Peak Elev=174.18' Storage=38,011 cf Inflow=11.26 cfs 0.873 af
Outflow=0.00 cfs 0.000 af**Pond 68P: (new Pond)**Peak Elev=176.44' Storage=313,741 cf Inflow=71.49 cfs 7.207 af
Outflow=0.00 cfs 0.000 af**Pond 69P: (new Pond)**Peak Elev=174.97' Storage=85,938 cf Inflow=25.23 cfs 1.974 af
Outflow=0.00 cfs 0.000 af**Pond 70P: (new Pond)**Peak Elev=198.58' Storage=19,889 cf Inflow=15.49 cfs 1.199 af
Outflow=9.61 cfs 0.860 af**Pond 71P: (new Pond)**Peak Elev=179.57' Storage=54,815 cf Inflow=34.95 cfs 3.211 af
Outflow=18.76 cfs 2.142 af**Pond 72P: (new Pond)**Peak Elev=180.48' Storage=124,199 cf Inflow=32.30 cfs 2.853 af
Outflow=0.00 cfs 0.000 af**Pond 73P: (new Pond)**Peak Elev=154.78' Storage=220,890 cf Inflow=109.64 cfs 11.163 af
Outflow=54.43 cfs 7.608 af

Existing Conditions - Windsorville

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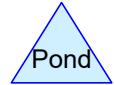
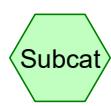
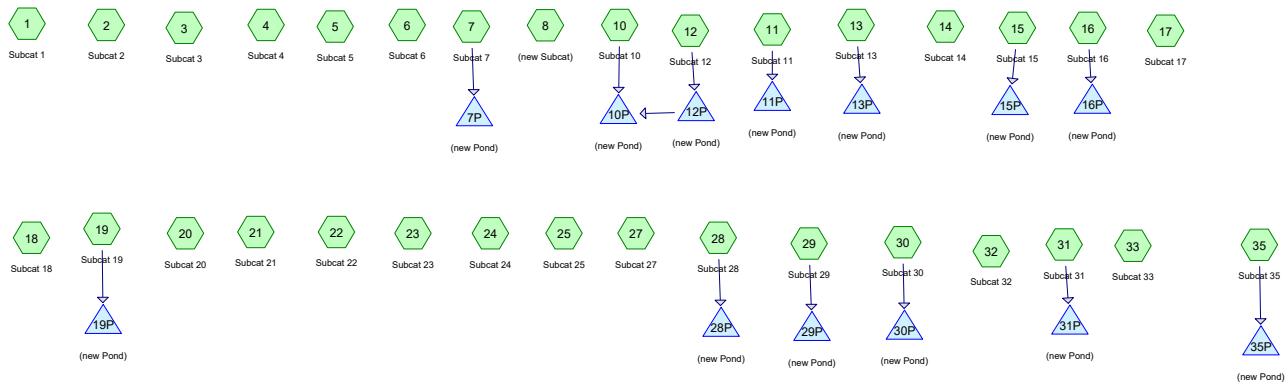
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Type III 24-hr 100 year Rainfall=7.96"

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Page 93

Pond 74P: (new Pond)Peak Elev=129.02' Storage=1,351,652 cf Inflow=236.61 cfs 31.052 af
Outflow=0.00 cfs 0.000 af**Pond 75P: (new Pond)**Peak Elev=133.35' Storage=897,797 cf Inflow=224.70 cfs 20.621 af
Outflow=0.00 cfs 0.000 af**Total Runoff Area = 205.781 ac Runoff Volume = 71.684 af Average Runoff Depth = 4.18"
99.28% Pervious = 204.296 ac 0.72% Impervious = 1.485 ac**



Routing Diagram for Existing Conditions - North Plantation

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Existing Conditions - North Plantation

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Page 2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.028	65	2 acre lots, 12% imp, HSG B (15)
0.440	49	50-75% Grass cover, Fair, HSG A (4, 19, 21, 28, 29, 30, 31, 32)
21.336	69	50-75% Grass cover, Fair, HSG B (4, 5, 6, 7, 10, 12, 17, 18, 19, 20, 21, 22, 25, 28, 29, 30, 31, 32, 33, 35)
1.246	56	Brush, Fair, HSG B (11, 22, 24)
4.892	77	Fallow, bare soil, HSG A (1, 2, 3, 4, 31, 32, 33, 35)
26.083	86	Fallow, bare soil, HSG B (1, 2, 3, 4, 30, 31, 32, 33, 35)
1.123	89	Paved roads w/open ditches, 50% imp, HSG B (11, 12, 13, 15, 16)
0.216	67	Row crops, straight row, Good, HSG A (6, 10, 11)
114.795	78	Row crops, straight row, Good, HSG B (4, 5, 6, 7, 8, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 27, 28, 30)
18.481	36	Woods, Fair, HSG A (1, 2, 3, 4, 5, 6, 10, 11, 19, 20, 21, 25, 27, 28, 29, 30, 31, 32, 35)
12.099	60	Woods, Fair, HSG B (1, 2, 3, 4, 5, 6, 7, 8, 10, 11, 16, 17, 18, 19, 20, 21, 22, 24, 25, 27, 28, 29, 33, 35)
0.080	73	Woods, Fair, HSG C (2)
200.819	73	TOTAL AREA

Exisiting Conditions - North Plantation

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Page 3

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
24.028	HSG A	1, 2, 3, 4, 5, 6, 10, 11, 19, 20, 21, 25, 27, 28, 29, 30, 31, 32, 33, 35
176.711	HSG B	1, 2, 3, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 27, 28, 29, 30, 31, 32, 33, 35
0.080	HSG C	2
0.000	HSG D	
0.000	Other	
200.819		TOTAL AREA

Existing Conditions - North Plantation

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Page 4

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatch Numbers
0.000	0.028	0.000	0.000	0.000	0.028	2 acre lots, 12% imp	
0.440	21.336	0.000	0.000	0.000	21.775	50-75% Grass cover, Fair	
0.000	1.246	0.000	0.000	0.000	1.246	Brush, Fair	
4.892	26.083	0.000	0.000	0.000	30.975	Fallow, bare soil	
0.000	1.123	0.000	0.000	0.000	1.123	Paved roads w/open ditches, 50% imp	
0.216	114.795	0.000	0.000	0.000	115.011	Row crops, straight row, Good	
18.481	12.099	0.080	0.000	0.000	30.661	Woods, Fair	
24.028	176.711	0.080	0.000	0.000	200.819	TOTAL AREA	

Existing Conditions - North Plantation

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Type III 24-hr 2 year Rainfall=3.16"

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Page 5

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1: Subcat 1Runoff Area=0.863 ac 0.00% Impervious Runoff Depth>1.27"
Flow Length=247' Tc=7.9 min CN=80 Runoff=1.27 cfs 0.091 af**Subcatchment2: Subcat 2**Runoff Area=5.512 ac 0.00% Impervious Runoff Depth>0.13"
Flow Length=343' Tc=15.3 min CN=52 Runoff=0.22 cfs 0.060 af**Subcatchment3: Subcat 3**Runoff Area=2.555 ac 0.00% Impervious Runoff Depth>0.47"
Flow Length=188' Tc=18.8 min CN=64 Runoff=0.83 cfs 0.101 af**Subcatchment4: Subcat 4**Runoff Area=3.648 ac 0.00% Impervious Runoff Depth>0.48"
Flow Length=462' Tc=11.1 min CN=64 Runoff=1.41 cfs 0.145 af**Subcatchment5: Subcat 5**Runoff Area=8.688 ac 0.00% Impervious Runoff Depth>0.92"
Flow Length=790' Tc=21.9 min CN=74 Runoff=6.26 cfs 0.663 af**Subcatchment6: Subcat 6**Runoff Area=6.474 ac 0.00% Impervious Runoff Depth>0.87"
Flow Length=527' Tc=15.4 min CN=73 Runoff=5.00 cfs 0.468 af**Subcatchment7: Subcat 7**Runoff Area=17.083 ac 0.00% Impervious Runoff Depth>1.07"
Flow Length=1,407' Tc=41.0 min CN=77 Runoff=11.14 cfs 1.523 af**Subcatchment8: (new Subcat)**Runoff Area=3.130 ac 0.00% Impervious Runoff Depth>0.72"
Tc=10.0 min CN=70 Runoff=2.26 cfs 0.189 af**Subcatchment10: Subcat 10**Runoff Area=3.666 ac 0.00% Impervious Runoff Depth>0.44"
Flow Length=427' Tc=12.8 min CN=63 Runoff=1.19 cfs 0.134 af**Subcatchment11: Subcat 11**Runoff Area=5.661 ac 0.85% Impervious Runoff Depth>0.28"
Flow Length=598' Tc=15.6 min CN=58 Runoff=0.84 cfs 0.131 af**Subcatchment12: Subcat 12**Runoff Area=2.699 ac 5.89% Impervious Runoff Depth>1.14"
Flow Length=374' Tc=13.9 min CN=78 Runoff=2.97 cfs 0.256 af**Subcatchment13: Subcat 13**Runoff Area=18.096 ac 1.07% Impervious Runoff Depth>1.12"
Flow Length=1,351' Tc=52.0 min CN=78 Runoff=10.96 cfs 1.692 af**Subcatchment14: Subcat 14**Runoff Area=0.597 ac 0.00% Impervious Runoff Depth>1.14"
Flow Length=270' Tc=12.6 min CN=78 Runoff=0.68 cfs 0.057 af**Subcatchment15: Subcat 15**Runoff Area=2.521 ac 4.81% Impervious Runoff Depth>1.20"
Flow Length=562' Tc=18.2 min CN=79 Runoff=2.64 cfs 0.252 af**Subcatchment16: Subcat 16**Runoff Area=4.718 ac 0.92% Impervious Runoff Depth>1.14"
Flow Length=719' Tc=24.0 min CN=78 Runoff=4.17 cfs 0.446 af**Subcatchment17: Subcat 17**Runoff Area=5.336 ac 0.00% Impervious Runoff Depth>0.97"
Flow Length=704' Tc=20.0 min CN=75 Runoff=4.26 cfs 0.431 af

Existing Conditions - North Plantation

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Type III 24-hr 2 year Rainfall=3.16"

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Page 6

Subcatchment18: Subcat 18Runoff Area=1.751 ac 0.00% Impervious Runoff Depth>1.02"
Flow Length=422' Tc=21.6 min CN=76 Runoff=1.44 cfs 0.149 af**Subcatchment19: Subcat 19**Runoff Area=21.570 ac 0.00% Impervious Runoff Depth>0.96"
Flow Length=1,667' Tc=39.5 min CN=75 Runoff=12.72 cfs 1.726 af**Subcatchment20: Subcat 20**Runoff Area=1.629 ac 0.00% Impervious Runoff Depth>0.87"
Flow Length=544' Tc=18.7 min CN=73 Runoff=1.17 cfs 0.117 af**Subcatchment21: Subcat 21**Runoff Area=3.990 ac 0.00% Impervious Runoff Depth>0.72"
Flow Length=1,249' Tc=27.1 min CN=70 Runoff=1.98 cfs 0.239 af**Subcatchment22: Subcat 22**Runoff Area=17.726 ac 0.00% Impervious Runoff Depth>0.85"
Flow Length=2,340' Tc=55.2 min CN=73 Runoff=7.61 cfs 1.256 af**Subcatchment23: Subcat 23**Runoff Area=0.264 ac 0.00% Impervious Runoff Depth>1.14"
Flow Length=133' Tc=5.5 min CN=78 Runoff=0.37 cfs 0.025 af**Subcatchment24: Subcat 24**Runoff Area=2.795 ac 0.00% Impervious Runoff Depth>0.92"
Flow Length=746' Tc=16.2 min CN=74 Runoff=2.27 cfs 0.214 af**Subcatchment25: Subcat 25**Runoff Area=12.168 ac 0.00% Impervious Runoff Depth>1.02"
Tc=38.1 min CN=76 Runoff=7.76 cfs 1.029 af**Subcatchment27: Subcat 27**Runoff Area=2.191 ac 0.00% Impervious Runoff Depth>0.63"
Flow Length=464' Tc=19.4 min CN=68 Runoff=1.05 cfs 0.116 af**Subcatchment28: Subcat 28**Runoff Area=7.360 ac 0.00% Impervious Runoff Depth>0.28"
Flow Length=461' Tc=15.3 min CN=58 Runoff=1.09 cfs 0.171 af**Subcatchment29: Subcat 29**Runoff Area=1.626 ac 0.00% Impervious Runoff Depth=0.00"
Flow Length=167' Tc=13.2 min CN=36 Runoff=0.00 cfs 0.000 af**Subcatchment30: Subcat 30**Runoff Area=3.911 ac 0.00% Impervious Runoff Depth>0.72"
Flow Length=380' Tc=11.2 min CN=70 Runoff=2.69 cfs 0.236 af**Subcatchment31: Subcat 31**Runoff Area=3.646 ac 0.00% Impervious Runoff Depth>0.00"
Flow Length=261' Tc=7.6 min CN=41 Runoff=0.00 cfs 0.000 af**Subcatchment32: Subcat 32**Runoff Area=4.598 ac 0.00% Impervious Runoff Depth>1.68"
Tc=0.0 min CN=86 Runoff=11.15 cfs 0.645 af**Subcatchment33: Subcat 33**Runoff Area=12.509 ac 0.00% Impervious Runoff Depth>1.61"
Tc=0.0 min CN=85 Runoff=29.06 cfs 1.678 af**Subcatchment35: Subcat 35**Runoff Area=11.838 ac 0.00% Impervious Runoff Depth>1.14"
Flow Length=579' Tc=21.7 min CN=78 Runoff=10.93 cfs 1.121 af**Pond 7P: (new Pond)**Peak Elev=164.35' Storage=66,271 cf Inflow=11.14 cfs 1.523 af
Outflow=0.00 cfs 0.000 af

Existing Conditions - North Plantation

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Type III 24-hr 2 year Rainfall=3.16"

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Page 7

Pond 10P: (new Pond)	Peak Elev=147.73' Storage=5,844 cf Inflow=1.19 cfs 0.134 af Outflow=0.00 cfs 0.000 af
Pond 11P: (new Pond)	Peak Elev=143.18' Storage=5,718 cf Inflow=0.84 cfs 0.131 af Outflow=0.00 cfs 0.000 af
Pond 12P: (new Pond)	Peak Elev=162.44' Storage=11,163 cf Inflow=2.97 cfs 0.256 af Outflow=0.00 cfs 0.000 af
Pond 13P: (new Pond)	Peak Elev=161.55' Storage=48,154 cf Inflow=10.96 cfs 1.692 af Outflow=2.14 cfs 0.640 af
Pond 15P: (new Pond)	Peak Elev=162.96' Storage=10,959 cf Inflow=2.64 cfs 0.252 af Outflow=0.00 cfs 0.000 af
Pond 16P: (new Pond)	Peak Elev=162.72' Storage=19,435 cf Inflow=4.17 cfs 0.446 af Outflow=0.00 cfs 0.000 af
Pond 19P: (new Pond)	Peak Elev=153.23' Storage=31,899 cf Inflow=12.72 cfs 1.726 af Outflow=5.71 cfs 1.120 af
Pond 28P: (new Pond)	Peak Elev=151.79' Storage=7,432 cf Inflow=1.09 cfs 0.171 af Outflow=0.00 cfs 0.000 af
Pond 29P: (new Pond)	Peak Elev=146.00' Storage=0 cf Inflow=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af
Pond 30P: (new Pond)	Peak Elev=170.04' Storage=10,273 cf Inflow=2.69 cfs 0.236 af Outflow=0.00 cfs 0.000 af
Pond 31P: (new Pond)	Peak Elev=144.03' Storage=13 cf Inflow=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af
Pond 35P: (new Pond)	Peak Elev=156.02' Storage=48,798 cf Inflow=10.93 cfs 1.121 af Outflow=0.00 cfs 0.000 af

Total Runoff Area = 200.819 ac Runoff Volume = 15.362 af Average Runoff Depth = 0.92"
99.72% Pervious = 200.254 ac 0.28% Impervious = 0.565 ac

Existing Conditions - North Plantation

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Type III 24-hr 25 year Rainfall=6.18"

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Page 62

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1: Subcat 1Runoff Area=0.863 ac 0.00% Impervious Runoff Depth>3.70"
Flow Length=247' Tc=7.9 min CN=80 Runoff=3.68 cfs 0.266 af**Subcatchment2: Subcat 2**Runoff Area=5.512 ac 0.00% Impervious Runoff Depth>1.24"
Flow Length=343' Tc=15.3 min CN=52 Runoff=5.61 cfs 0.568 af**Subcatchment3: Subcat 3**Runoff Area=2.555 ac 0.00% Impervious Runoff Depth>2.19"
Flow Length=188' Tc=18.8 min CN=64 Runoff=4.80 cfs 0.466 af**Subcatchment4: Subcat 4**Runoff Area=3.648 ac 0.00% Impervious Runoff Depth>2.19"
Flow Length=462' Tc=11.1 min CN=64 Runoff=8.35 cfs 0.667 af**Subcatchment5: Subcat 5**Runoff Area=8.688 ac 0.00% Impervious Runoff Depth>3.09"
Flow Length=790' Tc=21.9 min CN=74 Runoff=22.00 cfs 2.238 af**Subcatchment6: Subcat 6**Runoff Area=6.474 ac 0.00% Impervious Runoff Depth>3.00"
Flow Length=527' Tc=15.4 min CN=73 Runoff=18.32 cfs 1.620 af**Subcatchment7: Subcat 7**Runoff Area=17.083 ac 0.00% Impervious Runoff Depth>3.36"
Flow Length=1,407' Tc=41.0 min CN=77 Runoff=35.39 cfs 4.783 af**Subcatchment8: (new Subcat)**Runoff Area=3.130 ac 0.00% Impervious Runoff Depth>2.73"
Tc=10.0 min CN=70 Runoff=9.30 cfs 0.712 af**Subcatchment10: Subcat 10**Runoff Area=3.666 ac 0.00% Impervious Runoff Depth>2.11"
Flow Length=427' Tc=12.8 min CN=63 Runoff=7.60 cfs 0.644 af**Subcatchment11: Subcat 11**Runoff Area=5.661 ac 0.85% Impervious Runoff Depth>1.69"
Flow Length=598' Tc=15.6 min CN=58 Runoff=8.50 cfs 0.799 af**Subcatchment12: Subcat 12**Runoff Area=2.699 ac 5.89% Impervious Runoff Depth>3.49"
Flow Length=374' Tc=13.9 min CN=78 Runoff=9.14 cfs 0.785 af**Subcatchment13: Subcat 13**Runoff Area=18.096 ac 1.07% Impervious Runoff Depth>3.45"
Flow Length=1,351' Tc=52.0 min CN=78 Runoff=33.84 cfs 5.195 af**Subcatchment14: Subcat 14**Runoff Area=0.597 ac 0.00% Impervious Runoff Depth>3.49"
Flow Length=270' Tc=12.6 min CN=78 Runoff=2.10 cfs 0.174 af**Subcatchment15: Subcat 15**Runoff Area=2.521 ac 4.81% Impervious Runoff Depth>3.58"
Flow Length=562' Tc=18.2 min CN=79 Runoff=7.92 cfs 0.753 af**Subcatchment16: Subcat 16**Runoff Area=4.718 ac 0.92% Impervious Runoff Depth>3.48"
Flow Length=719' Tc=24.0 min CN=78 Runoff=12.86 cfs 1.367 af**Subcatchment17: Subcat 17**Runoff Area=5.336 ac 0.00% Impervious Runoff Depth>3.19"
Flow Length=704' Tc=20.0 min CN=75 Runoff=14.43 cfs 1.418 af

Existing Conditions - North Plantation

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Type III 24-hr 25 year Rainfall=6.18"

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Page 63

Subcatchment18: Subcat 18Runoff Area=1.751 ac 0.00% Impervious Runoff Depth>3.28"
Flow Length=422' Tc=21.6 min CN=76 Runoff=4.73 cfs 0.479 af**Subcatchment19: Subcat 19**Runoff Area=21.570 ac 0.00% Impervious Runoff Depth>3.17"
Flow Length=1,667' Tc=39.5 min CN=75 Runoff=42.97 cfs 5.694 af**Subcatchment20: Subcat 20**Runoff Area=1.629 ac 0.00% Impervious Runoff Depth>3.00"
Flow Length=544' Tc=18.7 min CN=73 Runoff=4.27 cfs 0.407 af**Subcatchment21: Subcat 21**Runoff Area=3.990 ac 0.00% Impervious Runoff Depth>2.71"
Flow Length=1,249' Tc=27.1 min CN=70 Runoff=8.10 cfs 0.902 af**Subcatchment22: Subcat 22**Runoff Area=17.726 ac 0.00% Impervious Runoff Depth>2.96"
Flow Length=2,340' Tc=55.2 min CN=73 Runoff=27.68 cfs 4.372 af**Subcatchment23: Subcat 23**Runoff Area=0.264 ac 0.00% Impervious Runoff Depth>3.50"
Flow Length=133' Tc=5.5 min CN=78 Runoff=1.14 cfs 0.077 af**Subcatchment24: Subcat 24**Runoff Area=2.795 ac 0.00% Impervious Runoff Depth>3.10"
Flow Length=746' Tc=16.2 min CN=74 Runoff=8.00 cfs 0.722 af**Subcatchment25: Subcat 25**Runoff Area=12.168 ac 0.00% Impervious Runoff Depth>3.27"
Tc=38.1 min CN=76 Runoff=25.42 cfs 3.311 af**Subcatchment27: Subcat 27**Runoff Area=2.191 ac 0.00% Impervious Runoff Depth>2.54"
Flow Length=464' Tc=19.4 min CN=68 Runoff=4.76 cfs 0.463 af**Subcatchment28: Subcat 28**Runoff Area=7.360 ac 0.00% Impervious Runoff Depth>1.69"
Flow Length=461' Tc=15.3 min CN=58 Runoff=11.12 cfs 1.038 af**Subcatchment29: Subcat 29**Runoff Area=1.626 ac 0.00% Impervious Runoff Depth>0.27"
Flow Length=167' Tc=13.2 min CN=36 Runoff=0.15 cfs 0.037 af**Subcatchment30: Subcat 30**Runoff Area=3.911 ac 0.00% Impervious Runoff Depth>2.73"
Flow Length=380' Tc=11.2 min CN=70 Runoff=11.24 cfs 0.889 af**Subcatchment31: Subcat 31**Runoff Area=3.646 ac 0.00% Impervious Runoff Depth>0.53"
Flow Length=261' Tc=7.6 min CN=41 Runoff=1.07 cfs 0.160 af**Subcatchment32: Subcat 32**Runoff Area=4.598 ac 0.00% Impervious Runoff Depth>4.33"
Tc=0.0 min CN=86 Runoff=27.60 cfs 1.659 af**Subcatchment33: Subcat 33**Runoff Area=12.509 ac 0.00% Impervious Runoff Depth>4.22"
Tc=0.0 min CN=85 Runoff=73.68 cfs 4.403 af**Subcatchment35: Subcat 35**Runoff Area=11.838 ac 0.00% Impervious Runoff Depth>3.48"
Flow Length=579' Tc=21.7 min CN=78 Runoff=33.70 cfs 3.434 af**Pond 7P: (new Pond)**Peak Elev=164.71' Storage=138,244 cf Inflow=35.39 cfs 4.783 af
Outflow=4.93 cfs 2.077 af

Existing Conditions - North Plantation

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Type III 24-hr 25 year Rainfall=6.18"

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Page 64

Pond 10P: (new Pond)Peak Elev=150.18' Storage=28,013 cf Inflow=7.60 cfs 0.644 af
Outflow=0.00 cfs 0.000 af**Pond 11P: (new Pond)**Peak Elev=145.96' Storage=34,757 cf Inflow=8.50 cfs 0.799 af
Outflow=0.00 cfs 0.000 af**Pond 12P: (new Pond)**Peak Elev=163.37' Storage=34,165 cf Inflow=9.14 cfs 0.785 af
Outflow=0.00 cfs 0.000 af**Pond 13P: (new Pond)**Peak Elev=161.78' Storage=70,089 cf Inflow=33.84 cfs 5.195 af
Outflow=28.52 cfs 4.110 af**Pond 15P: (new Pond)**Peak Elev=163.66' Storage=32,790 cf Inflow=7.92 cfs 0.753 af
Outflow=0.00 cfs 0.000 af**Pond 16P: (new Pond)**Peak Elev=163.05' Storage=40,041 cf Inflow=12.86 cfs 1.367 af
Outflow=1.56 cfs 0.500 af**Pond 19P: (new Pond)**Peak Elev=153.80' Storage=52,762 cf Inflow=42.97 cfs 5.694 af
Outflow=38.63 cfs 5.055 af**Pond 28P: (new Pond)**Peak Elev=154.55' Storage=45,177 cf Inflow=11.12 cfs 1.038 af
Outflow=0.00 cfs 0.000 af**Pond 29P: (new Pond)**Peak Elev=147.17' Storage=1,607 cf Inflow=0.15 cfs 0.037 af
Outflow=0.00 cfs 0.000 af**Pond 30P: (new Pond)**Peak Elev=170.99' Storage=38,698 cf Inflow=11.24 cfs 0.889 af
Outflow=0.00 cfs 0.000 af**Pond 31P: (new Pond)**Peak Elev=146.13' Storage=6,953 cf Inflow=1.07 cfs 0.160 af
Outflow=0.00 cfs 0.000 af**Pond 35P: (new Pond)**Peak Elev=157.52' Storage=149,473 cf Inflow=33.70 cfs 3.434 af
Outflow=0.00 cfs 0.000 af**Total Runoff Area = 200.819 ac Runoff Volume = 50.501 af Average Runoff Depth = 3.02"**
99.72% Pervious = 200.254 ac 0.28% Impervious = 0.565 ac

Existing Conditions - North Plantation

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Type III 24-hr 50 year Rainfall=7.02"

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Page 119

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1: Subcat 1Runoff Area=0.863 ac 0.00% Impervious Runoff Depth>4.43"
Flow Length=247' Tc=7.9 min CN=80 Runoff=4.37 cfs 0.319 af**Subcatchment2: Subcat 2**Runoff Area=5.512 ac 0.00% Impervious Runoff Depth>1.67"
Flow Length=343' Tc=15.3 min CN=52 Runoff=7.98 cfs 0.768 af**Subcatchment3: Subcat 3**Runoff Area=2.555 ac 0.00% Impervious Runoff Depth>2.77"
Flow Length=188' Tc=18.8 min CN=64 Runoff=6.13 cfs 0.590 af**Subcatchment4: Subcat 4**Runoff Area=3.648 ac 0.00% Impervious Runoff Depth>2.78"
Flow Length=462' Tc=11.1 min CN=64 Runoff=10.66 cfs 0.845 af**Subcatchment5: Subcat 5**Runoff Area=8.688 ac 0.00% Impervious Runoff Depth>3.77"
Flow Length=790' Tc=21.9 min CN=74 Runoff=26.78 cfs 2.731 af**Subcatchment6: Subcat 6**Runoff Area=6.474 ac 0.00% Impervious Runoff Depth>3.68"
Flow Length=527' Tc=15.4 min CN=73 Runoff=22.39 cfs 1.983 af**Subcatchment7: Subcat 7**Runoff Area=17.083 ac 0.00% Impervious Runoff Depth>4.06"
Flow Length=1,407' Tc=41.0 min CN=77 Runoff=42.59 cfs 5.782 af**Subcatchment8: (new Subcat)**Runoff Area=3.130 ac 0.00% Impervious Runoff Depth>3.38"
Tc=10.0 min CN=70 Runoff=11.51 cfs 0.880 af**Subcatchment10: Subcat 10**Runoff Area=3.666 ac 0.00% Impervious Runoff Depth>2.68"
Flow Length=427' Tc=12.8 min CN=63 Runoff=9.76 cfs 0.819 af**Subcatchment11: Subcat 11**Runoff Area=5.661 ac 0.85% Impervious Runoff Depth>2.21"
Flow Length=598' Tc=15.6 min CN=58 Runoff=11.32 cfs 1.041 af**Subcatchment12: Subcat 12**Runoff Area=2.699 ac 5.89% Impervious Runoff Depth>4.20"
Flow Length=374' Tc=13.9 min CN=78 Runoff=10.95 cfs 0.945 af**Subcatchment13: Subcat 13**Runoff Area=18.096 ac 1.07% Impervious Runoff Depth>4.15"
Flow Length=1,351' Tc=52.0 min CN=78 Runoff=40.60 cfs 6.262 af**Subcatchment14: Subcat 14**Runoff Area=0.597 ac 0.00% Impervious Runoff Depth>4.21"
Flow Length=270' Tc=12.6 min CN=78 Runoff=2.52 cfs 0.209 af**Subcatchment15: Subcat 15**Runoff Area=2.521 ac 4.81% Impervious Runoff Depth>4.31"
Flow Length=562' Tc=18.2 min CN=79 Runoff=9.46 cfs 0.905 af**Subcatchment16: Subcat 16**Runoff Area=4.718 ac 0.92% Impervious Runoff Depth>4.19"
Flow Length=719' Tc=24.0 min CN=78 Runoff=15.42 cfs 1.648 af**Subcatchment17: Subcat 17**Runoff Area=5.336 ac 0.00% Impervious Runoff Depth>3.88"
Flow Length=704' Tc=20.0 min CN=75 Runoff=17.55 cfs 1.725 af

Existing Conditions - North Plantation

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Type III 24-hr 50 year Rainfall=7.02"

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Page 120

Subcatchment18: Subcat 18Runoff Area=1.751 ac 0.00% Impervious Runoff Depth>3.98"
Flow Length=422' Tc=21.6 min CN=76 Runoff=5.71 cfs 0.581 af**Subcatchment19: Subcat 19**Runoff Area=21.570 ac 0.00% Impervious Runoff Depth>3.85"
Flow Length=1,667' Tc=39.5 min CN=75 Runoff=52.11 cfs 6.927 af**Subcatchment20: Subcat 20**Runoff Area=1.629 ac 0.00% Impervious Runoff Depth>3.67"
Flow Length=544' Tc=18.7 min CN=73 Runoff=5.22 cfs 0.499 af**Subcatchment21: Subcat 21**Runoff Area=3.990 ac 0.00% Impervious Runoff Depth>3.36"
Flow Length=1,249' Tc=27.1 min CN=70 Runoff=10.02 cfs 1.115 af**Subcatchment22: Subcat 22**Runoff Area=17.726 ac 0.00% Impervious Runoff Depth>3.63"
Flow Length=2,340' Tc=55.2 min CN=73 Runoff=33.86 cfs 5.355 af**Subcatchment23: Subcat 23**Runoff Area=0.264 ac 0.00% Impervious Runoff Depth>4.21"
Flow Length=133' Tc=5.5 min CN=78 Runoff=1.37 cfs 0.093 af**Subcatchment24: Subcat 24**Runoff Area=2.795 ac 0.00% Impervious Runoff Depth>3.78"
Flow Length=746' Tc=16.2 min CN=74 Runoff=9.74 cfs 0.880 af**Subcatchment25: Subcat 25**Runoff Area=12.168 ac 0.00% Impervious Runoff Depth>3.96"
Tc=38.1 min CN=76 Runoff=30.73 cfs 4.015 af**Subcatchment27: Subcat 27**Runoff Area=2.191 ac 0.00% Impervious Runoff Depth>3.16"
Flow Length=464' Tc=19.4 min CN=68 Runoff=5.97 cfs 0.578 af**Subcatchment28: Subcat 28**Runoff Area=7.360 ac 0.00% Impervious Runoff Depth>2.21"
Flow Length=461' Tc=15.3 min CN=58 Runoff=14.81 cfs 1.353 af**Subcatchment29: Subcat 29**Runoff Area=1.626 ac 0.00% Impervious Runoff Depth>0.47"
Flow Length=167' Tc=13.2 min CN=36 Runoff=0.36 cfs 0.064 af**Subcatchment30: Subcat 30**Runoff Area=3.911 ac 0.00% Impervious Runoff Depth>3.37"
Flow Length=380' Tc=11.2 min CN=70 Runoff=13.91 cfs 1.100 af**Subcatchment31: Subcat 31**Runoff Area=3.646 ac 0.00% Impervious Runoff Depth>0.81"
Flow Length=261' Tc=7.6 min CN=41 Runoff=2.20 cfs 0.245 af**Subcatchment32: Subcat 32**Runoff Area=4.598 ac 0.00% Impervious Runoff Depth>5.09"
Tc=0.0 min CN=86 Runoff=32.19 cfs 1.952 af**Subcatchment33: Subcat 33**Runoff Area=12.509 ac 0.00% Impervious Runoff Depth>4.98"
Tc=0.0 min CN=85 Runoff=86.17 cfs 5.196 af**Subcatchment35: Subcat 35**Runoff Area=11.838 ac 0.00% Impervious Runoff Depth>4.19"
Flow Length=579' Tc=21.7 min CN=78 Runoff=40.41 cfs 4.137 af**Pond 7P: (new Pond)**Peak Elev=164.79' Storage=155,819 cf Inflow=42.59 cfs 5.782 af
Outflow=8.07 cfs 3.013 af

Existing Conditions - North Plantation

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Type III 24-hr 50 year Rainfall=7.02"

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Page 121

Pond 10P: (new Pond)	Peak Elev=150.84' Storage=37,490 cf Inflow=9.76 cfs 0.862 af Outflow=0.00 cfs 0.000 af
Pond 11P: (new Pond)	Peak Elev=146.66' Storage=45,298 cf Inflow=11.32 cfs 1.041 af Outflow=0.00 cfs 0.000 af
Pond 12P: (new Pond)	Peak Elev=163.53' Storage=39,314 cf Inflow=10.95 cfs 0.945 af Outflow=0.24 cfs 0.043 af
Pond 13P: (new Pond)	Peak Elev=161.83' Storage=75,112 cf Inflow=40.60 cfs 6.262 af Outflow=35.97 cfs 5.169 af
Pond 15P: (new Pond)	Peak Elev=163.81' Storage=39,386 cf Inflow=9.46 cfs 0.905 af Outflow=0.00 cfs 0.000 af
Pond 16P: (new Pond)	Peak Elev=163.09' Storage=42,823 cf Inflow=15.42 cfs 1.648 af Outflow=3.54 cfs 0.777 af
Pond 19P: (new Pond)	Peak Elev=153.92' Storage=57,779 cf Inflow=52.11 cfs 6.927 af Outflow=47.33 cfs 6.280 af
Pond 28P: (new Pond)	Peak Elev=155.13' Storage=58,912 cf Inflow=14.81 cfs 1.353 af Outflow=0.00 cfs 0.000 af
Pond 29P: (new Pond)	Peak Elev=147.74' Storage=2,786 cf Inflow=0.36 cfs 0.064 af Outflow=0.00 cfs 0.000 af
Pond 30P: (new Pond)	Peak Elev=171.20' Storage=47,872 cf Inflow=13.91 cfs 1.100 af Outflow=0.00 cfs 0.000 af
Pond 31P: (new Pond)	Peak Elev=146.63' Storage=10,635 cf Inflow=2.20 cfs 0.245 af Outflow=0.00 cfs 0.000 af
Pond 35P: (new Pond)	Peak Elev=157.82' Storage=180,107 cf Inflow=40.41 cfs 4.137 af Outflow=0.00 cfs 0.000 af

Total Runoff Area = 200.819 ac Runoff Volume = 61.542 af Average Runoff Depth = 3.68"
99.72% Pervious = 200.254 ac 0.28% Impervious = 0.565 ac

Existing Conditions - North Plantation

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Type III 24-hr 100 year Rainfall=7.96"

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Page 176

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1: Subcat 1Runoff Area=0.863 ac 0.00% Impervious Runoff Depth>5.26"
Flow Length=247' Tc=7.9 min CN=80 Runoff=5.15 cfs 0.378 af**Subcatchment2: Subcat 2**Runoff Area=5.512 ac 0.00% Impervious Runoff Depth>2.21"
Flow Length=343' Tc=15.3 min CN=52 Runoff=10.87 cfs 1.014 af**Subcatchment3: Subcat 3**Runoff Area=2.555 ac 0.00% Impervious Runoff Depth>3.46"
Flow Length=188' Tc=18.8 min CN=64 Runoff=7.69 cfs 0.736 af**Subcatchment4: Subcat 4**Runoff Area=3.648 ac 0.00% Impervious Runoff Depth>3.47"
Flow Length=462' Tc=11.1 min CN=64 Runoff=13.36 cfs 1.054 af**Subcatchment5: Subcat 5**Runoff Area=8.688 ac 0.00% Impervious Runoff Depth>4.56"
Flow Length=790' Tc=21.9 min CN=74 Runoff=32.22 cfs 3.298 af**Subcatchment6: Subcat 6**Runoff Area=6.474 ac 0.00% Impervious Runoff Depth>4.45"
Flow Length=527' Tc=15.4 min CN=73 Runoff=27.03 cfs 2.402 af**Subcatchment7: Subcat 7**Runoff Area=17.083 ac 0.00% Impervious Runoff Depth>4.87"
Flow Length=1,407' Tc=41.0 min CN=77 Runoff=50.74 cfs 6.926 af**Subcatchment8: (new Subcat)**Runoff Area=3.130 ac 0.00% Impervious Runoff Depth>4.13"
Tc=10.0 min CN=70 Runoff=14.04 cfs 1.076 af**Subcatchment10: Subcat 10**Runoff Area=3.666 ac 0.00% Impervious Runoff Depth>3.36"
Flow Length=427' Tc=12.8 min CN=63 Runoff=12.30 cfs 1.025 af**Subcatchment11: Subcat 11**Runoff Area=5.661 ac 0.85% Impervious Runoff Depth>2.82"
Flow Length=598' Tc=15.6 min CN=58 Runoff=14.68 cfs 1.331 af**Subcatchment12: Subcat 12**Runoff Area=2.699 ac 5.89% Impervious Runoff Depth>5.02"
Flow Length=374' Tc=13.9 min CN=78 Runoff=13.00 cfs 1.129 af**Subcatchment13: Subcat 13**Runoff Area=18.096 ac 1.07% Impervious Runoff Depth>4.96"
Flow Length=1,351' Tc=52.0 min CN=78 Runoff=48.23 cfs 7.481 af**Subcatchment14: Subcat 14**Runoff Area=0.597 ac 0.00% Impervious Runoff Depth>5.02"
Flow Length=270' Tc=12.6 min CN=78 Runoff=2.98 cfs 0.250 af**Subcatchment15: Subcat 15**Runoff Area=2.521 ac 4.81% Impervious Runoff Depth>5.13"
Flow Length=562' Tc=18.2 min CN=79 Runoff=11.19 cfs 1.077 af**Subcatchment16: Subcat 16**Runoff Area=4.718 ac 0.92% Impervious Runoff Depth>5.01"
Flow Length=719' Tc=24.0 min CN=78 Runoff=18.31 cfs 1.968 af**Subcatchment17: Subcat 17**Runoff Area=5.336 ac 0.00% Impervious Runoff Depth>4.67"
Flow Length=704' Tc=20.0 min CN=75 Runoff=21.04 cfs 2.077 af

Existing Conditions - North Plantation

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Page 177

Subcatchment18: Subcat 18

Runoff Area=1.751 ac 0.00% Impervious Runoff Depth>4.78"
Flow Length=422' Tc=21.6 min CN=76 Runoff=6.83 cfs 0.698 af

Subcatchment19: Subcat 19

Runoff Area=21.570 ac 0.00% Impervious Runoff Depth>4.64"
Flow Length=1,667' Tc=39.5 min CN=75 Runoff=62.49 cfs 8.343 af

Subcatchment20: Subcat 20

Runoff Area=1.629 ac 0.00% Impervious Runoff Depth>4.45"
Flow Length=544' Tc=18.7 min CN=73 Runoff=6.30 cfs 0.604 af

Subcatchment21: Subcat 21

Runoff Area=3.990 ac 0.00% Impervious Runoff Depth>4.10"
Flow Length=1,249' Tc=27.1 min CN=70 Runoff=12.24 cfs 1.364 af

Subcatchment22: Subcat 22

Runoff Area=17.726 ac 0.00% Impervious Runoff Depth>4.39"
Flow Length=2,340' Tc=55.2 min CN=73 Runoff=40.91 cfs 6.490 af

Subcatchment23: Subcat 23

Runoff Area=0.264 ac 0.00% Impervious Runoff Depth>5.03"
Flow Length=133' Tc=5.5 min CN=78 Runoff=1.62 cfs 0.111 af

Subcatchment24: Subcat 24

Runoff Area=2.795 ac 0.00% Impervious Runoff Depth>4.56"
Flow Length=746' Tc=16.2 min CN=74 Runoff=11.72 cfs 1.063 af

Subcatchment25: Subcat 25

Runoff Area=12.168 ac 0.00% Impervious Runoff Depth>4.76"
Tc=38.1 min CN=76 Runoff=36.73 cfs 4.823 af

Subcatchment27: Subcat 27

Runoff Area=2.191 ac 0.00% Impervious Runoff Depth>3.89"
Flow Length=464' Tc=19.4 min CN=68 Runoff=7.35 cfs 0.711 af

Subcatchment28: Subcat 28

Runoff Area=7.360 ac 0.00% Impervious Runoff Depth>2.82"
Flow Length=461' Tc=15.3 min CN=58 Runoff=19.33 cfs 1.731 af

Subcatchment29: Subcat 29

Runoff Area=1.626 ac 0.00% Impervious Runoff Depth>0.75"
Flow Length=167' Tc=13.2 min CN=36 Runoff=0.69 cfs 0.102 af

Subcatchment30: Subcat 30

Runoff Area=3.911 ac 0.00% Impervious Runoff Depth>4.12"
Flow Length=380' Tc=11.2 min CN=70 Runoff=16.98 cfs 1.344 af

Subcatchment31: Subcat 31

Runoff Area=3.646 ac 0.00% Impervious Runoff Depth>1.17"
Flow Length=261' Tc=7.6 min CN=41 Runoff=3.79 cfs 0.356 af

Subcatchment32: Subcat 32

Runoff Area=4.598 ac 0.00% Impervious Runoff Depth>5.96"
Tc=0.0 min CN=86 Runoff=37.30 cfs 2.282 af

Subcatchment33: Subcat 33

Runoff Area=12.509 ac 0.00% Impervious Runoff Depth>5.84"
Tc=0.0 min CN=85 Runoff=100.11 cfs 6.090 af

Subcatchment35: Subcat 35

Runoff Area=11.838 ac 0.00% Impervious Runoff Depth>5.01"
Flow Length=579' Tc=21.7 min CN=78 Runoff=47.97 cfs 4.941 af

Pond 7P: (new Pond)

Peak Elev=164.89' Storage=176,610 cf Inflow=50.74 cfs 6.926 af
Outflow=12.38 cfs 4.095 af

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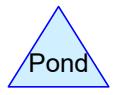
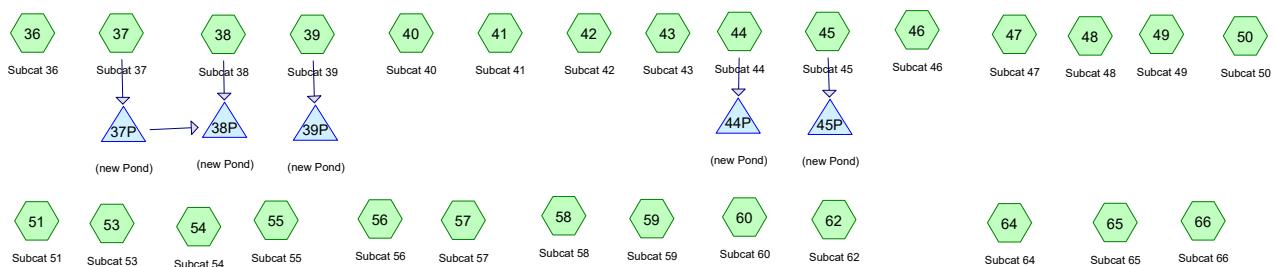
Type III 24-hr 100 year Rainfall=7.96"

Printed 7/22/2020

Page 178

Pond 10P: (new Pond)	Peak Elev=151.82' Storage=54,358 cf	Inflow=12.30 cfs 1.249 af	Outflow=0.00 cfs 0.000 af
Pond 11P: (new Pond)	Peak Elev=147.38' Storage=57,944 cf	Inflow=14.68 cfs 1.331 af	Outflow=0.00 cfs 0.000 af
Pond 12P: (new Pond)	Peak Elev=163.56' Storage=40,334 cf	Inflow=13.00 cfs 1.129 af	Outflow=0.68 cfs 0.224 af
Pond 13P: (new Pond)	Peak Elev=161.88' Storage=80,241 cf	Inflow=48.23 cfs 7.481 af	Outflow=43.83 cfs 6.380 af
Pond 15P: (new Pond)	Peak Elev=163.98' Storage=46,912 cf	Inflow=11.19 cfs 1.077 af	Outflow=0.00 cfs 0.000 af
Pond 16P: (new Pond)	Peak Elev=163.14' Storage=46,466 cf	Inflow=18.31 cfs 1.968 af	Outflow=6.70 cfs 1.094 af
Pond 19P: (new Pond)	Peak Elev=154.04' Storage=63,241 cf	Inflow=62.49 cfs 8.343 af	Outflow=57.05 cfs 7.689 af
Pond 28P: (new Pond)	Peak Elev=155.72' Storage=75,341 cf	Inflow=19.33 cfs 1.731 af	Outflow=0.00 cfs 0.000 af
Pond 29P: (new Pond)	Peak Elev=148.37' Storage=4,416 cf	Inflow=0.69 cfs 0.102 af	Outflow=0.00 cfs 0.000 af
Pond 30P: (new Pond)	Peak Elev=171.43' Storage=58,516 cf	Inflow=16.98 cfs 1.344 af	Outflow=0.00 cfs 0.000 af
Pond 31P: (new Pond)	Peak Elev=147.13' Storage=15,454 cf	Inflow=3.79 cfs 0.356 af	Outflow=0.00 cfs 0.000 af
Pond 35P: (new Pond)	Peak Elev=158.11' Storage=215,118 cf	Inflow=47.97 cfs 4.941 af	Outflow=0.00 cfs 0.000 af

Total Runoff Area = 200.819 ac Runoff Volume = 74.275 af Average Runoff Depth = 4.44"
99.72% Pervious = 200.254 ac 0.28% Impervious = 0.565 ac



Routing Diagram for Existing Conditions - South Plantation

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Page 2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.002	0	, HSG A (62)
0.001	0	, HSG B (62)
2.022	46	2 acre lots, 12% imp, HSG A (40, 41, 42, 43, 53, 56, 57, 58, 59, 60, 62, 64)
16.959	65	2 acre lots, 12% imp, HSG B (36, 39, 40, 41, 42, 43, 51, 53, 54, 56, 57, 58, 59, 60, 62)
0.107	89	Paved roads w/open ditches, 50% imp, HSG B (36, 37, 39, 62, 66)
2.256	98	Roofs, HSG B (49, 60)
1.324	67	Row crops, straight row, Good, HSG A (44, 45, 46, 47, 48, 49, 55, 59, 64, 65)
94.391	78	Row crops, straight row, Good, HSG B (36, 37, 38, 39, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 55, 56, 57, 59, 60, 62, 64, 65, 66)
20.938	36	Woods, Fair, HSG A (42, 43, 46, 47, 48, 49, 50, 51, 53, 54, 55, 56, 57, 58, 59, 60, 62, 64, 65)
7.953	60	Woods, Fair, HSG B (43, 46, 47, 48, 49, 50, 51, 53, 54, 55, 56, 57, 58, 59, 60, 62, 65, 66)
145.952	69	TOTAL AREA

Existing Conditions - South Plantation

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Page 3

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
24.286	HSG A	40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 53, 54, 55, 56, 57, 58, 59, 60, 62, 64, 65
121.666	HSG B	36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 53, 54, 55, 56, 57, 58, 59, 60, 62, 64, 65, 66
0.000	HSG C	
0.000	HSG D	
0.000	Other	
145.952		TOTAL AREA

Exisiting Conditions - South Plantation

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Page 4

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatch Numbers
0.002	0.001	0.000	0.000	0.000	0.003		
2.022	16.959	0.000	0.000	0.000	18.981	2 acre lots, 12% imp	
0.000	0.107	0.000	0.000	0.000	0.107	Paved roads w/open ditches, 50% imp	
0.000	2.256	0.000	0.000	0.000	2.256	Roofs	
1.324	94.391	0.000	0.000	0.000	95.715	Row crops, straight row, Good	
20.938	7.953	0.000	0.000	0.000	28.890	Woods, Fair	
24.286	121.666	0.000	0.000	0.000	145.952	TOTAL AREA	

Existing Conditions - South Plantation

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Type III 24-hr 2 year Rainfall=3.16"

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Page 5

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment36: Subcat 36Runoff Area=8.684 ac 0.33% Impervious Runoff Depth>1.13"
Flow Length=944' Tc=28.5 min CN=78 Runoff=7.14 cfs 0.820 af**Subcatchment37: Subcat 37**Runoff Area=1.143 ac 0.10% Impervious Runoff Depth>1.14"
Flow Length=405' Tc=15.1 min CN=78 Runoff=1.22 cfs 0.109 af**Subcatchment38: Subcat 38**Runoff Area=3.921 ac 0.00% Impervious Runoff Depth>1.14"
Flow Length=567' Tc=20.9 min CN=78 Runoff=3.68 cfs 0.372 af**Subcatchment39: Subcat 39**Runoff Area=2.047 ac 5.11% Impervious Runoff Depth>0.87"
Flow Length=200' Tc=10.7 min CN=73 Runoff=1.81 cfs 0.148 af**Subcatchment40: Subcat 40**Runoff Area=0.652 ac 12.00% Impervious Runoff Depth>0.51"
Flow Length=208' Tc=10.2 min CN=65 Runoff=0.29 cfs 0.028 af**Subcatchment41: Subcat 41**Runoff Area=0.889 ac 10.73% Impervious Runoff Depth>0.48"
Flow Length=245' Tc=9.2 min CN=64 Runoff=0.37 cfs 0.035 af**Subcatchment42: Subcat 42**Runoff Area=1.849 ac 7.72% Impervious Runoff Depth>0.51"
Flow Length=384' Tc=13.6 min CN=65 Runoff=0.75 cfs 0.079 af**Subcatchment43: Subcat 43**Runoff Area=0.915 ac 7.83% Impervious Runoff Depth>0.44"
Flow Length=354' Tc=14.5 min CN=63 Runoff=0.29 cfs 0.034 af**Subcatchment44: Subcat 44**Runoff Area=2.114 ac 0.00% Impervious Runoff Depth>1.08"
Flow Length=363' Tc=10.2 min CN=77 Runoff=2.44 cfs 0.191 af**Subcatchment45: Subcat 45**Runoff Area=2.350 ac 0.00% Impervious Runoff Depth>1.09"
Flow Length=214' Tc=6.4 min CN=77 Runoff=3.08 cfs 0.213 af**Subcatchment46: Subcat 46**Runoff Area=3.063 ac 0.00% Impervious Runoff Depth>1.08"
Flow Length=522' Tc=11.7 min CN=77 Runoff=3.38 cfs 0.276 af**Subcatchment47: Subcat 47**Runoff Area=3.767 ac 0.00% Impervious Runoff Depth>0.25"
Flow Length=463' Tc=13.2 min CN=57 Runoff=0.49 cfs 0.079 af**Subcatchment48: Subcat 48**Runoff Area=5.342 ac 0.00% Impervious Runoff Depth>0.44"
Flow Length=376' Tc=12.2 min CN=63 Runoff=1.77 cfs 0.196 af**Subcatchment49: Subcat 49**Runoff Area=3.212 ac 20.41% Impervious Runoff Depth>0.48"
Flow Length=466' Tc=13.3 min CN=64 Runoff=1.16 cfs 0.127 af**Subcatchment50: Subcat 50**Runoff Area=7.384 ac 0.00% Impervious Runoff Depth>0.59"
Tc=13.3 min CN=67 Runoff=3.72 cfs 0.365 af**Subcatchment51: Subcat 51**Runoff Area=27.555 ac 0.43% Impervious Runoff Depth>1.07"
Flow Length=1,356' Tc=33.5 min CN=77 Runoff=19.86 cfs 2.464 af

Existing Conditions - South Plantation

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Type III 24-hr 2 year Rainfall=3.16"

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Page 6

Subcatchment53: Subcat 53Runoff Area=4.763 ac 1.36% Impervious Runoff Depth>0.00"
Tc=0.0 min CN=40 Runoff=0.00 cfs 0.000 af**Subcatchment54: Subcat 54**Runoff Area=4.933 ac 0.15% Impervious Runoff Depth>0.00"
Tc=0.0 min CN=41 Runoff=0.00 cfs 0.001 af**Subcatchment55: Subcat 55**Runoff Area=2.683 ac 0.00% Impervious Runoff Depth>0.97"
Flow Length=790' Tc=20.4 min CN=75 Runoff=2.12 cfs 0.217 af**Subcatchment56: Subcat 56**Runoff Area=7.230 ac 2.24% Impervious Runoff Depth>0.82"
Tc=0.0 min CN=72 Runoff=8.14 cfs 0.496 af**Subcatchment57: Subcat 57**Runoff Area=5.692 ac 2.59% Impervious Runoff Depth>0.77"
Flow Length=567' Tc=16.3 min CN=71 Runoff=3.73 cfs 0.365 af**Subcatchment58: Subcat 58**Runoff Area=2.853 ac 4.92% Impervious Runoff Depth>0.05"
Flow Length=591' Tc=14.0 min CN=47 Runoff=0.03 cfs 0.011 af**Subcatchment59: Subcat 59**Runoff Area=4.073 ac 4.25% Impervious Runoff Depth>0.05"
Flow Length=316' Tc=12.3 min CN=47 Runoff=0.04 cfs 0.016 af**Subcatchment60: Subcat 60**Runoff Area=7.389 ac 22.44% Impervious Runoff Depth>1.13"
Flow Length=1,003' Tc=32.4 min CN=78 Runoff=5.72 cfs 0.697 af**Subcatchment62: Subcat 62**Runoff Area=24.202 ac 3.83% Impervious Runoff Depth>0.76"
Flow Length=1,288' Tc=29.6 min CN=71 Runoff=12.47 cfs 1.540 af**Subcatchment64: Subcat 64**Runoff Area=1.772 ac 0.08% Impervious Runoff Depth>0.63"
Flow Length=404' Tc=14.5 min CN=68 Runoff=0.94 cfs 0.094 af**Subcatchment65: Subcat 65**Runoff Area=3.560 ac 0.00% Impervious Runoff Depth>0.97"
Flow Length=599' Tc=22.0 min CN=75 Runoff=2.73 cfs 0.287 af**Subcatchment66: Subcat 66**Runoff Area=1.916 ac 0.53% Impervious Runoff Depth>1.03"
Flow Length=379' Tc=13.5 min CN=76 Runoff=1.89 cfs 0.164 af**Pond 37P: (new Pond)**Peak Elev=166.51' Storage=2,623 cf Inflow=1.22 cfs 0.109 af
Outflow=0.22 cfs 0.050 af**Pond 38P: (new Pond)**Peak Elev=164.52' Storage=13,479 cf Inflow=3.68 cfs 0.422 af
Outflow=0.41 cfs 0.119 af**Pond 39P: (new Pond)**Peak Elev=164.66' Storage=6,449 cf Inflow=1.81 cfs 0.148 af
Outflow=0.00 cfs 0.000 af**Pond 44P: (new Pond)**Peak Elev=158.53' Storage=8,312 cf Inflow=2.44 cfs 0.191 af
Outflow=0.00 cfs 0.000 af**Pond 45P: (new Pond)**Peak Elev=154.81' Storage=9,255 cf Inflow=3.08 cfs 0.213 af
Outflow=0.00 cfs 0.000 af

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Type III 24-hr 2 year Rainfall=3.16"

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Page 7

Total Runoff Area = 145.952 ac Runoff Volume = 9.424 af Average Runoff Depth = 0.77"
96.86% Pervious = 141.365 ac 3.14% Impervious = 4.587 ac

Existing Conditions - South Plantation

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Type III 24-hr 25 year Rainfall=6.18"

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Page 49

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment36: Subcat 36Runoff Area=8.684 ac 0.33% Impervious Runoff Depth>3.47"
Flow Length=944' Tc=28.5 min CN=78 Runoff=21.99 cfs 2.513 af**Subcatchment37: Subcat 37**Runoff Area=1.143 ac 0.10% Impervious Runoff Depth>3.49"
Flow Length=405' Tc=15.1 min CN=78 Runoff=3.76 cfs 0.332 af**Subcatchment38: Subcat 38**Runoff Area=3.921 ac 0.00% Impervious Runoff Depth>3.48"
Flow Length=567' Tc=20.9 min CN=78 Runoff=11.33 cfs 1.138 af**Subcatchment39: Subcat 39**Runoff Area=2.047 ac 5.11% Impervious Runoff Depth>3.01"
Flow Length=200' Tc=10.7 min CN=73 Runoff=6.58 cfs 0.513 af**Subcatchment40: Subcat 40**Runoff Area=0.652 ac 12.00% Impervious Runoff Depth>2.28"
Flow Length=208' Tc=10.2 min CN=65 Runoff=1.60 cfs 0.124 af**Subcatchment41: Subcat 41**Runoff Area=0.889 ac 10.73% Impervious Runoff Depth>2.20"
Flow Length=245' Tc=9.2 min CN=64 Runoff=2.14 cfs 0.163 af**Subcatchment42: Subcat 42**Runoff Area=1.849 ac 7.72% Impervious Runoff Depth>2.28"
Flow Length=384' Tc=13.6 min CN=65 Runoff=4.10 cfs 0.351 af**Subcatchment43: Subcat 43**Runoff Area=0.915 ac 7.83% Impervious Runoff Depth>2.11"
Flow Length=354' Tc=14.5 min CN=63 Runoff=1.82 cfs 0.161 af**Subcatchment44: Subcat 44**Runoff Area=2.114 ac 0.00% Impervious Runoff Depth>3.39"
Flow Length=363' Tc=10.2 min CN=77 Runoff=7.74 cfs 0.598 af**Subcatchment45: Subcat 45**Runoff Area=2.350 ac 0.00% Impervious Runoff Depth>3.40"
Flow Length=214' Tc=6.4 min CN=77 Runoff=9.72 cfs 0.666 af**Subcatchment46: Subcat 46**Runoff Area=3.063 ac 0.00% Impervious Runoff Depth>3.39"
Flow Length=522' Tc=11.7 min CN=77 Runoff=10.76 cfs 0.866 af**Subcatchment47: Subcat 47**Runoff Area=3.767 ac 0.00% Impervious Runoff Depth>1.62"
Flow Length=463' Tc=13.2 min CN=57 Runoff=5.70 cfs 0.507 af**Subcatchment48: Subcat 48**Runoff Area=5.342 ac 0.00% Impervious Runoff Depth>2.11"
Flow Length=376' Tc=12.2 min CN=63 Runoff=11.23 cfs 0.938 af**Subcatchment49: Subcat 49**Runoff Area=3.212 ac 20.41% Impervious Runoff Depth>2.19"
Flow Length=466' Tc=13.3 min CN=64 Runoff=6.88 cfs 0.587 af**Subcatchment50: Subcat 50**Runoff Area=7.384 ac 0.00% Impervious Runoff Depth>2.45"
Tc=13.3 min CN=67 Runoff=17.85 cfs 1.510 af**Subcatchment51: Subcat 51**Runoff Area=27.555 ac 0.43% Impervious Runoff Depth>3.37"
Flow Length=1,356' Tc=33.5 min CN=77 Runoff=63.05 cfs 7.735 af

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Type III 24-hr 25 year Rainfall=6.18"

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Page 50

Subcatchment53: Subcat 53Runoff Area=4.763 ac 1.36% Impervious Runoff Depth>0.47"
Tc=0.0 min CN=40 Runoff=1.32 cfs 0.188 af**Subcatchment54: Subcat 54**Runoff Area=4.933 ac 0.15% Impervious Runoff Depth>0.53"
Tc=0.0 min CN=41 Runoff=1.78 cfs 0.218 af**Subcatchment55: Subcat 55**Runoff Area=2.683 ac 0.00% Impervious Runoff Depth>3.19"
Flow Length=790' Tc=20.4 min CN=75 Runoff=7.20 cfs 0.713 af**Subcatchment56: Subcat 56**Runoff Area=7.230 ac 2.24% Impervious Runoff Depth>2.92"
Tc=0.0 min CN=72 Runoff=30.58 cfs 1.762 af**Subcatchment57: Subcat 57**Runoff Area=5.692 ac 2.59% Impervious Runoff Depth>2.81"
Flow Length=567' Tc=16.3 min CN=71 Runoff=14.71 cfs 1.335 af**Subcatchment58: Subcat 58**Runoff Area=2.853 ac 4.92% Impervious Runoff Depth>0.89"
Flow Length=591' Tc=14.0 min CN=47 Runoff=1.86 cfs 0.212 af**Subcatchment59: Subcat 59**Runoff Area=4.073 ac 4.25% Impervious Runoff Depth>0.89"
Flow Length=316' Tc=12.3 min CN=47 Runoff=2.78 cfs 0.302 af**Subcatchment60: Subcat 60**Runoff Area=7.389 ac 22.44% Impervious Runoff Depth>3.47"
Flow Length=1,003' Tc=32.4 min CN=78 Runoff=17.62 cfs 2.136 af**Subcatchment62: Subcat 62**Runoff Area=24.202 ac 3.83% Impervious Runoff Depth>2.80"
Flow Length=1,288' Tc=29.6 min CN=71 Runoff=48.90 cfs 5.649 af**Subcatchment64: Subcat 64**Runoff Area=1.772 ac 0.08% Impervious Runoff Depth>2.54"
Flow Length=404' Tc=14.5 min CN=68 Runoff=4.32 cfs 0.376 af**Subcatchment65: Subcat 65**Runoff Area=3.560 ac 0.00% Impervious Runoff Depth>3.19"
Flow Length=599' Tc=22.0 min CN=75 Runoff=9.27 cfs 0.946 af**Subcatchment66: Subcat 66**Runoff Area=1.916 ac 0.53% Impervious Runoff Depth>3.29"
Flow Length=379' Tc=13.5 min CN=76 Runoff=6.20 cfs 0.526 af**Pond 37P: (new Pond)**Peak Elev=166.59' Storage=3,286 cf Inflow=3.76 cfs 0.332 af
Outflow=3.61 cfs 0.273 af**Pond 38P: (new Pond)**Peak Elev=164.70' Storage=18,415 cf Inflow=14.87 cfs 1.411 af
Outflow=12.32 cfs 1.102 af**Pond 39P: (new Pond)**Peak Elev=165.34' Storage=22,340 cf Inflow=6.58 cfs 0.513 af
Outflow=0.00 cfs 0.000 af**Pond 44P: (new Pond)**Peak Elev=159.03' Storage=18,005 cf Inflow=7.74 cfs 0.598 af
Outflow=0.67 cfs 0.194 af**Pond 45P: (new Pond)**Peak Elev=156.02' Storage=28,983 cf Inflow=9.72 cfs 0.666 af
Outflow=0.00 cfs 0.000 af

Existing Conditions - South Plantation

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Type III 24-hr 25 year Rainfall=6.18"

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Page 51

Total Runoff Area = 145.952 ac Runoff Volume = 33.064 af Average Runoff Depth = 2.72"
96.86% Pervious = 141.365 ac 3.14% Impervious = 4.587 ac

Existing Conditions - South Plantation

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Type III 24-hr 50 year Rainfall=7.02"

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Page 93

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment36: Subcat 36Runoff Area=8.684 ac 0.33% Impervious Runoff Depth>4.18"
Flow Length=944' Tc=28.5 min CN=78 Runoff=26.36 cfs 3.029 af**Subcatchment37: Subcat 37**Runoff Area=1.143 ac 0.10% Impervious Runoff Depth>4.20"
Flow Length=405' Tc=15.1 min CN=78 Runoff=4.51 cfs 0.400 af**Subcatchment38: Subcat 38**Runoff Area=3.921 ac 0.00% Impervious Runoff Depth>4.19"
Flow Length=567' Tc=20.9 min CN=78 Runoff=13.59 cfs 1.371 af**Subcatchment39: Subcat 39**Runoff Area=2.047 ac 5.11% Impervious Runoff Depth>3.68"
Flow Length=200' Tc=10.7 min CN=73 Runoff=8.04 cfs 0.628 af**Subcatchment40: Subcat 40**Runoff Area=0.652 ac 12.00% Impervious Runoff Depth>2.88"
Flow Length=208' Tc=10.2 min CN=65 Runoff=2.03 cfs 0.156 af**Subcatchment41: Subcat 41**Runoff Area=0.889 ac 10.73% Impervious Runoff Depth>2.78"
Flow Length=245' Tc=9.2 min CN=64 Runoff=2.73 cfs 0.206 af**Subcatchment42: Subcat 42**Runoff Area=1.849 ac 7.72% Impervious Runoff Depth>2.87"
Flow Length=384' Tc=13.6 min CN=65 Runoff=5.21 cfs 0.443 af**Subcatchment43: Subcat 43**Runoff Area=0.915 ac 7.83% Impervious Runoff Depth>2.68"
Flow Length=354' Tc=14.5 min CN=63 Runoff=2.34 cfs 0.204 af**Subcatchment44: Subcat 44**Runoff Area=2.114 ac 0.00% Impervious Runoff Depth>4.10"
Flow Length=363' Tc=10.2 min CN=77 Runoff=9.30 cfs 0.723 af**Subcatchment45: Subcat 45**Runoff Area=2.350 ac 0.00% Impervious Runoff Depth>4.11"
Flow Length=214' Tc=6.4 min CN=77 Runoff=11.68 cfs 0.804 af**Subcatchment46: Subcat 46**Runoff Area=3.063 ac 0.00% Impervious Runoff Depth>4.10"
Flow Length=522' Tc=11.7 min CN=77 Runoff=12.94 cfs 1.047 af**Subcatchment47: Subcat 47**Runoff Area=3.767 ac 0.00% Impervious Runoff Depth>2.12"
Flow Length=463' Tc=13.2 min CN=57 Runoff=7.66 cfs 0.665 af**Subcatchment48: Subcat 48**Runoff Area=5.342 ac 0.00% Impervious Runoff Depth>2.68"
Flow Length=376' Tc=12.2 min CN=63 Runoff=14.44 cfs 1.193 af**Subcatchment49: Subcat 49**Runoff Area=3.212 ac 20.41% Impervious Runoff Depth>2.78"
Flow Length=466' Tc=13.3 min CN=64 Runoff=8.78 cfs 0.743 af**Subcatchment50: Subcat 50**Runoff Area=7.384 ac 0.00% Impervious Runoff Depth>3.07"
Tc=13.3 min CN=67 Runoff=22.43 cfs 1.889 af**Subcatchment51: Subcat 51**Runoff Area=27.555 ac 0.43% Impervious Runoff Depth>4.07"
Flow Length=1,356' Tc=33.5 min CN=77 Runoff=75.88 cfs 9.350 af

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Type III 24-hr 50 year Rainfall=7.02"

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Page 94

Subcatchment53: Subcat 53Runoff Area=4.763 ac 1.36% Impervious Runoff Depth>0.74"
Tc=0.0 min CN=40 Runoff=2.97 cfs 0.293 af**Subcatchment54: Subcat 54**Runoff Area=4.933 ac 0.15% Impervious Runoff Depth>0.81"
Tc=0.0 min CN=41 Runoff=3.63 cfs 0.333 af**Subcatchment55: Subcat 55**Runoff Area=2.683 ac 0.00% Impervious Runoff Depth>3.88"
Flow Length=790' Tc=20.4 min CN=75 Runoff=8.73 cfs 0.867 af**Subcatchment56: Subcat 56**Runoff Area=7.230 ac 2.24% Impervious Runoff Depth>3.59"
Tc=0.0 min CN=72 Runoff=37.49 cfs 2.164 af**Subcatchment57: Subcat 57**Runoff Area=5.692 ac 2.59% Impervious Runoff Depth>3.47"
Flow Length=567' Tc=16.3 min CN=71 Runoff=18.14 cfs 1.646 af**Subcatchment58: Subcat 58**Runoff Area=2.853 ac 4.92% Impervious Runoff Depth>1.26"
Flow Length=591' Tc=14.0 min CN=47 Runoff=2.91 cfs 0.299 af**Subcatchment59: Subcat 59**Runoff Area=4.073 ac 4.25% Impervious Runoff Depth>1.26"
Flow Length=316' Tc=12.3 min CN=47 Runoff=4.38 cfs 0.427 af**Subcatchment60: Subcat 60**Runoff Area=7.389 ac 22.44% Impervious Runoff Depth>4.18"
Flow Length=1,003' Tc=32.4 min CN=78 Runoff=21.13 cfs 2.573 af**Subcatchment62: Subcat 62**Runoff Area=24.202 ac 3.83% Impervious Runoff Depth>3.45"
Flow Length=1,288' Tc=29.6 min CN=71 Runoff=60.28 cfs 6.965 af**Subcatchment64: Subcat 64**Runoff Area=1.772 ac 0.08% Impervious Runoff Depth>3.17"
Flow Length=404' Tc=14.5 min CN=68 Runoff=5.40 cfs 0.468 af**Subcatchment65: Subcat 65**Runoff Area=3.560 ac 0.00% Impervious Runoff Depth>3.88"
Flow Length=599' Tc=22.0 min CN=75 Runoff=11.24 cfs 1.150 af**Subcatchment66: Subcat 66**Runoff Area=1.916 ac 0.53% Impervious Runoff Depth>3.99"
Flow Length=379' Tc=13.5 min CN=76 Runoff=7.49 cfs 0.637 af**Pond 37P: (new Pond)**Peak Elev=166.60' Storage=3,394 cf Inflow=4.51 cfs 0.400 af
Outflow=4.34 cfs 0.341 af**Pond 38P: (new Pond)**Peak Elev=164.74' Storage=19,545 cf Inflow=17.89 cfs 1.712 af
Outflow=15.89 cfs 1.402 af**Pond 39P: (new Pond)**Peak Elev=165.49' Storage=27,347 cf Inflow=8.04 cfs 0.628 af
Outflow=0.00 cfs 0.000 af**Pond 44P: (new Pond)**Peak Elev=159.05' Storage=18,670 cf Inflow=9.30 cfs 0.723 af
Outflow=1.76 cfs 0.318 af**Pond 45P: (new Pond)**Peak Elev=156.29' Storage=35,025 cf Inflow=11.68 cfs 0.804 af
Outflow=0.00 cfs 0.000 af

Existing Conditions - South Plantation

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Type III 24-hr 50 year Rainfall=7.02"

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Page 95

Total Runoff Area = 145.952 ac Runoff Volume = 40.674 af Average Runoff Depth = 3.34"
96.86% Pervious = 141.365 ac 3.14% Impervious = 4.587 ac

Existing Conditions - South Plantation

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Type III 24-hr 100 year Rainfall=7.96"

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Page 137

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment36: Subcat 36Runoff Area=8.684 ac 0.33% Impervious Runoff Depth>5.00"
Flow Length=944' Tc=28.5 min CN=78 Runoff=31.30 cfs 3.617 af**Subcatchment37: Subcat 37**Runoff Area=1.143 ac 0.10% Impervious Runoff Depth>5.02"
Flow Length=405' Tc=15.1 min CN=78 Runoff=5.35 cfs 0.478 af**Subcatchment38: Subcat 38**Runoff Area=3.921 ac 0.00% Impervious Runoff Depth>5.01"
Flow Length=567' Tc=20.9 min CN=78 Runoff=16.13 cfs 1.637 af**Subcatchment39: Subcat 39**Runoff Area=2.047 ac 5.11% Impervious Runoff Depth>4.46"
Flow Length=200' Tc=10.7 min CN=73 Runoff=9.70 cfs 0.761 af**Subcatchment40: Subcat 40**Runoff Area=0.652 ac 12.00% Impervious Runoff Depth>3.58"
Flow Length=208' Tc=10.2 min CN=65 Runoff=2.53 cfs 0.194 af**Subcatchment41: Subcat 41**Runoff Area=0.889 ac 10.73% Impervious Runoff Depth>3.47"
Flow Length=245' Tc=9.2 min CN=64 Runoff=3.42 cfs 0.257 af**Subcatchment42: Subcat 42**Runoff Area=1.849 ac 7.72% Impervious Runoff Depth>3.57"
Flow Length=384' Tc=13.6 min CN=65 Runoff=6.49 cfs 0.550 af**Subcatchment43: Subcat 43**Runoff Area=0.915 ac 7.83% Impervious Runoff Depth>3.35"
Flow Length=354' Tc=14.5 min CN=63 Runoff=2.95 cfs 0.256 af**Subcatchment44: Subcat 44**Runoff Area=2.114 ac 0.00% Impervious Runoff Depth>4.91"
Flow Length=363' Tc=10.2 min CN=77 Runoff=11.07 cfs 0.865 af**Subcatchment45: Subcat 45**Runoff Area=2.350 ac 0.00% Impervious Runoff Depth>4.92"
Flow Length=214' Tc=6.4 min CN=77 Runoff=13.89 cfs 0.963 af**Subcatchment46: Subcat 46**Runoff Area=3.063 ac 0.00% Impervious Runoff Depth>4.91"
Flow Length=522' Tc=11.7 min CN=77 Runoff=15.40 cfs 1.253 af**Subcatchment47: Subcat 47**Runoff Area=3.767 ac 0.00% Impervious Runoff Depth>2.72"
Flow Length=463' Tc=13.2 min CN=57 Runoff=9.99 cfs 0.854 af**Subcatchment48: Subcat 48**Runoff Area=5.342 ac 0.00% Impervious Runoff Depth>3.36"
Flow Length=376' Tc=12.2 min CN=63 Runoff=18.31 cfs 1.495 af**Subcatchment49: Subcat 49**Runoff Area=3.212 ac 20.41% Impervious Runoff Depth>3.46"
Flow Length=466' Tc=13.3 min CN=64 Runoff=11.00 cfs 0.927 af**Subcatchment50: Subcat 50**Runoff Area=7.384 ac 0.00% Impervious Runoff Depth>3.79"
Tc=13.3 min CN=67 Runoff=27.72 cfs 2.332 af**Subcatchment51: Subcat 51**Runoff Area=27.555 ac 0.43% Impervious Runoff Depth>4.88"
Flow Length=1,356' Tc=33.5 min CN=77 Runoff=90.38 cfs 11.198 af

Existing Conditions - South Plantation

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Type III 24-hr 100 year Rainfall=7.96"

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Page 138

Subcatchment53: Subcat 53Runoff Area=4.763 ac 1.36% Impervious Runoff Depth>1.09"
Tc=0.0 min CN=40 Runoff=5.30 cfs 0.432 af**Subcatchment54: Subcat 54**Runoff Area=4.933 ac 0.15% Impervious Runoff Depth>1.18"
Tc=0.0 min CN=41 Runoff=6.39 cfs 0.483 af**Subcatchment55: Subcat 55**Runoff Area=2.683 ac 0.00% Impervious Runoff Depth>4.67"
Flow Length=790' Tc=20.4 min CN=75 Runoff=10.46 cfs 1.044 af**Subcatchment56: Subcat 56**Runoff Area=7.230 ac 2.24% Impervious Runoff Depth>4.36"
Tc=0.0 min CN=72 Runoff=45.36 cfs 2.629 af**Subcatchment57: Subcat 57**Runoff Area=5.692 ac 2.59% Impervious Runoff Depth>4.23"
Flow Length=567' Tc=16.3 min CN=71 Runoff=22.15 cfs 2.006 af**Subcatchment58: Subcat 58**Runoff Area=2.853 ac 4.92% Impervious Runoff Depth>1.72"
Flow Length=591' Tc=14.0 min CN=47 Runoff=4.29 cfs 0.408 af**Subcatchment59: Subcat 59**Runoff Area=4.073 ac 4.25% Impervious Runoff Depth>1.72"
Flow Length=316' Tc=12.3 min CN=47 Runoff=6.38 cfs 0.583 af**Subcatchment60: Subcat 60**Runoff Area=7.389 ac 22.44% Impervious Runoff Depth>4.99"
Flow Length=1,003' Tc=32.4 min CN=78 Runoff=25.09 cfs 3.074 af**Subcatchment62: Subcat 62**Runoff Area=24.202 ac 3.83% Impervious Runoff Depth>4.21"
Flow Length=1,288' Tc=29.6 min CN=71 Runoff=73.32 cfs 8.490 af**Subcatchment64: Subcat 64**Runoff Area=1.772 ac 0.08% Impervious Runoff Depth>3.90"
Flow Length=404' Tc=14.5 min CN=68 Runoff=6.65 cfs 0.576 af**Subcatchment65: Subcat 65**Runoff Area=3.560 ac 0.00% Impervious Runoff Depth>4.67"
Flow Length=599' Tc=22.0 min CN=75 Runoff=13.48 cfs 1.385 af**Subcatchment66: Subcat 66**Runoff Area=1.916 ac 0.53% Impervious Runoff Depth>4.79"
Flow Length=379' Tc=13.5 min CN=76 Runoff=8.95 cfs 0.765 af**Pond 37P: (new Pond)**Peak Elev=166.61' Storage=3,511 cf Inflow=5.35 cfs 0.478 af
Outflow=5.17 cfs 0.419 af**Pond 38P: (new Pond)**Peak Elev=164.78' Storage=20,623 cf Inflow=21.24 cfs 2.056 af
Outflow=19.46 cfs 1.745 af**Pond 39P: (new Pond)**Peak Elev=165.53' Storage=28,646 cf Inflow=9.70 cfs 0.761 af
Outflow=0.35 cfs 0.110 af**Pond 44P: (new Pond)**Peak Elev=159.10' Storage=19,755 cf Inflow=11.07 cfs 0.865 af
Outflow=4.14 cfs 0.460 af**Pond 45P: (new Pond)**Peak Elev=156.57' Storage=41,938 cf Inflow=13.89 cfs 0.963 af
Outflow=0.00 cfs 0.000 af

Existing Conditions - South Plantation

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Type III 24-hr 100 year Rainfall=7.96"

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Page 139

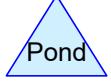
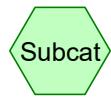
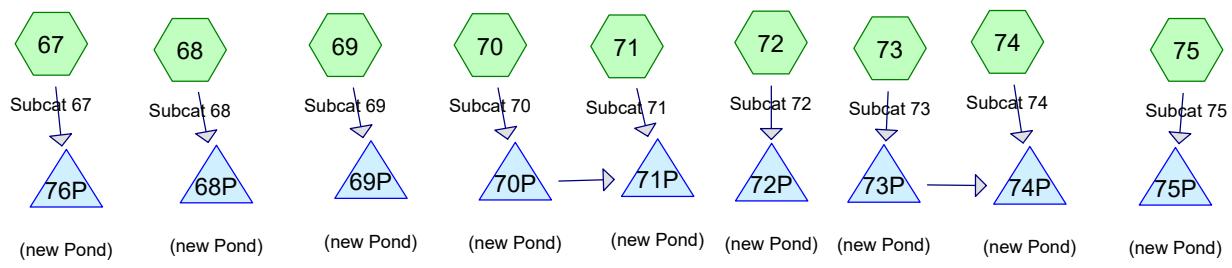
Total Runoff Area = 145.952 ac Runoff Volume = 49.513 af Average Runoff Depth = 4.07"
96.86% Pervious = 141.365 ac 3.14% Impervious = 4.587 ac



HydroCAD Analysis: Proposed Conditions



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Routing Diagram for Proposed Conditions - Windsorville

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Proposed Conditions - Windsorville

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Page 2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.000	0	, HSG B (69, 72)
0.000	0	, HSG C (72, 74)
0.209	70	1/2 acre lots, 25% imp, HSG B (72)
0.824	49	50-75% Grass cover, Fair, HSG A (74, 75)
2.243	69	50-75% Grass cover, Fair, HSG B (74, 75)
3.228	79	50-75% Grass cover, Fair, HSG C (74)
34.933	39	>75% Grass cover, Good, HSG A (68, 69, 70, 71, 73, 74, 75)
82.264	61	>75% Grass cover, Good, HSG B (67, 68, 69, 70, 71, 72, 73, 74, 75)
50.706	74	>75% Grass cover, Good, HSG C (71, 72, 73, 74)
0.815	70	Brush, Fair, HSG C (74)
2.411	77	Fallow, bare soil, HSG A (74, 75)
1.596	86	Fallow, bare soil, HSG B (67, 74, 75)
4.271	91	Fallow, bare soil, HSG C (73, 74)
0.103	83	Paved roads w/open ditches, 50% imp, HSG A (71)
2.525	89	Paved roads w/open ditches, 50% imp, HSG B (67, 68, 69, 71, 72)
0.233	92	Paved roads w/open ditches, 50% imp, HSG C (72)
2.785	36	Woods, Fair, HSG A (69, 71, 73, 74)
7.532	60	Woods, Fair, HSG B (67, 69, 71, 72, 73, 74, 75)
9.199	73	Woods, Fair, HSG C (72, 73, 74)
205.877	62	TOTAL AREA

Proposed Conditions - Windsorville

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Page 3

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
41.055	HSG A	68, 69, 70, 71, 73, 74, 75
96.369	HSG B	67, 68, 69, 70, 71, 72, 73, 74, 75
68.452	HSG C	71, 72, 73, 74
0.000	HSG D	
0.000	Other	
205.877		TOTAL AREA

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Page 4

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatch Numbers
0.000	0.000	0.000	0.000	0.000	0.000		
0.000	0.209	0.000	0.000	0.000	0.209	1/2 acre lots, 25% imp	
0.824	2.243	3.228	0.000	0.000	6.295	50-75% Grass cover, Fair	
34.933	82.264	50.706	0.000	0.000	167.903	>75% Grass cover, Good	
0.000	0.000	0.815	0.000	0.000	0.815	Brush, Fair	
2.411	1.596	4.271	0.000	0.000	8.277	Fallow, bare soil	
0.103	2.525	0.233	0.000	0.000	2.862	Paved roads w/open ditches, 50% imp	
2.785	7.532	9.199	0.000	0.000	19.515	Woods, Fair	
41.055	96.369	68.452	0.000	0.000	205.877	TOTAL AREA	

Proposed Conditions - Windsorville

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Type III 24-hr 2 year Rainfall=3.16"

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Page 5

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Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment67: Subcat 67Runoff Area=1.280 ac 11.27% Impervious Runoff Depth>0.59"
Flow Length=286' Tc=9.9 min CN=67 Runoff=0.71 cfs 0.063 af**Subcatchment68: Subcat 68**Runoff Area=18.623 ac 2.62% Impervious Runoff Depth>0.34"
Flow Length=931' Tc=24.4 min CN=60 Runoff=3.33 cfs 0.523 af**Subcatchment69: Subcat 69**Runoff Area=6.832 ac 3.28% Impervious Runoff Depth>0.25"
Flow Length=664' Tc=12.0 min CN=57 Runoff=0.90 cfs 0.143 af**Subcatchment70: Subcat 70**Runoff Area=3.224 ac 0.00% Impervious Runoff Depth>0.25"
Flow Length=425' Tc=8.8 min CN=57 Runoff=0.44 cfs 0.068 af**Subcatchment71: Subcat 71**Runoff Area=8.154 ac 4.96% Impervious Runoff Depth>0.34"
Flow Length=616' Tc=16.7 min CN=60 Runoff=1.62 cfs 0.230 af**Subcatchment72: Subcat 72**Runoff Area=8.308 ac 2.67% Impervious Runoff Depth>0.68"
Flow Length=983' Tc=15.3 min CN=69 Runoff=4.74 cfs 0.469 af**Subcatchment73: Subcat 73**Runoff Area=28.700 ac 0.00% Impervious Runoff Depth>0.92"
Flow Length=1,079' Tc=13.8 min CN=74 Runoff=24.81 cfs 2.197 af**Subcatchment74: Subcat 74**Runoff Area=82.866 ac 0.00% Impervious Runoff Depth>0.40"
Flow Length=2,328' Tc=42.6 min CN=62 Runoff=15.17 cfs 2.742 af**Subcatchment75: Subcat 75**Runoff Area=47.890 ac 0.00% Impervious Runoff Depth>0.25"
Flow Length=1,192' Tc=19.3 min CN=57 Runoff=5.72 cfs 0.998 af**Pond 68P: (new Pond)**Peak Elev=174.48' Storage=22,727 cf Inflow=3.33 cfs 0.523 af
Outflow=0.00 cfs 0.000 af**Pond 69P: (new Pond)**Peak Elev=170.95' Storage=6,227 cf Inflow=0.90 cfs 0.143 af
Outflow=0.00 cfs 0.000 af**Pond 70P: (new Pond)**Peak Elev=197.78' Storage=2,946 cf Inflow=0.44 cfs 0.068 af
Outflow=0.00 cfs 0.000 af**Pond 71P: (new Pond)**Peak Elev=177.96' Storage=10,008 cf Inflow=1.62 cfs 0.230 af
Outflow=0.00 cfs 0.000 af**Pond 72P: (new Pond)**Peak Elev=174.68' Storage=20,421 cf Inflow=4.74 cfs 0.469 af
Outflow=0.00 cfs 0.000 af**Pond 73P: (new Pond)**Peak Elev=153.59' Storage=95,627 cf Inflow=24.81 cfs 2.197 af
Outflow=0.00 cfs 0.000 af**Pond 74P: (new Pond)**Peak Elev=123.72' Storage=119,299 cf Inflow=15.17 cfs 2.742 af
Outflow=0.00 cfs 0.000 af

Proposed Conditions - Windsorville

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Type III 24-hr 2 year Rainfall=3.16"

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Page 6

Pond 75P: (new Pond)Peak Elev=135.35' Storage=43,392 cf Inflow=5.72 cfs 0.998 af
Outflow=0.00 cfs 0.000 af**Pond 76P: (new Pond)**Peak Elev=173.11' Storage=2,758 cf Inflow=0.71 cfs 0.063 af
Outflow=0.00 cfs 0.000 af**Total Runoff Area = 205.877 ac Runoff Volume = 7.433 af Average Runoff Depth = 0.43"
99.28% Pervious = 204.393 ac 0.72% Impervious = 1.483 ac**

Proposed Conditions - Windsorville

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Type III 24-hr 25 year Rainfall=6.18"

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Page 34

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment67: Subcat 67Runoff Area=1.280 ac 11.27% Impervious Runoff Depth>2.46"
Flow Length=286' Tc=9.9 min CN=67 Runoff=3.42 cfs 0.262 af**Subcatchment68: Subcat 68**Runoff Area=18.623 ac 2.62% Impervious Runoff Depth>1.85"
Flow Length=931' Tc=24.4 min CN=60 Runoff=26.09 cfs 2.866 af**Subcatchment69: Subcat 69**Runoff Area=6.832 ac 3.28% Impervious Runoff Depth>1.62"
Flow Length=664' Tc=12.0 min CN=57 Runoff=10.63 cfs 0.920 af**Subcatchment70: Subcat 70**Runoff Area=3.224 ac 0.00% Impervious Runoff Depth>1.62"
Flow Length=425' Tc=8.8 min CN=57 Runoff=5.54 cfs 0.435 af**Subcatchment71: Subcat 71**Runoff Area=8.154 ac 4.96% Impervious Runoff Depth>1.85"
Flow Length=616' Tc=16.7 min CN=60 Runoff=13.30 cfs 1.259 af**Subcatchment72: Subcat 72**Runoff Area=8.308 ac 2.67% Impervious Runoff Depth>2.63"
Flow Length=983' Tc=15.3 min CN=69 Runoff=20.61 cfs 1.823 af**Subcatchment73: Subcat 73**Runoff Area=28.700 ac 0.00% Impervious Runoff Depth>3.10"
Flow Length=1,079' Tc=13.8 min CN=74 Runoff=87.05 cfs 7.414 af**Subcatchment74: Subcat 74**Runoff Area=82.866 ac 0.00% Impervious Runoff Depth>2.00"
Flow Length=2,328' Tc=42.6 min CN=62 Runoff=98.46 cfs 13.783 af**Subcatchment75: Subcat 75**Runoff Area=47.890 ac 0.00% Impervious Runoff Depth>1.61"
Flow Length=1,192' Tc=19.3 min CN=57 Runoff=62.61 cfs 6.428 af**Pond 68P: (new Pond)**Peak Elev=175.50' Storage=124,758 cf Inflow=26.09 cfs 2.866 af
Outflow=0.00 cfs 0.000 af**Pond 69P: (new Pond)**Peak Elev=173.12' Storage=40,057 cf Inflow=10.63 cfs 0.920 af
Outflow=0.00 cfs 0.000 af**Pond 70P: (new Pond)**Peak Elev=198.42' Storage=14,801 cf Inflow=5.54 cfs 0.435 af
Outflow=0.34 cfs 0.100 af**Pond 71P: (new Pond)**Peak Elev=179.34' Storage=49,145 cf Inflow=13.30 cfs 1.360 af
Outflow=0.96 cfs 0.241 af**Pond 72P: (new Pond)**Peak Elev=178.57' Storage=79,337 cf Inflow=20.61 cfs 1.823 af
Outflow=0.00 cfs 0.000 af**Pond 73P: (new Pond)**Peak Elev=155.69' Storage=235,094 cf Inflow=87.05 cfs 7.414 af
Outflow=6.45 cfs 2.225 af**Pond 74P: (new Pond)**Peak Elev=127.64' Storage=696,592 cf Inflow=98.46 cfs 16.008 af
Outflow=0.00 cfs 0.000 af

Proposed Conditions - Windsorville

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Type III 24-hr 25 year Rainfall=6.18"

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Page 35

Pond 75P: (new Pond)Peak Elev=144.41' Storage=279,795 cf Inflow=62.61 cfs 6.428 af
Outflow=0.00 cfs 0.000 af**Pond 76P: (new Pond)**Peak Elev=174.61' Storage=11,409 cf Inflow=3.42 cfs 0.262 af
Outflow=0.00 cfs 0.000 af**Total Runoff Area = 205.877 ac Runoff Volume = 35.192 af Average Runoff Depth = 2.05"
99.28% Pervious = 204.393 ac 0.72% Impervious = 1.483 ac**

Proposed Conditions - Windsorville

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Type III 24-hr 50 year Rainfall=7.02"

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Page 63

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment67: Subcat 67Runoff Area=1.280 ac 11.27% Impervious Runoff Depth>3.07"
Flow Length=286' Tc=9.9 min CN=67 Runoff=4.29 cfs 0.328 af**Subcatchment68: Subcat 68**Runoff Area=18.623 ac 2.62% Impervious Runoff Depth>2.38"
Flow Length=931' Tc=24.4 min CN=60 Runoff=34.19 cfs 3.698 af**Subcatchment69: Subcat 69**Runoff Area=6.832 ac 3.28% Impervious Runoff Depth>2.12"
Flow Length=664' Tc=12.0 min CN=57 Runoff=14.28 cfs 1.206 af**Subcatchment70: Subcat 70**Runoff Area=3.224 ac 0.00% Impervious Runoff Depth>2.12"
Flow Length=425' Tc=8.8 min CN=57 Runoff=7.44 cfs 0.570 af**Subcatchment71: Subcat 71**Runoff Area=8.154 ac 4.96% Impervious Runoff Depth>2.39"
Flow Length=616' Tc=16.7 min CN=60 Runoff=17.44 cfs 1.625 af**Subcatchment72: Subcat 72**Runoff Area=8.308 ac 2.67% Impervious Runoff Depth>3.27"
Flow Length=983' Tc=15.3 min CN=69 Runoff=25.65 cfs 2.263 af**Subcatchment73: Subcat 73**Runoff Area=28.700 ac 0.00% Impervious Runoff Depth>3.78"
Flow Length=1,079' Tc=13.8 min CN=74 Runoff=105.94 cfs 9.046 af**Subcatchment74: Subcat 74**Runoff Area=82.866 ac 0.00% Impervious Runoff Depth>2.55"
Flow Length=2,328' Tc=42.6 min CN=62 Runoff=127.14 cfs 17.624 af**Subcatchment75: Subcat 75**Runoff Area=47.890 ac 0.00% Impervious Runoff Depth>2.11"
Flow Length=1,192' Tc=19.3 min CN=57 Runoff=84.10 cfs 8.426 af**Pond 68P: (new Pond)**Peak Elev=175.75' Storage=160,994 cf Inflow=34.19 cfs 3.698 af
Outflow=0.00 cfs 0.000 af**Pond 69P: (new Pond)**Peak Elev=173.69' Storage=52,496 cf Inflow=14.28 cfs 1.206 af
Outflow=0.00 cfs 0.000 af**Pond 70P: (new Pond)**Peak Elev=198.43' Storage=15,220 cf Inflow=7.44 cfs 0.570 af
Outflow=0.75 cfs 0.234 af**Pond 71P: (new Pond)**Peak Elev=179.37' Storage=50,346 cf Inflow=17.44 cfs 1.859 af
Outflow=2.42 cfs 0.736 af**Pond 72P: (new Pond)**Peak Elev=179.45' Storage=98,504 cf Inflow=25.65 cfs 2.263 af
Outflow=0.00 cfs 0.000 af**Pond 73P: (new Pond)**Peak Elev=155.81' Storage=245,416 cf Inflow=105.94 cfs 9.046 af
Outflow=13.04 cfs 3.837 af**Pond 74P: (new Pond)**Peak Elev=128.31' Storage=934,028 cf Inflow=131.31 cfs 21.461 af
Outflow=0.00 cfs 0.000 af

Proposed Conditions - Windsorville

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Type III 24-hr 50 year Rainfall=7.02"

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Page 64

Pond 75P: (new Pond)Peak Elev=146.55' Storage=366,766 cf Inflow=84.10 cfs 8.426 af
Outflow=0.00 cfs 0.000 af**Pond 76P: (new Pond)**Peak Elev=174.96' Storage=14,272 cf Inflow=4.29 cfs 0.328 af
Outflow=0.00 cfs 0.000 af**Total Runoff Area = 205.877 ac Runoff Volume = 44.786 af Average Runoff Depth = 2.61"
99.28% Pervious = 204.393 ac 0.72% Impervious = 1.483 ac**

Proposed Conditions - Windsorville

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Type III 24-hr 100 year Rainfall=7.96"

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Page 92

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment67: Subcat 67Runoff Area=1.280 ac 11.27% Impervious Runoff Depth>3.80"
Flow Length=286' Tc=9.9 min CN=67 Runoff=5.30 cfs 0.405 af**Subcatchment68: Subcat 68**Runoff Area=18.623 ac 2.62% Impervious Runoff Depth>3.02"
Flow Length=931' Tc=24.4 min CN=60 Runoff=43.76 cfs 4.690 af**Subcatchment69: Subcat 69**Runoff Area=6.832 ac 3.28% Impervious Runoff Depth>2.72"
Flow Length=664' Tc=12.0 min CN=57 Runoff=18.65 cfs 1.550 af**Subcatchment70: Subcat 70**Runoff Area=3.224 ac 0.00% Impervious Runoff Depth>2.73"
Flow Length=425' Tc=8.8 min CN=57 Runoff=9.70 cfs 0.732 af**Subcatchment71: Subcat 71**Runoff Area=8.154 ac 4.96% Impervious Runoff Depth>3.03"
Flow Length=616' Tc=16.7 min CN=60 Runoff=22.33 cfs 2.060 af**Subcatchment72: Subcat 72**Runoff Area=8.308 ac 2.67% Impervious Runoff Depth>4.01"
Flow Length=983' Tc=15.3 min CN=69 Runoff=31.44 cfs 2.775 af**Subcatchment73: Subcat 73**Runoff Area=28.700 ac 0.00% Impervious Runoff Depth>4.57"
Flow Length=1,079' Tc=13.8 min CN=74 Runoff=127.40 cfs 10.925 af**Subcatchment74: Subcat 74**Runoff Area=82.866 ac 0.00% Impervious Runoff Depth>3.21"
Flow Length=2,328' Tc=42.6 min CN=62 Runoff=160.90 cfs 22.174 af**Subcatchment75: Subcat 75**Runoff Area=47.890 ac 0.00% Impervious Runoff Depth>2.71"
Flow Length=1,192' Tc=19.3 min CN=57 Runoff=109.79 cfs 10.829 af**Pond 68P: (new Pond)**Peak Elev=176.01' Storage=204,146 cf Inflow=43.76 cfs 4.690 af
Outflow=0.00 cfs 0.000 af**Pond 69P: (new Pond)**Peak Elev=174.29' Storage=67,456 cf Inflow=18.65 cfs 1.550 af
Outflow=0.00 cfs 0.000 af**Pond 70P: (new Pond)**Peak Elev=198.46' Storage=15,988 cf Inflow=9.70 cfs 0.732 af
Outflow=1.73 cfs 0.395 af**Pond 71P: (new Pond)**Peak Elev=179.42' Storage=52,149 cf Inflow=22.33 cfs 2.455 af
Outflow=5.38 cfs 1.328 af**Pond 72P: (new Pond)**Peak Elev=180.35' Storage=120,811 cf Inflow=31.44 cfs 2.775 af
Outflow=0.00 cfs 0.000 af**Pond 73P: (new Pond)**Peak Elev=156.15' Storage=263,427 cf Inflow=127.40 cfs 10.925 af
Outflow=42.07 cfs 5.693 af**Pond 74P: (new Pond)**Peak Elev=128.94' Storage=1,212,886 cf Inflow=202.97 cfs 27.867 af
Outflow=0.00 cfs 0.000 af

Proposed Conditions - Windsorville

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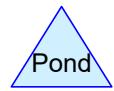
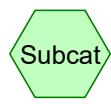
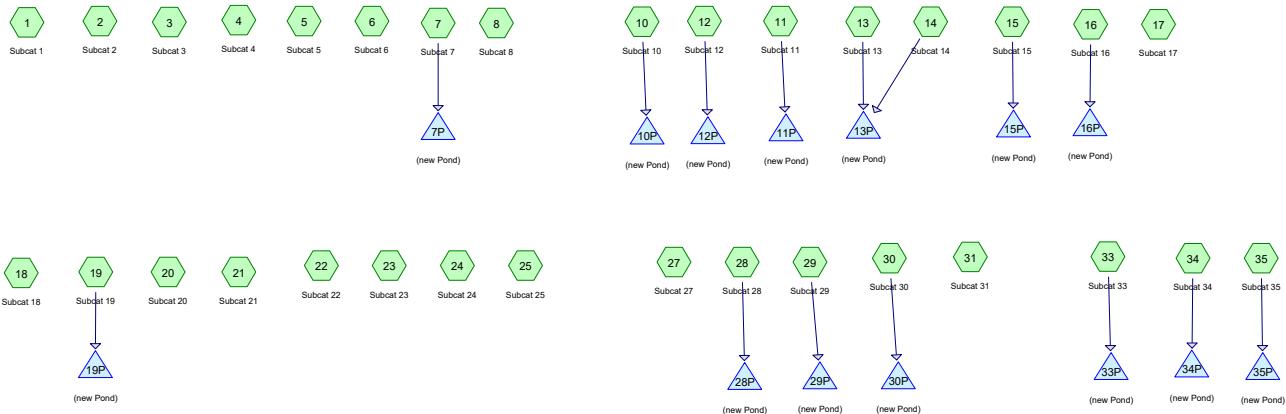
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Type III 24-hr 100 year Rainfall=7.96"

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Page 93

Pond 75P: (new Pond)Peak Elev=148.43' Storage=470,810 cf Inflow=109.79 cfs 10.829 af
Outflow=0.00 cfs 0.000 af**Pond 76P: (new Pond)**Peak Elev=175.32' Storage=17,619 cf Inflow=5.30 cfs 0.405 af
Outflow=0.00 cfs 0.000 af**Total Runoff Area = 205.877 ac Runoff Volume = 56.139 af Average Runoff Depth = 3.27"
99.28% Pervious = 204.393 ac 0.72% Impervious = 1.483 ac**



Routing Diagram for Proposed Conditions - North Plantation

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Page 2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.000	0	, HSG A (31)
0.000	0	, HSG B (28)
0.028	65	2 acre lots, 12% imp, HSG B (15)
13.601	39	>75% Grass cover, Good, HSG A (1, 2, 3, 4, 5, 6, 8, 10, 11, 19, 20, 21, 25, 27, 28, 29, 30, 31, 33, 34, 35)
172.891	61	>75% Grass cover, Good, HSG B (1, 2, 3, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 27, 28, 29, 30, 31, 33, 34, 35)
0.368	56	Brush, Fair, HSG B (11)
0.066	77	Fallow, bare soil, HSG A (1, 31, 33)
0.226	86	Fallow, bare soil, HSG B (33)
1.123	89	Paved roads w/open ditches, 50% imp, HSG B (11, 12, 13, 15, 16)
10.373	36	Woods, Fair, HSG A (1, 2, 8, 10, 11, 28, 29, 31)
2.049	60	Woods, Fair, HSG B (2, 8, 10, 11, 28)
0.080	73	Woods, Fair, HSG C (2)
200.805	58	TOTAL AREA

Proposed Conditions - North Plantation

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Page 3

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
24.041	HSG A	1, 2, 3, 4, 5, 6, 8, 10, 11, 19, 20, 21, 25, 27, 28, 29, 30, 31, 33, 34, 35
176.684	HSG B	1, 2, 3, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 27, 28, 29, 30, 31, 33, 34, 35
0.080	HSG C	2
0.000	HSG D	
0.000	Other	
200.805		TOTAL AREA

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Page 4

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatch Numbers
0.000	0.000	0.000	0.000	0.000	0.000		
0.000	0.028	0.000	0.000	0.000	0.028	2 acre lots, 12% imp	
13.601	172.891	0.000	0.000	0.000	186.492	>75% Grass cover, Good	
0.000	0.368	0.000	0.000	0.000	0.368	Brush, Fair	
0.066	0.226	0.000	0.000	0.000	0.292	Fallow, bare soil	
0.000	1.123	0.000	0.000	0.000	1.123	Paved roads w/open ditches, 50% imp	
10.373	2.049	0.080	0.000	0.000	12.502	Woods, Fair	
24.041	176.684	0.080	0.000	0.000	200.805	TOTAL AREA	

Proposed Conditions - North Plantation

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Type III 24-hr 2 year Rainfall=3.16"

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Page 5

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1: Subcat 1Runoff Area=0.864 ac 0.00% Impervious Runoff Depth>0.31"
Flow Length=247' Tc=7.8 min CN=59 Runoff=0.17 cfs 0.022 af**Subcatchment2: Subcat 2**Runoff Area=4.510 ac 0.00% Impervious Runoff Depth>0.00"
Flow Length=343' Tc=9.5 min CN=41 Runoff=0.00 cfs 0.001 af**Subcatchment3: Subcat 3**Runoff Area=2.727 ac 0.00% Impervious Runoff Depth>0.06"
Flow Length=188' Tc=9.5 min CN=48 Runoff=0.03 cfs 0.014 af**Subcatchment4: Subcat 4**Runoff Area=3.638 ac 0.00% Impervious Runoff Depth>0.25"
Flow Length=462' Tc=11.1 min CN=57 Runoff=0.48 cfs 0.076 af**Subcatchment5: Subcat 5**Runoff Area=8.688 ac 0.00% Impervious Runoff Depth>0.34"
Flow Length=790' Tc=24.2 min CN=60 Runoff=1.56 cfs 0.244 af**Subcatchment6: Subcat 6**Runoff Area=6.472 ac 0.00% Impervious Runoff Depth>0.31"
Flow Length=527' Tc=16.2 min CN=59 Runoff=1.11 cfs 0.166 af**Subcatchment7: Subcat 7**Runoff Area=17.047 ac 0.00% Impervious Runoff Depth>0.36"
Flow Length=1,407' Tc=49.6 min CN=61 Runoff=2.53 cfs 0.514 af**Subcatchment8: Subcat 8**Runoff Area=3.131 ac 0.00% Impervious Runoff Depth>0.37"
Flow Length=435' Tc=11.6 min CN=61 Runoff=0.78 cfs 0.097 af**Subcatchment10: Subcat 10**Runoff Area=3.173 ac 0.00% Impervious Runoff Depth>0.18"
Flow Length=427' Tc=13.0 min CN=54 Runoff=0.23 cfs 0.046 af**Subcatchment11: Subcat 11**Runoff Area=5.661 ac 0.85% Impervious Runoff Depth>0.11"
Flow Length=598' Tc=16.1 min CN=51 Runoff=0.15 cfs 0.053 af**Subcatchment12: Subcat 12**Runoff Area=3.290 ac 4.83% Impervious Runoff Depth>0.48"
Flow Length=374' Tc=14.4 min CN=64 Runoff=1.17 cfs 0.130 af**Subcatchment13: Subcat 13**Runoff Area=18.033 ac 1.07% Impervious Runoff Depth>0.39"
Flow Length=1,351' Tc=63.8 min CN=62 Runoff=2.61 cfs 0.588 af**Subcatchment14: Subcat 14**Runoff Area=0.597 ac 0.00% Impervious Runoff Depth>0.37"
Flow Length=270' Tc=13.0 min CN=61 Runoff=0.15 cfs 0.018 af**Subcatchment15: Subcat 15**Runoff Area=2.521 ac 4.81% Impervious Runoff Depth>0.47"
Flow Length=562' Tc=21.3 min CN=64 Runoff=0.78 cfs 0.100 af**Subcatchment16: Subcat 16**Runoff Area=4.718 ac 0.92% Impervious Runoff Depth>0.40"
Flow Length=719' Tc=27.7 min CN=62 Runoff=1.05 cfs 0.158 af**Subcatchment17: Subcat 17**Runoff Area=5.336 ac 0.00% Impervious Runoff Depth>0.37"
Flow Length=704' Tc=22.6 min CN=61 Runoff=1.12 cfs 0.164 af

Proposed Conditions - North Plantation

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Type III 24-hr 2 year Rainfall=3.16"

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Page 6

Subcatchment18: Subcat 18Runoff Area=1.751 ac 0.00% Impervious Runoff Depth>0.37"
Flow Length=422' Tc=24.5 min CN=61 Runoff=0.36 cfs 0.054 af**Subcatchment19: Subcat 19**Runoff Area=21.570 ac 0.00% Impervious Runoff Depth>0.36"
Flow Length=1,667' Tc=45.7 min CN=61 Runoff=3.35 cfs 0.653 af**Subcatchment20: Subcat 20**Runoff Area=1.629 ac 0.00% Impervious Runoff Depth>0.37"
Flow Length=544' Tc=20.9 min CN=61 Runoff=0.35 cfs 0.050 af**Subcatchment21: Subcat 21**Runoff Area=3.990 ac 0.00% Impervious Runoff Depth>0.28"
Flow Length=1,249' Tc=29.8 min CN=58 Runoff=0.49 cfs 0.092 af**Subcatchment22: Subcat 22**Runoff Area=17.726 ac 0.00% Impervious Runoff Depth>0.36"
Flow Length=2,340' Tc=64.5 min CN=61 Runoff=2.26 cfs 0.529 af**Subcatchment23: Subcat 23**Runoff Area=0.264 ac 0.00% Impervious Runoff Depth>0.37"
Flow Length=133' Tc=5.3 min CN=61 Runoff=0.08 cfs 0.008 af**Subcatchment24: Subcat 24**Runoff Area=2.795 ac 0.00% Impervious Runoff Depth>0.37"
Flow Length=746' Tc=17.4 min CN=61 Runoff=0.63 cfs 0.086 af**Subcatchment25: Subcat 25**Runoff Area=12.168 ac 0.00% Impervious Runoff Depth>0.36"
Tc=45.8 min CN=61 Runoff=1.89 cfs 0.368 af**Subcatchment27: Subcat 27**Runoff Area=2.191 ac 0.00% Impervious Runoff Depth>0.37"
Flow Length=464' Tc=21.7 min CN=61 Runoff=0.47 cfs 0.067 af**Subcatchment28: Subcat 28**Runoff Area=7.360 ac 0.00% Impervious Runoff Depth>0.11"
Flow Length=461' Tc=16.1 min CN=51 Runoff=0.20 cfs 0.068 af**Subcatchment29: Subcat 29**Runoff Area=1.626 ac 0.00% Impervious Runoff Depth=0.00"
Flow Length=167' Tc=6.5 min CN=37 Runoff=0.00 cfs 0.000 af**Subcatchment30: Subcat 30**Runoff Area=3.911 ac 0.00% Impervious Runoff Depth>0.37"
Flow Length=380' Tc=11.2 min CN=61 Runoff=1.00 cfs 0.121 af**Subcatchment31: Subcat 31**Runoff Area=3.646 ac 0.00% Impervious Runoff Depth>0.00"
Flow Length=261' Tc=7.6 min CN=40 Runoff=0.00 cfs 0.000 af**Subcatchment33: Subcat 33**Runoff Area=14.255 ac 0.00% Impervious Runoff Depth>0.28"
Tc=0.0 min CN=58 Runoff=2.87 cfs 0.335 af**Subcatchment34: Subcat 34**Runoff Area=7.888 ac 0.00% Impervious Runoff Depth>0.37"
Flow Length=596' Tc=24.6 min CN=61 Runoff=1.61 cfs 0.242 af**Subcatchment35: Subcat 35**Runoff Area=7.628 ac 0.00% Impervious Runoff Depth>0.17"
Flow Length=579' Tc=23.5 min CN=54 Runoff=0.46 cfs 0.110 af**Pond 7P: (new Pond)**Peak Elev=163.88' Storage=22,381 cf Inflow=2.53 cfs 0.514 af
Outflow=0.00 cfs 0.000 af

Proposed Conditions - North Plantation

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Type III 24-hr 2 year Rainfall=3.16"

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Page 7

Pond 10P: (new Pond)	Peak Elev=146.83' Storage=2,013 cf Inflow=0.23 cfs 0.046 af Outflow=0.00 cfs 0.000 af
Pond 11P: (new Pond)	Peak Elev=142.01' Storage=42 cf Inflow=0.15 cfs 0.053 af Outflow=0.14 cfs 0.052 af
Pond 12P: (new Pond)	Peak Elev=162.22' Storage=5,675 cf Inflow=1.17 cfs 0.130 af Outflow=0.00 cfs 0.000 af
Pond 13P: (new Pond)	Peak Elev=161.23' Storage=26,374 cf Inflow=2.66 cfs 0.606 af Outflow=0.00 cfs 0.000 af
Pond 15P: (new Pond)	Peak Elev=162.60' Storage=4,331 cf Inflow=0.78 cfs 0.100 af Outflow=0.00 cfs 0.000 af
Pond 16P: (new Pond)	Peak Elev=162.41' Storage=6,859 cf Inflow=1.05 cfs 0.158 af Outflow=0.00 cfs 0.000 af
Pond 19P: (new Pond)	Peak Elev=153.04' Storage=25,921 cf Inflow=3.35 cfs 0.653 af Outflow=0.37 cfs 0.058 af
Pond 28P: (new Pond)	Peak Elev=151.02' Storage=2,969 cf Inflow=0.20 cfs 0.068 af Outflow=0.00 cfs 0.000 af
Pond 29P: (new Pond)	Peak Elev=146.00' Storage=0 cf Inflow=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af
Pond 30P: (new Pond)	Peak Elev=169.74' Storage=5,271 cf Inflow=1.00 cfs 0.121 af Outflow=0.00 cfs 0.000 af
Pond 33P: (new Pond)	Peak Elev=150.41' Storage=14,573 cf Inflow=2.87 cfs 0.335 af Outflow=0.00 cfs 0.000 af
Pond 34P: (new Pond)	Peak Elev=152.83' Storage=10,541 cf Inflow=1.61 cfs 0.242 af Outflow=0.00 cfs 0.000 af
Pond 35P: (new Pond)	Peak Elev=155.00' Storage=4,801 cf Inflow=0.46 cfs 0.110 af Outflow=0.00 cfs 0.000 af

Total Runoff Area = 200.805 ac Runoff Volume = 5.177 af Average Runoff Depth = 0.31"
99.72% Pervious = 200.240 ac 0.28% Impervious = 0.565 ac

Proposed Conditions - North Plantation

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Type III 24-hr 25 year Rainfall=6.18"

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Page 60

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1: Subcat 1Runoff Area=0.864 ac 0.00% Impervious Runoff Depth>1.78"
Flow Length=247' Tc=7.8 min CN=59 Runoff=1.73 cfs 0.128 af**Subcatchment2: Subcat 2**Runoff Area=4.510 ac 0.00% Impervious Runoff Depth>0.53"
Flow Length=343' Tc=9.5 min CN=41 Runoff=1.31 cfs 0.198 af**Subcatchment3: Subcat 3**Runoff Area=2.727 ac 0.00% Impervious Runoff Depth>0.96"
Flow Length=188' Tc=9.5 min CN=48 Runoff=2.28 cfs 0.218 af**Subcatchment4: Subcat 4**Runoff Area=3.638 ac 0.00% Impervious Runoff Depth>1.62"
Flow Length=462' Tc=11.1 min CN=57 Runoff=5.86 cfs 0.490 af**Subcatchment5: Subcat 5**Runoff Area=8.688 ac 0.00% Impervious Runoff Depth>1.85"
Flow Length=790' Tc=24.2 min CN=60 Runoff=12.21 cfs 1.337 af**Subcatchment6: Subcat 6**Runoff Area=6.472 ac 0.00% Impervious Runoff Depth>1.77"
Flow Length=527' Tc=16.2 min CN=59 Runoff=10.13 cfs 0.956 af**Subcatchment7: Subcat 7**Runoff Area=17.047 ac 0.00% Impervious Runoff Depth>1.91"
Flow Length=1,407' Tc=49.6 min CN=61 Runoff=17.77 cfs 2.709 af**Subcatchment8: Subcat 8**Runoff Area=3.131 ac 0.00% Impervious Runoff Depth>1.94"
Flow Length=435' Tc=11.6 min CN=61 Runoff=6.15 cfs 0.506 af**Subcatchment10: Subcat 10**Runoff Area=3.173 ac 0.00% Impervious Runoff Depth>1.38"
Flow Length=427' Tc=13.0 min CN=54 Runoff=3.98 cfs 0.366 af**Subcatchment11: Subcat 11**Runoff Area=5.661 ac 0.85% Impervious Runoff Depth>1.16"
Flow Length=598' Tc=16.1 min CN=51 Runoff=5.22 cfs 0.549 af**Subcatchment12: Subcat 12**Runoff Area=3.290 ac 4.83% Impervious Runoff Depth>2.19"
Flow Length=374' Tc=14.4 min CN=64 Runoff=6.86 cfs 0.601 af**Subcatchment13: Subcat 13**Runoff Area=18.033 ac 1.07% Impervious Runoff Depth>1.98"
Flow Length=1,351' Tc=63.8 min CN=62 Runoff=16.93 cfs 2.970 af**Subcatchment14: Subcat 14**Runoff Area=0.597 ac 0.00% Impervious Runoff Depth>1.94"
Flow Length=270' Tc=13.0 min CN=61 Runoff=1.12 cfs 0.096 af**Subcatchment15: Subcat 15**Runoff Area=2.521 ac 4.81% Impervious Runoff Depth>2.18"
Flow Length=562' Tc=21.3 min CN=64 Runoff=4.50 cfs 0.459 af**Subcatchment16: Subcat 16**Runoff Area=4.718 ac 0.92% Impervious Runoff Depth>2.01"
Flow Length=719' Tc=27.7 min CN=62 Runoff=6.89 cfs 0.790 af**Subcatchment17: Subcat 17**Runoff Area=5.336 ac 0.00% Impervious Runoff Depth>1.93"
Flow Length=704' Tc=22.6 min CN=61 Runoff=8.10 cfs 0.859 af

Proposed Conditions - North Plantation

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Type III 24-hr 25 year Rainfall=6.18"

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Page 61

Subcatchment18: Subcat 18Runoff Area=1.751 ac 0.00% Impervious Runoff Depth>1.93"
Flow Length=422' Tc=24.5 min CN=61 Runoff=2.57 cfs 0.282 af**Subcatchment19: Subcat 19**Runoff Area=21.570 ac 0.00% Impervious Runoff Depth>1.91"
Flow Length=1,667' Tc=45.7 min CN=61 Runoff=23.57 cfs 3.434 af**Subcatchment20: Subcat 20**Runoff Area=1.629 ac 0.00% Impervious Runoff Depth>1.93"
Flow Length=544' Tc=20.9 min CN=61 Runoff=2.56 cfs 0.262 af**Subcatchment21: Subcat 21**Runoff Area=3.990 ac 0.00% Impervious Runoff Depth>1.68"
Flow Length=1,249' Tc=29.8 min CN=58 Runoff=4.61 cfs 0.559 af**Subcatchment22: Subcat 22**Runoff Area=17.726 ac 0.00% Impervious Runoff Depth>1.89"
Flow Length=2,340' Tc=64.5 min CN=61 Runoff=15.75 cfs 2.797 af**Subcatchment23: Subcat 23**Runoff Area=0.264 ac 0.00% Impervious Runoff Depth>1.95"
Flow Length=133' Tc=5.3 min CN=61 Runoff=0.63 cfs 0.043 af**Subcatchment24: Subcat 24**Runoff Area=2.795 ac 0.00% Impervious Runoff Depth>1.94"
Flow Length=746' Tc=17.4 min CN=61 Runoff=4.72 cfs 0.451 af**Subcatchment25: Subcat 25**Runoff Area=12.168 ac 0.00% Impervious Runoff Depth>1.91"
Tc=45.8 min CN=61 Runoff=13.26 cfs 1.937 af**Subcatchment27: Subcat 27**Runoff Area=2.191 ac 0.00% Impervious Runoff Depth>1.93"
Flow Length=464' Tc=21.7 min CN=61 Runoff=3.39 cfs 0.353 af**Subcatchment28: Subcat 28**Runoff Area=7.360 ac 0.00% Impervious Runoff Depth>1.16"
Flow Length=461' Tc=16.1 min CN=51 Runoff=6.79 cfs 0.713 af**Subcatchment29: Subcat 29**Runoff Area=1.626 ac 0.00% Impervious Runoff Depth>0.32"
Flow Length=167' Tc=6.5 min CN=37 Runoff=0.22 cfs 0.043 af**Subcatchment30: Subcat 30**Runoff Area=3.911 ac 0.00% Impervious Runoff Depth>1.94"
Flow Length=380' Tc=11.2 min CN=61 Runoff=7.78 cfs 0.632 af**Subcatchment31: Subcat 31**Runoff Area=3.646 ac 0.00% Impervious Runoff Depth>0.47"
Flow Length=261' Tc=7.6 min CN=40 Runoff=0.91 cfs 0.143 af**Subcatchment33: Subcat 33**Runoff Area=14.255 ac 0.00% Impervious Runoff Depth>1.70"
Tc=0.0 min CN=58 Runoff=33.60 cfs 2.025 af**Subcatchment34: Subcat 34**Runoff Area=7.888 ac 0.00% Impervious Runoff Depth>1.93"
Flow Length=596' Tc=24.6 min CN=61 Runoff=11.57 cfs 1.268 af**Subcatchment35: Subcat 35**Runoff Area=7.628 ac 0.00% Impervious Runoff Depth>1.38"
Flow Length=579' Tc=23.5 min CN=54 Runoff=7.64 cfs 0.876 af**Pond 7P: (new Pond)**Peak Elev=164.57' Storage=108,081 cf Inflow=17.77 cfs 2.709 af
Outflow=0.94 cfs 0.227 af

Proposed Conditions - North Plantation

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Type III 24-hr 25 year Rainfall=6.18"

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Page 62

Pond 10P: (new Pond)Peak Elev=149.12' Storage=15,938 cf Inflow=3.98 cfs 0.366 af
Outflow=0.00 cfs 0.000 af**Pond 11P: (new Pond)**Peak Elev=142.33' Storage=1,197 cf Inflow=5.22 cfs 0.549 af
Outflow=4.96 cfs 0.547 af**Pond 12P: (new Pond)**Peak Elev=162.68' Storage=26,147 cf Inflow=6.86 cfs 0.601 af
Outflow=0.00 cfs 0.000 af**Pond 13P: (new Pond)**Peak Elev=161.64' Storage=55,889 cf Inflow=17.14 cfs 3.066 af
Outflow=9.72 cfs 1.992 af**Pond 15P: (new Pond)**Peak Elev=163.29' Storage=19,982 cf Inflow=4.50 cfs 0.459 af
Outflow=0.00 cfs 0.000 af**Pond 16P: (new Pond)**Peak Elev=162.97' Storage=34,386 cf Inflow=6.89 cfs 0.790 af
Outflow=0.00 cfs 0.000 af**Pond 19P: (new Pond)**Peak Elev=153.49' Storage=40,773 cf Inflow=23.57 cfs 3.434 af
Outflow=18.28 cfs 2.806 af**Pond 28P: (new Pond)**Peak Elev=153.81' Storage=31,034 cf Inflow=6.79 cfs 0.713 af
Outflow=0.00 cfs 0.000 af**Pond 29P: (new Pond)**Peak Elev=147.32' Storage=1,888 cf Inflow=0.22 cfs 0.043 af
Outflow=0.00 cfs 0.000 af**Pond 30P: (new Pond)**Peak Elev=170.68' Storage=27,525 cf Inflow=7.78 cfs 0.632 af
Outflow=0.00 cfs 0.000 af**Pond 33P: (new Pond)**Peak Elev=152.13' Storage=88,157 cf Inflow=33.60 cfs 2.025 af
Outflow=0.00 cfs 0.000 af**Pond 34P: (new Pond)**Peak Elev=154.99' Storage=55,192 cf Inflow=11.57 cfs 1.268 af
Outflow=0.00 cfs 0.000 af**Pond 35P: (new Pond)**Peak Elev=157.02' Storage=38,101 cf Inflow=7.64 cfs 0.876 af
Outflow=0.00 cfs 0.000 af**Total Runoff Area = 200.805 ac Runoff Volume = 29.049 af Average Runoff Depth = 1.74"**
99.72% Pervious = 200.240 ac 0.28% Impervious = 0.565 ac

Proposed Conditions - North Plantation

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Type III 24-hr 50 year Rainfall=7.02"

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Page 115

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1: Subcat 1Runoff Area=0.864 ac 0.00% Impervious Runoff Depth>2.31"
Flow Length=247' Tc=7.8 min CN=59 Runoff=2.28 cfs 0.166 af**Subcatchment2: Subcat 2**Runoff Area=4.510 ac 0.00% Impervious Runoff Depth>0.80"
Flow Length=343' Tc=9.5 min CN=41 Runoff=2.53 cfs 0.302 af**Subcatchment3: Subcat 3**Runoff Area=2.727 ac 0.00% Impervious Runoff Depth>1.34"
Flow Length=188' Tc=9.5 min CN=48 Runoff=3.50 cfs 0.305 af**Subcatchment4: Subcat 4**Runoff Area=3.638 ac 0.00% Impervious Runoff Depth>2.12"
Flow Length=462' Tc=11.1 min CN=57 Runoff=7.88 cfs 0.642 af**Subcatchment5: Subcat 5**Runoff Area=8.688 ac 0.00% Impervious Runoff Depth>2.38"
Flow Length=790' Tc=24.2 min CN=60 Runoff=16.00 cfs 1.726 af**Subcatchment6: Subcat 6**Runoff Area=6.472 ac 0.00% Impervious Runoff Depth>2.30"
Flow Length=527' Tc=16.2 min CN=59 Runoff=13.38 cfs 1.240 af**Subcatchment7: Subcat 7**Runoff Area=17.047 ac 0.00% Impervious Runoff Depth>2.45"
Flow Length=1,407' Tc=49.6 min CN=61 Runoff=23.11 cfs 3.481 af**Subcatchment8: Subcat 8**Runoff Area=3.131 ac 0.00% Impervious Runoff Depth>2.49"
Flow Length=435' Tc=11.6 min CN=61 Runoff=8.01 cfs 0.650 af**Subcatchment10: Subcat 10**Runoff Area=3.173 ac 0.00% Impervious Runoff Depth>1.85"
Flow Length=427' Tc=13.0 min CN=54 Runoff=5.52 cfs 0.489 af**Subcatchment11: Subcat 11**Runoff Area=5.661 ac 0.85% Impervious Runoff Depth>1.59"
Flow Length=598' Tc=16.1 min CN=51 Runoff=7.55 cfs 0.748 af**Subcatchment12: Subcat 12**Runoff Area=3.290 ac 4.83% Impervious Runoff Depth>2.77"
Flow Length=374' Tc=14.4 min CN=64 Runoff=8.76 cfs 0.761 af**Subcatchment13: Subcat 13**Runoff Area=18.033 ac 1.07% Impervious Runoff Depth>2.53"
Flow Length=1,351' Tc=63.8 min CN=62 Runoff=21.91 cfs 3.799 af**Subcatchment14: Subcat 14**Runoff Area=0.597 ac 0.00% Impervious Runoff Depth>2.49"
Flow Length=270' Tc=13.0 min CN=61 Runoff=1.46 cfs 0.124 af**Subcatchment15: Subcat 15**Runoff Area=2.521 ac 4.81% Impervious Runoff Depth>2.77"
Flow Length=562' Tc=21.3 min CN=64 Runoff=5.75 cfs 0.581 af**Subcatchment16: Subcat 16**Runoff Area=4.718 ac 0.92% Impervious Runoff Depth>2.57"
Flow Length=719' Tc=27.7 min CN=62 Runoff=8.90 cfs 1.010 af**Subcatchment17: Subcat 17**Runoff Area=5.336 ac 0.00% Impervious Runoff Depth>2.48"
Flow Length=704' Tc=22.6 min CN=61 Runoff=10.54 cfs 1.102 af

Proposed Conditions - North Plantation

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Type III 24-hr 50 year Rainfall=7.02"

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Page 116

Subcatchment18: Subcat 18Runoff Area=1.751 ac 0.00% Impervious Runoff Depth>2.48"
Flow Length=422' Tc=24.5 min CN=61 Runoff=3.35 cfs 0.362 af**Subcatchment19: Subcat 19**Runoff Area=21.570 ac 0.00% Impervious Runoff Depth>2.45"
Flow Length=1,667' Tc=45.7 min CN=61 Runoff=30.66 cfs 4.412 af**Subcatchment20: Subcat 20**Runoff Area=1.629 ac 0.00% Impervious Runoff Depth>2.48"
Flow Length=544' Tc=20.9 min CN=61 Runoff=3.33 cfs 0.337 af**Subcatchment21: Subcat 21**Runoff Area=3.990 ac 0.00% Impervious Runoff Depth>2.19"
Flow Length=1,249' Tc=29.8 min CN=58 Runoff=6.13 cfs 0.729 af**Subcatchment22: Subcat 22**Runoff Area=17.726 ac 0.00% Impervious Runoff Depth>2.43"
Flow Length=2,340' Tc=64.5 min CN=61 Runoff=20.51 cfs 3.595 af**Subcatchment23: Subcat 23**Runoff Area=0.264 ac 0.00% Impervious Runoff Depth>2.50"
Flow Length=133' Tc=5.3 min CN=61 Runoff=0.82 cfs 0.055 af**Subcatchment24: Subcat 24**Runoff Area=2.795 ac 0.00% Impervious Runoff Depth>2.48"
Flow Length=746' Tc=17.4 min CN=61 Runoff=6.15 cfs 0.579 af**Subcatchment25: Subcat 25**Runoff Area=12.168 ac 0.00% Impervious Runoff Depth>2.45"
Tc=45.8 min CN=61 Runoff=17.25 cfs 2.489 af**Subcatchment27: Subcat 27**Runoff Area=2.191 ac 0.00% Impervious Runoff Depth>2.48"
Flow Length=464' Tc=21.7 min CN=61 Runoff=4.41 cfs 0.453 af**Subcatchment28: Subcat 28**Runoff Area=7.360 ac 0.00% Impervious Runoff Depth>1.59"
Flow Length=461' Tc=16.1 min CN=51 Runoff=9.81 cfs 0.973 af**Subcatchment29: Subcat 29**Runoff Area=1.626 ac 0.00% Impervious Runoff Depth>0.54"
Flow Length=167' Tc=6.5 min CN=37 Runoff=0.46 cfs 0.073 af**Subcatchment30: Subcat 30**Runoff Area=3.911 ac 0.00% Impervious Runoff Depth>2.49"
Flow Length=380' Tc=11.2 min CN=61 Runoff=10.13 cfs 0.812 af**Subcatchment31: Subcat 31**Runoff Area=3.646 ac 0.00% Impervious Runoff Depth>0.74"
Flow Length=261' Tc=7.6 min CN=40 Runoff=1.85 cfs 0.223 af**Subcatchment33: Subcat 33**Runoff Area=14.255 ac 0.00% Impervious Runoff Depth>2.22"
Tc=0.0 min CN=58 Runoff=44.71 cfs 2.639 af**Subcatchment34: Subcat 34**Runoff Area=7.888 ac 0.00% Impervious Runoff Depth>2.48"
Flow Length=596' Tc=24.6 min CN=61 Runoff=15.05 cfs 1.628 af**Subcatchment35: Subcat 35**Runoff Area=7.628 ac 0.00% Impervious Runoff Depth>1.84"
Flow Length=579' Tc=23.5 min CN=54 Runoff=10.56 cfs 1.169 af**Pond 7P: (new Pond)**Peak Elev=164.62' Storage=118,720 cf Inflow=23.11 cfs 3.481 af
Outflow=2.11 cfs 0.848 af

Proposed Conditions - North Plantation

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Type III 24-hr 50 year Rainfall=7.02"

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Page 117

Pond 10P: (new Pond)Peak Elev=149.63' Storage=21,272 cf Inflow=5.52 cfs 0.489 af
Outflow=0.00 cfs 0.000 af**Pond 11P: (new Pond)**Peak Elev=142.42' Storage=1,579 cf Inflow=7.55 cfs 0.748 af
Outflow=7.27 cfs 0.746 af**Pond 12P: (new Pond)**Peak Elev=162.80' Storage=33,116 cf Inflow=8.76 cfs 0.761 af
Outflow=0.00 cfs 0.000 af**Pond 13P: (new Pond)**Peak Elev=161.69' Storage=60,803 cf Inflow=22.18 cfs 3.923 af
Outflow=15.74 cfs 2.839 af**Pond 15P: (new Pond)**Peak Elev=163.45' Storage=25,312 cf Inflow=5.75 cfs 0.581 af
Outflow=0.00 cfs 0.000 af**Pond 16P: (new Pond)**Peak Elev=163.02' Storage=38,069 cf Inflow=8.90 cfs 1.010 af
Outflow=0.51 cfs 0.144 af**Pond 19P: (new Pond)**Peak Elev=153.62' Storage=45,325 cf Inflow=30.66 cfs 4.412 af
Outflow=26.12 cfs 3.776 af**Pond 28P: (new Pond)**Peak Elev=154.41' Storage=42,310 cf Inflow=9.81 cfs 0.973 af
Outflow=0.00 cfs 0.000 af**Pond 29P: (new Pond)**Peak Elev=147.90' Storage=3,166 cf Inflow=0.46 cfs 0.073 af
Outflow=0.00 cfs 0.000 af**Pond 30P: (new Pond)**Peak Elev=170.90' Storage=35,332 cf Inflow=10.13 cfs 0.812 af
Outflow=0.00 cfs 0.000 af**Pond 33P: (new Pond)**Peak Elev=152.65' Storage=114,863 cf Inflow=44.71 cfs 2.639 af
Outflow=0.00 cfs 0.000 af**Pond 34P: (new Pond)**Peak Elev=155.54' Storage=70,875 cf Inflow=15.05 cfs 1.628 af
Outflow=0.00 cfs 0.000 af**Pond 35P: (new Pond)**Peak Elev=157.26' Storage=50,873 cf Inflow=10.56 cfs 1.169 af
Outflow=0.00 cfs 0.000 af**Total Runoff Area = 200.805 ac Runoff Volume = 37.651 af Average Runoff Depth = 2.25"
99.72% Pervious = 200.240 ac 0.28% Impervious = 0.565 ac**

Proposed Conditions - North Plantation

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Type III 24-hr 100 year Rainfall=7.96"

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Page 170

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1: Subcat 1Runoff Area=0.864 ac 0.00% Impervious Runoff Depth>2.94"
Flow Length=247' Tc=7.8 min CN=59 Runoff=2.94 cfs 0.212 af**Subcatchment2: Subcat 2**Runoff Area=4.510 ac 0.00% Impervious Runoff Depth>1.17"
Flow Length=343' Tc=9.5 min CN=41 Runoff=4.45 cfs 0.439 af**Subcatchment3: Subcat 3**Runoff Area=2.727 ac 0.00% Impervious Runoff Depth>1.82"
Flow Length=188' Tc=9.5 min CN=48 Runoff=5.01 cfs 0.413 af**Subcatchment4: Subcat 4**Runoff Area=3.638 ac 0.00% Impervious Runoff Depth>2.72"
Flow Length=462' Tc=11.1 min CN=57 Runoff=10.29 cfs 0.825 af**Subcatchment5: Subcat 5**Runoff Area=8.688 ac 0.00% Impervious Runoff Depth>3.02"
Flow Length=790' Tc=24.2 min CN=60 Runoff=20.48 cfs 2.188 af**Subcatchment6: Subcat 6**Runoff Area=6.472 ac 0.00% Impervious Runoff Depth>2.93"
Flow Length=527' Tc=16.2 min CN=59 Runoff=17.24 cfs 1.578 af**Subcatchment7: Subcat 7**Runoff Area=17.047 ac 0.00% Impervious Runoff Depth>3.10"
Flow Length=1,407' Tc=49.6 min CN=61 Runoff=29.41 cfs 4.398 af**Subcatchment8: Subcat 8**Runoff Area=3.131 ac 0.00% Impervious Runoff Depth>3.14"
Flow Length=435' Tc=11.6 min CN=61 Runoff=10.20 cfs 0.820 af**Subcatchment10: Subcat 10**Runoff Area=3.173 ac 0.00% Impervious Runoff Depth>2.41"
Flow Length=427' Tc=13.0 min CN=54 Runoff=7.38 cfs 0.638 af**Subcatchment11: Subcat 11**Runoff Area=5.661 ac 0.85% Impervious Runoff Depth>2.11"
Flow Length=598' Tc=16.1 min CN=51 Runoff=10.39 cfs 0.993 af**Subcatchment12: Subcat 12**Runoff Area=3.290 ac 4.83% Impervious Runoff Depth>3.46"
Flow Length=374' Tc=14.4 min CN=64 Runoff=10.98 cfs 0.949 af**Subcatchment13: Subcat 13**Runoff Area=18.033 ac 1.07% Impervious Runoff Depth>3.18"
Flow Length=1,351' Tc=63.8 min CN=62 Runoff=27.77 cfs 4.782 af**Subcatchment14: Subcat 14**Runoff Area=0.597 ac 0.00% Impervious Runoff Depth>3.14"
Flow Length=270' Tc=13.0 min CN=61 Runoff=1.86 cfs 0.156 af**Subcatchment15: Subcat 15**Runoff Area=2.521 ac 4.81% Impervious Runoff Depth>3.45"
Flow Length=562' Tc=21.3 min CN=64 Runoff=7.20 cfs 0.726 af**Subcatchment16: Subcat 16**Runoff Area=4.718 ac 0.92% Impervious Runoff Depth>3.23"
Flow Length=719' Tc=27.7 min CN=62 Runoff=11.27 cfs 1.270 af**Subcatchment17: Subcat 17**Runoff Area=5.336 ac 0.00% Impervious Runoff Depth>3.13"
Flow Length=704' Tc=22.6 min CN=61 Runoff=13.41 cfs 1.392 af

Proposed Conditions - North Plantation

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Type III 24-hr 100 year Rainfall=7.96"

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Page 171

Subcatchment18: Subcat 18

Runoff Area=1.751 ac 0.00% Impervious Runoff Depth>3.13"
Flow Length=422' Tc=24.5 min CN=61 Runoff=4.26 cfs 0.457 af

Subcatchment19: Subcat 19

Runoff Area=21.570 ac 0.00% Impervious Runoff Depth>3.10"
Flow Length=1,667' Tc=45.7 min CN=61 Runoff=39.03 cfs 5.574 af

Subcatchment20: Subcat 20

Runoff Area=1.629 ac 0.00% Impervious Runoff Depth>3.13"
Flow Length=544' Tc=20.9 min CN=61 Runoff=4.23 cfs 0.425 af

Subcatchment21: Subcat 21

Runoff Area=3.990 ac 0.00% Impervious Runoff Depth>2.81"
Flow Length=1,249' Tc=29.8 min CN=58 Runoff=7.94 cfs 0.933 af

Subcatchment22: Subcat 22

Runoff Area=17.726 ac 0.00% Impervious Runoff Depth>3.08"
Flow Length=2,340' Tc=64.5 min CN=61 Runoff=26.14 cfs 4.543 af

Subcatchment23: Subcat 23

Runoff Area=0.264 ac 0.00% Impervious Runoff Depth>3.15"
Flow Length=133' Tc=5.3 min CN=61 Runoff=1.04 cfs 0.069 af

Subcatchment24: Subcat 24

Runoff Area=2.795 ac 0.00% Impervious Runoff Depth>3.14"
Flow Length=746' Tc=17.4 min CN=61 Runoff=7.83 cfs 0.731 af

Subcatchment25: Subcat 25

Runoff Area=12.168 ac 0.00% Impervious Runoff Depth>3.10"
Tc=45.8 min CN=61 Runoff=21.96 cfs 3.144 af

Subcatchment27: Subcat 27

Runoff Area=2.191 ac 0.00% Impervious Runoff Depth>3.13"
Flow Length=464' Tc=21.7 min CN=61 Runoff=5.61 cfs 0.572 af

Subcatchment28: Subcat 28

Runoff Area=7.360 ac 0.00% Impervious Runoff Depth>2.11"
Flow Length=461' Tc=16.1 min CN=51 Runoff=13.51 cfs 1.292 af

Subcatchment29: Subcat 29

Runoff Area=1.626 ac 0.00% Impervious Runoff Depth>0.83"
Flow Length=167' Tc=6.5 min CN=37 Runoff=0.96 cfs 0.113 af

Subcatchment30: Subcat 30

Runoff Area=3.911 ac 0.00% Impervious Runoff Depth>3.14"
Flow Length=380' Tc=11.2 min CN=61 Runoff=12.89 cfs 1.025 af

Subcatchment31: Subcat 31

Runoff Area=3.646 ac 0.00% Impervious Runoff Depth>1.08"
Flow Length=261' Tc=7.6 min CN=40 Runoff=3.35 cfs 0.329 af

Subcatchment33: Subcat 33

Runoff Area=14.255 ac 0.00% Impervious Runoff Depth>2.84"
Tc=0.0 min CN=58 Runoff=57.90 cfs 3.374 af

Subcatchment34: Subcat 34

Runoff Area=7.888 ac 0.00% Impervious Runoff Depth>3.13"
Flow Length=596' Tc=24.6 min CN=61 Runoff=19.16 cfs 2.056 af

Subcatchment35: Subcat 35

Runoff Area=7.628 ac 0.00% Impervious Runoff Depth>2.40"
Flow Length=579' Tc=23.5 min CN=54 Runoff=14.10 cfs 1.526 af

Pond 7P: (new Pond)

Peak Elev=164.68' Storage=131,492 cf Inflow=29.41 cfs 4.398 af
Outflow=3.86 cfs 1.669 af

Proposed Conditions - North Plantation

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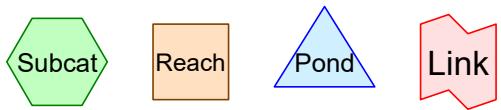
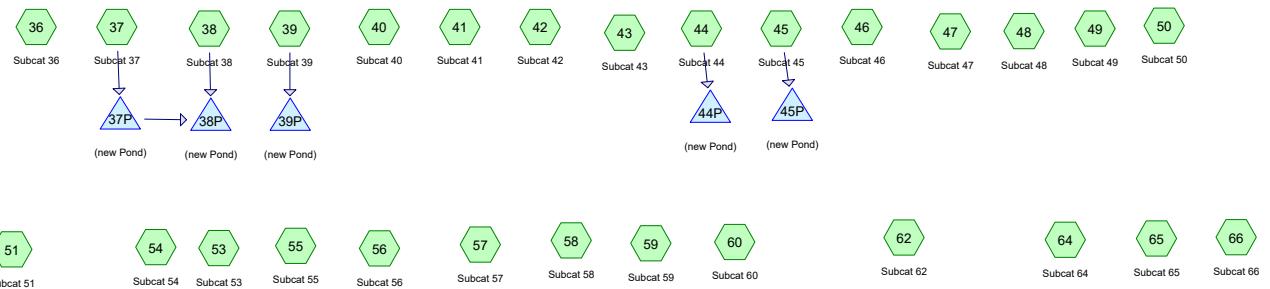
Type III 24-hr 100 year Rainfall=7.96"

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Page 172

Pond 10P: (new Pond)	Peak Elev=150.16' Storage=27,755 cf Inflow=7.38 cfs 0.638 af Outflow=0.00 cfs 0.000 af
Pond 11P: (new Pond)	Peak Elev=142.52' Storage=2,024 cf Inflow=10.39 cfs 0.993 af Outflow=10.03 cfs 0.991 af
Pond 12P: (new Pond)	Peak Elev=162.92' Storage=41,323 cf Inflow=10.98 cfs 0.949 af Outflow=0.00 cfs 0.000 af
Pond 13P: (new Pond)	Peak Elev=161.74' Storage=66,055 cf Inflow=28.13 cfs 4.939 af Outflow=22.78 cfs 3.846 af
Pond 15P: (new Pond)	Peak Elev=163.62' Storage=31,589 cf Inflow=7.20 cfs 0.726 af Outflow=0.00 cfs 0.000 af
Pond 16P: (new Pond)	Peak Elev=163.04' Storage=39,432 cf Inflow=11.27 cfs 1.270 af Outflow=1.19 cfs 0.400 af
Pond 19P: (new Pond)	Peak Elev=153.75' Storage=50,457 cf Inflow=39.03 cfs 5.574 af Outflow=34.70 cfs 4.929 af
Pond 28P: (new Pond)	Peak Elev=155.02' Storage=56,199 cf Inflow=13.51 cfs 1.292 af Outflow=0.00 cfs 0.000 af
Pond 29P: (new Pond)	Peak Elev=148.53' Storage=4,907 cf Inflow=0.96 cfs 0.113 af Outflow=0.00 cfs 0.000 af
Pond 30P: (new Pond)	Peak Elev=171.13' Storage=44,607 cf Inflow=12.89 cfs 1.025 af Outflow=0.00 cfs 0.000 af
Pond 33P: (new Pond)	Peak Elev=153.22' Storage=146,865 cf Inflow=57.90 cfs 3.374 af Outflow=0.00 cfs 0.000 af
Pond 34P: (new Pond)	Peak Elev=156.11' Storage=89,474 cf Inflow=19.16 cfs 2.056 af Outflow=0.00 cfs 0.000 af
Pond 35P: (new Pond)	Peak Elev=157.52' Storage=66,405 cf Inflow=14.10 cfs 1.526 af Outflow=0.00 cfs 0.000 af

Total Runoff Area = 200.805 ac Runoff Volume = 47.941 af Average Runoff Depth = 2.86"
99.72% Pervious = 200.240 ac 0.28% Impervious = 0.565 ac



Routing Diagram for Proposed Conditions - South Plantation

Prepared by VHB, Printed 7/22/2020

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Page 2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.000	0	, HSG A (54)
0.012	46	2 acre lots, 12% imp, HSG A (64)
4.022	65	2 acre lots, 12% imp, HSG B (36, 62)
9.708	39	>75% Grass cover, Good, HSG A (40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 53, 54, 55, 56, 57, 58, 59, 60, 62, 64, 65)
115.246	61	>75% Grass cover, Good, HSG B (36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 53, 54, 55, 56, 57, 58, 59, 60, 62, 64, 65, 66)
0.105	89	Paved roads w/open ditches, 50% imp, HSG B (36, 37, 39, 62, 66)
14.570	36	Woods, Fair, HSG A (47, 48, 49, 50, 51, 53, 54, 57, 58, 59, 60)
2.295	60	Woods, Fair, HSG B (46, 47, 48, 49, 50, 51, 53, 54, 57)
145.958	57	TOTAL AREA

Proposed Conditions - South Plantation

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Page 3

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
24.289	HSG A	40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 53, 54, 55, 56, 57, 58, 59, 60, 62, 64, 65
121.668	HSG B	36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 53, 54, 55, 56, 57, 58, 59, 60, 62, 64, 65, 66
0.000	HSG C	
0.000	HSG D	
0.000	Other	
145.958		TOTAL AREA

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Page 4

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatch Numbers
0.000	0.000	0.000	0.000	0.000	0.000		
0.012	4.022	0.000	0.000	0.000	4.033	2 acre lots, 12% imp	
9.708	115.246	0.000	0.000	0.000	124.954	>75% Grass cover, Good	
0.000	0.105	0.000	0.000	0.000	0.105	Paved roads w/open ditches, 50% imp	
14.570	2.295	0.000	0.000	0.000	16.865	Woods, Fair	
24.289	121.668	0.000	0.000	0.000	145.958	TOTAL AREA	

Proposed Conditions - South Plantation

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Type III 24-hr 2 year Rainfall=3.16"

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Page 5

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment36: Subcat 36Runoff Area=8.684 ac 0.33% Impervious Runoff Depth>0.37"
Flow Length=944' Tc=33.6 min CN=61 Runoff=1.57 cfs 0.265 af**Subcatchment37: Subcat 37**Runoff Area=1.143 ac 0.10% Impervious Runoff Depth>0.37"
Flow Length=405' Tc=17.0 min CN=61 Runoff=0.26 cfs 0.035 af**Subcatchment38: Subcat 38**Runoff Area=3.921 ac 0.00% Impervious Runoff Depth>0.37"
Flow Length=567' Tc=23.7 min CN=61 Runoff=0.81 cfs 0.121 af**Subcatchment39: Subcat 39**Runoff Area=2.047 ac 0.60% Impervious Runoff Depth>0.37"
Flow Length=200' Tc=10.6 min CN=61 Runoff=0.53 cfs 0.063 af**Subcatchment40: Subcat 40**Runoff Area=0.652 ac 0.00% Impervious Runoff Depth>0.37"
Flow Length=208' Tc=10.2 min CN=61 Runoff=0.17 cfs 0.020 af**Subcatchment41: Subcat 41**Runoff Area=0.889 ac 0.00% Impervious Runoff Depth>0.28"
Flow Length=245' Tc=8.6 min CN=58 Runoff=0.14 cfs 0.021 af**Subcatchment42: Subcat 42**Runoff Area=1.849 ac 0.00% Impervious Runoff Depth>0.25"
Flow Length=384' Tc=13.0 min CN=57 Runoff=0.24 cfs 0.039 af**Subcatchment43: Subcat 43**Runoff Area=0.915 ac 0.00% Impervious Runoff Depth>0.25"
Flow Length=354' Tc=15.5 min CN=57 Runoff=0.12 cfs 0.019 af**Subcatchment44: Subcat 44**Runoff Area=2.114 ac 0.00% Impervious Runoff Depth>0.31"
Flow Length=363' Tc=10.2 min CN=59 Runoff=0.39 cfs 0.054 af**Subcatchment45: Subcat 45**Runoff Area=2.350 ac 0.00% Impervious Runoff Depth>0.31"
Flow Length=214' Tc=6.4 min CN=59 Runoff=0.49 cfs 0.061 af**Subcatchment46: Subcat 46**Runoff Area=3.063 ac 0.00% Impervious Runoff Depth>0.34"
Flow Length=522' Tc=11.7 min CN=60 Runoff=0.66 cfs 0.087 af**Subcatchment47: Subcat 47**Runoff Area=3.767 ac 0.00% Impervious Runoff Depth>0.08"
Flow Length=463' Tc=13.8 min CN=49 Runoff=0.05 cfs 0.024 af**Subcatchment48: Subcat 48**Runoff Area=5.342 ac 0.00% Impervious Runoff Depth>0.15"
Flow Length=376' Tc=12.5 min CN=53 Runoff=0.30 cfs 0.068 af**Subcatchment49: Subcat 49**Runoff Area=3.212 ac 0.00% Impervious Runoff Depth>0.11"
Flow Length=466' Tc=14.7 min CN=51 Runoff=0.09 cfs 0.030 af**Subcatchment50: Subcat 50**Runoff Area=7.384 ac 0.00% Impervious Runoff Depth>0.20"
Tc=14.7 min CN=55 Runoff=0.64 cfs 0.122 af**Subcatchment51: Subcat 51**Runoff Area=27.555 ac 0.00% Impervious Runoff Depth>0.36"
Flow Length=1,356' Tc=39.9 min CN=61 Runoff=4.60 cfs 0.837 af

Proposed Conditions - South Plantation

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Type III 24-hr 2 year Rainfall=3.16"

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Page 6

Subcatchment53: Subcat 53Runoff Area=4.763 ac 0.00% Impervious Runoff Depth>0.00"
Tc=0.0 min CN=40 Runoff=0.00 cfs 0.000 af**Subcatchment54: Subcat 54**Runoff Area=4.936 ac 0.00% Impervious Runoff Depth>0.00"
Tc=0.0 min CN=42 Runoff=0.01 cfs 0.002 af**Subcatchment55: Subcat 55**Runoff Area=2.683 ac 0.00% Impervious Runoff Depth>0.31"
Flow Length=790' Tc=23.0 min CN=59 Runoff=0.42 cfs 0.068 af**Subcatchment56: Subcat 56**Runoff Area=7.230 ac 0.00% Impervious Runoff Depth>0.37"
Tc=0.0 min CN=61 Runoff=2.51 cfs 0.226 af**Subcatchment57: Subcat 57**Runoff Area=5.692 ac 0.00% Impervious Runoff Depth>0.34"
Flow Length=567' Tc=17.8 min CN=60 Runoff=1.11 cfs 0.160 af**Subcatchment58: Subcat 58**Runoff Area=2.853 ac 0.00% Impervious Runoff Depth>0.04"
Flow Length=591' Tc=14.0 min CN=46 Runoff=0.02 cfs 0.009 af**Subcatchment59: Subcat 59**Runoff Area=4.073 ac 0.00% Impervious Runoff Depth>0.02"
Flow Length=316' Tc=12.3 min CN=44 Runoff=0.01 cfs 0.006 af**Subcatchment60: Subcat 60**Runoff Area=7.389 ac 0.00% Impervious Runoff Depth>0.30"
Flow Length=1,003' Tc=38.2 min CN=59 Runoff=0.95 cfs 0.186 af**Subcatchment62: Subcat 62**Runoff Area=24.202 ac 2.00% Impervious Runoff Depth>0.34"
Flow Length=1,288' Tc=29.7 min CN=60 Runoff=4.02 cfs 0.676 af**Subcatchment64: Subcat 64**Runoff Area=1.772 ac 0.08% Impervious Runoff Depth>0.15"
Flow Length=404' Tc=15.4 min CN=53 Runoff=0.09 cfs 0.023 af**Subcatchment65: Subcat 65**Runoff Area=3.565 ac 0.00% Impervious Runoff Depth>0.31"
Flow Length=599' Tc=25.1 min CN=59 Runoff=0.54 cfs 0.091 af**Subcatchment66: Subcat 66**Runoff Area=1.913 ac 0.49% Impervious Runoff Depth>0.37"
Flow Length=379' Tc=14.2 min CN=61 Runoff=0.46 cfs 0.059 af**Pond 37P: (new Pond)**Peak Elev=166.36' Storage=1,535 cf Inflow=0.26 cfs 0.035 af
Outflow=0.00 cfs 0.000 af**Pond 38P: (new Pond)**Peak Elev=164.05' Storage=5,243 cf Inflow=0.81 cfs 0.121 af
Outflow=0.00 cfs 0.000 af**Pond 39P: (new Pond)**Peak Elev=164.40' Storage=2,762 cf Inflow=0.53 cfs 0.063 af
Outflow=0.00 cfs 0.000 af**Pond 44P: (new Pond)**Peak Elev=157.92' Storage=2,370 cf Inflow=0.39 cfs 0.054 af
Outflow=0.00 cfs 0.000 af**Pond 45P: (new Pond)**Peak Elev=154.02' Storage=2,640 cf Inflow=0.49 cfs 0.061 af
Outflow=0.00 cfs 0.000 af

Proposed Conditions - South Plantation

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Type III 24-hr 2 year Rainfall=3.16"

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Page 7

Total Runoff Area = 145.958 ac Runoff Volume = 3.374 af Average Runoff Depth = 0.28"
99.63% Pervious = 145.421 ac 0.37% Impervious = 0.537 ac

Proposed Conditions - South Plantation

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Type III 24-hr 25 year Rainfall=6.18"

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Page 46

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment36: Subcat 36Runoff Area=8.684 ac 0.33% Impervious Runoff Depth>1.92"
Flow Length=944' Tc=33.6 min CN=61 Runoff=11.08 cfs 1.390 af**Subcatchment37: Subcat 37**Runoff Area=1.143 ac 0.10% Impervious Runoff Depth>1.94"
Flow Length=405' Tc=17.0 min CN=61 Runoff=1.95 cfs 0.184 af**Subcatchment38: Subcat 38**Runoff Area=3.921 ac 0.00% Impervious Runoff Depth>1.93"
Flow Length=567' Tc=23.7 min CN=61 Runoff=5.84 cfs 0.631 af**Subcatchment39: Subcat 39**Runoff Area=2.047 ac 0.60% Impervious Runoff Depth>1.94"
Flow Length=200' Tc=10.6 min CN=61 Runoff=4.14 cfs 0.331 af**Subcatchment40: Subcat 40**Runoff Area=0.652 ac 0.00% Impervious Runoff Depth>1.94"
Flow Length=208' Tc=10.2 min CN=61 Runoff=1.34 cfs 0.106 af**Subcatchment41: Subcat 41**Runoff Area=0.889 ac 0.00% Impervious Runoff Depth>1.70"
Flow Length=245' Tc=8.6 min CN=58 Runoff=1.62 cfs 0.126 af**Subcatchment42: Subcat 42**Runoff Area=1.849 ac 0.00% Impervious Runoff Depth>1.62"
Flow Length=384' Tc=13.0 min CN=57 Runoff=2.81 cfs 0.249 af**Subcatchment43: Subcat 43**Runoff Area=0.915 ac 0.00% Impervious Runoff Depth>1.61"
Flow Length=354' Tc=15.5 min CN=57 Runoff=1.30 cfs 0.123 af**Subcatchment44: Subcat 44**Runoff Area=2.114 ac 0.00% Impervious Runoff Depth>1.78"
Flow Length=363' Tc=10.2 min CN=59 Runoff=3.91 cfs 0.313 af**Subcatchment45: Subcat 45**Runoff Area=2.350 ac 0.00% Impervious Runoff Depth>1.78"
Flow Length=214' Tc=6.4 min CN=59 Runoff=4.94 cfs 0.349 af**Subcatchment46: Subcat 46**Runoff Area=3.063 ac 0.00% Impervious Runoff Depth>1.86"
Flow Length=522' Tc=11.7 min CN=60 Runoff=5.70 cfs 0.474 af**Subcatchment47: Subcat 47**Runoff Area=3.767 ac 0.00% Impervious Runoff Depth>1.02"
Flow Length=463' Tc=13.8 min CN=49 Runoff=3.04 cfs 0.322 af**Subcatchment48: Subcat 48**Runoff Area=5.342 ac 0.00% Impervious Runoff Depth>1.31"
Flow Length=376' Tc=12.5 min CN=53 Runoff=6.32 cfs 0.583 af**Subcatchment49: Subcat 49**Runoff Area=3.212 ac 0.00% Impervious Runoff Depth>1.16"
Flow Length=466' Tc=14.7 min CN=51 Runoff=3.05 cfs 0.311 af**Subcatchment50: Subcat 50**Runoff Area=7.384 ac 0.00% Impervious Runoff Depth>1.46"
Tc=14.7 min CN=55 Runoff=9.43 cfs 0.898 af**Subcatchment51: Subcat 51**Runoff Area=27.555 ac 0.00% Impervious Runoff Depth>1.92"
Flow Length=1,356' Tc=39.9 min CN=61 Runoff=32.31 cfs 4.399 af

Proposed Conditions - South Plantation

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Type III 24-hr 25 year Rainfall=6.18"

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Page 47

Subcatchment53: Subcat 53	Runoff Area=4.763 ac 0.00% Impervious Runoff Depth>0.47" Tc=0.0 min CN=40 Runoff=1.32 cfs 0.188 af
Subcatchment54: Subcat 54	Runoff Area=4.936 ac 0.00% Impervious Runoff Depth>0.59" Tc=0.0 min CN=42 Runoff=2.21 cfs 0.241 af
Subcatchment55: Subcat 55	Runoff Area=2.683 ac 0.00% Impervious Runoff Depth>1.77" Flow Length=790' Tc=23.0 min CN=59 Runoff=3.65 cfs 0.395 af
Subcatchment56: Subcat 56	Runoff Area=7.230 ac 0.00% Impervious Runoff Depth>1.95" Tc=0.0 min CN=61 Runoff=19.90 cfs 1.175 af
Subcatchment57: Subcat 57	Runoff Area=5.692 ac 0.00% Impervious Runoff Depth>1.85" Flow Length=567' Tc=17.8 min CN=60 Runoff=9.07 cfs 0.879 af
Subcatchment58: Subcat 58	Runoff Area=2.853 ac 0.00% Impervious Runoff Depth>0.82" Flow Length=591' Tc=14.0 min CN=46 Runoff=1.65 cfs 0.196 af
Subcatchment59: Subcat 59	Runoff Area=4.073 ac 0.00% Impervious Runoff Depth>0.70" Flow Length=316' Tc=12.3 min CN=44 Runoff=1.85 cfs 0.238 af
Subcatchment60: Subcat 60	Runoff Area=7.389 ac 0.00% Impervious Runoff Depth>1.75" Flow Length=1,003' Tc=38.2 min CN=59 Runoff=8.01 cfs 1.080 af
Subcatchment62: Subcat 62	Runoff Area=24.202 ac 2.00% Impervious Runoff Depth>1.84" Flow Length=1,288' Tc=29.7 min CN=60 Runoff=31.12 cfs 3.716 af
Subcatchment64: Subcat 64	Runoff Area=1.772 ac 0.08% Impervious Runoff Depth>1.31" Flow Length=404' Tc=15.4 min CN=53 Runoff=1.94 cfs 0.193 af
Subcatchment65: Subcat 65	Runoff Area=3.565 ac 0.00% Impervious Runoff Depth>1.77" Flow Length=599' Tc=25.1 min CN=59 Runoff=4.68 cfs 0.524 af
Subcatchment66: Subcat 66	Runoff Area=1.913 ac 0.49% Impervious Runoff Depth>1.94" Flow Length=379' Tc=14.2 min CN=61 Runoff=3.49 cfs 0.309 af
Pond 37P: (new Pond)	Peak Elev=166.54' Storage=2,870 cf Inflow=1.95 cfs 0.184 af Outflow=1.19 cfs 0.126 af
Pond 38P: (new Pond)	Peak Elev=164.57' Storage=14,596 cf Inflow=6.35 cfs 0.756 af Outflow=2.26 cfs 0.450 af
Pond 39P: (new Pond)	Peak Elev=165.05' Storage=14,411 cf Inflow=4.14 cfs 0.331 af Outflow=0.00 cfs 0.000 af
Pond 44P: (new Pond)	Peak Elev=158.83' Storage=13,628 cf Inflow=3.91 cfs 0.313 af Outflow=0.00 cfs 0.000 af
Pond 45P: (new Pond)	Peak Elev=155.26' Storage=15,175 cf Inflow=4.94 cfs 0.349 af Outflow=0.00 cfs 0.000 af

Proposed Conditions - South Plantation

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Type III 24-hr 25 year Rainfall=6.18"

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Page 48

Total Runoff Area = 145.958 ac Runoff Volume = 19.923 af Average Runoff Depth = 1.64"
99.63% Pervious = 145.421 ac 0.37% Impervious = 0.537 ac

Proposed Conditions - South Plantation

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Type III 24-hr 50 year Rainfall=7.02"

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Page 87

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment36: Subcat 36Runoff Area=8.684 ac 0.33% Impervious Runoff Depth>2.47"
Flow Length=944' Tc=33.6 min CN=61 Runoff=14.41 cfs 1.786 af**Subcatchment37: Subcat 37**Runoff Area=1.143 ac 0.10% Impervious Runoff Depth>2.48"
Flow Length=405' Tc=17.0 min CN=61 Runoff=2.53 cfs 0.237 af**Subcatchment38: Subcat 38**Runoff Area=3.921 ac 0.00% Impervious Runoff Depth>2.48"
Flow Length=567' Tc=23.7 min CN=61 Runoff=7.60 cfs 0.810 af**Subcatchment39: Subcat 39**Runoff Area=2.047 ac 0.60% Impervious Runoff Depth>2.49"
Flow Length=200' Tc=10.6 min CN=61 Runoff=5.39 cfs 0.425 af**Subcatchment40: Subcat 40**Runoff Area=0.652 ac 0.00% Impervious Runoff Depth>2.49"
Flow Length=208' Tc=10.2 min CN=61 Runoff=1.74 cfs 0.135 af**Subcatchment41: Subcat 41**Runoff Area=0.889 ac 0.00% Impervious Runoff Depth>2.21"
Flow Length=245' Tc=8.6 min CN=58 Runoff=2.16 cfs 0.164 af**Subcatchment42: Subcat 42**Runoff Area=1.849 ac 0.00% Impervious Runoff Depth>2.12"
Flow Length=384' Tc=13.0 min CN=57 Runoff=3.78 cfs 0.326 af**Subcatchment43: Subcat 43**Runoff Area=0.915 ac 0.00% Impervious Runoff Depth>2.11"
Flow Length=354' Tc=15.5 min CN=57 Runoff=1.75 cfs 0.161 af**Subcatchment44: Subcat 44**Runoff Area=2.114 ac 0.00% Impervious Runoff Depth>2.30"
Flow Length=363' Tc=10.2 min CN=59 Runoff=5.17 cfs 0.406 af**Subcatchment45: Subcat 45**Runoff Area=2.350 ac 0.00% Impervious Runoff Depth>2.31"
Flow Length=214' Tc=6.4 min CN=59 Runoff=6.52 cfs 0.452 af**Subcatchment46: Subcat 46**Runoff Area=3.063 ac 0.00% Impervious Runoff Depth>2.40"
Flow Length=522' Tc=11.7 min CN=60 Runoff=7.48 cfs 0.612 af**Subcatchment47: Subcat 47**Runoff Area=3.767 ac 0.00% Impervious Runoff Depth>1.42"
Flow Length=463' Tc=13.8 min CN=49 Runoff=4.61 cfs 0.446 af**Subcatchment48: Subcat 48**Runoff Area=5.342 ac 0.00% Impervious Runoff Depth>1.76"
Flow Length=376' Tc=12.5 min CN=53 Runoff=8.87 cfs 0.784 af**Subcatchment49: Subcat 49**Runoff Area=3.212 ac 0.00% Impervious Runoff Depth>1.59"
Flow Length=466' Tc=14.7 min CN=51 Runoff=4.41 cfs 0.425 af**Subcatchment50: Subcat 50**Runoff Area=7.384 ac 0.00% Impervious Runoff Depth>1.94"
Tc=14.7 min CN=55 Runoff=13.03 cfs 1.191 af**Subcatchment51: Subcat 51**Runoff Area=27.555 ac 0.00% Impervious Runoff Depth>2.46"
Flow Length=1,356' Tc=39.9 min CN=61 Runoff=42.02 cfs 5.650 af

Proposed Conditions - South Plantation

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Page 88

Subcatchment53: Subcat 53Runoff Area=4.763 ac 0.00% Impervious Runoff Depth>0.74"
Tc=0.0 min CN=40 Runoff=2.97 cfs 0.293 af**Subcatchment54: Subcat 54**Runoff Area=4.936 ac 0.00% Impervious Runoff Depth>0.88"
Tc=0.0 min CN=42 Runoff=4.21 cfs 0.363 af**Subcatchment55: Subcat 55**Runoff Area=2.683 ac 0.00% Impervious Runoff Depth>2.29"
Flow Length=790' Tc=23.0 min CN=59 Runoff=4.82 cfs 0.512 af**Subcatchment56: Subcat 56**Runoff Area=7.230 ac 0.00% Impervious Runoff Depth>2.50"
Tc=0.0 min CN=61 Runoff=25.87 cfs 1.508 af**Subcatchment57: Subcat 57**Runoff Area=5.692 ac 0.00% Impervious Runoff Depth>2.39"
Flow Length=567' Tc=17.8 min CN=60 Runoff=11.89 cfs 1.134 af**Subcatchment58: Subcat 58**Runoff Area=2.853 ac 0.00% Impervious Runoff Depth>1.18"
Flow Length=591' Tc=14.0 min CN=46 Runoff=2.65 cfs 0.280 af**Subcatchment59: Subcat 59**Runoff Area=4.073 ac 0.00% Impervious Runoff Depth>1.02"
Flow Length=316' Tc=12.3 min CN=44 Runoff=3.22 cfs 0.347 af**Subcatchment60: Subcat 60**Runoff Area=7.389 ac 0.00% Impervious Runoff Depth>2.28"
Flow Length=1,003' Tc=38.2 min CN=59 Runoff=10.57 cfs 1.401 af**Subcatchment62: Subcat 62**Runoff Area=24.202 ac 2.00% Impervious Runoff Depth>2.38"
Flow Length=1,288' Tc=29.7 min CN=60 Runoff=40.74 cfs 4.796 af**Subcatchment64: Subcat 64**Runoff Area=1.772 ac 0.08% Impervious Runoff Depth>1.76"
Flow Length=404' Tc=15.4 min CN=53 Runoff=2.72 cfs 0.260 af**Subcatchment65: Subcat 65**Runoff Area=3.565 ac 0.00% Impervious Runoff Depth>2.29"
Flow Length=599' Tc=25.1 min CN=59 Runoff=6.19 cfs 0.680 af**Subcatchment66: Subcat 66**Runoff Area=1.913 ac 0.49% Impervious Runoff Depth>2.49"
Flow Length=379' Tc=14.2 min CN=61 Runoff=4.55 cfs 0.397 af**Pond 37P: (new Pond)**Peak Elev=166.56' Storage=3,026 cf Inflow=2.53 cfs 0.237 af
Outflow=2.01 cfs 0.178 af**Pond 38P: (new Pond)**Peak Elev=164.62' Storage=15,905 cf Inflow=9.47 cfs 0.988 af
Outflow=5.25 cfs 0.679 af**Pond 39P: (new Pond)**Peak Elev=165.20' Storage=18,500 cf Inflow=5.39 cfs 0.425 af
Outflow=0.00 cfs 0.000 af**Pond 44P: (new Pond)**Peak Elev=159.01' Storage=17,535 cf Inflow=5.17 cfs 0.406 af
Outflow=0.10 cfs 0.003 af**Pond 45P: (new Pond)**Peak Elev=155.54' Storage=19,673 cf Inflow=6.52 cfs 0.452 af
Outflow=0.00 cfs 0.000 af

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Page 89

Total Runoff Area = 145.958 ac Runoff Volume = 25.979 af Average Runoff Depth = 2.14"
99.63% Pervious = 145.421 ac 0.37% Impervious = 0.537 ac

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Type III 24-hr 100 year Rainfall=7.96"

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Page 128

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment36: Subcat 36Runoff Area=8.684 ac 0.33% Impervious Runoff Depth>3.12"
Flow Length=944' Tc=33.6 min CN=61 Runoff=18.34 cfs 2.255 af**Subcatchment37: Subcat 37**Runoff Area=1.143 ac 0.10% Impervious Runoff Depth>3.14"
Flow Length=405' Tc=17.0 min CN=61 Runoff=3.22 cfs 0.299 af**Subcatchment38: Subcat 38**Runoff Area=3.921 ac 0.00% Impervious Runoff Depth>3.13"
Flow Length=567' Tc=23.7 min CN=61 Runoff=9.67 cfs 1.022 af**Subcatchment39: Subcat 39**Runoff Area=2.047 ac 0.60% Impervious Runoff Depth>3.15"
Flow Length=200' Tc=10.6 min CN=61 Runoff=6.87 cfs 0.537 af**Subcatchment40: Subcat 40**Runoff Area=0.652 ac 0.00% Impervious Runoff Depth>3.15"
Flow Length=208' Tc=10.2 min CN=61 Runoff=2.21 cfs 0.171 af**Subcatchment41: Subcat 41**Runoff Area=0.889 ac 0.00% Impervious Runoff Depth>2.83"
Flow Length=245' Tc=8.6 min CN=58 Runoff=2.80 cfs 0.210 af**Subcatchment42: Subcat 42**Runoff Area=1.849 ac 0.00% Impervious Runoff Depth>2.72"
Flow Length=384' Tc=13.0 min CN=57 Runoff=4.93 cfs 0.419 af**Subcatchment43: Subcat 43**Runoff Area=0.915 ac 0.00% Impervious Runoff Depth>2.72"
Flow Length=354' Tc=15.5 min CN=57 Runoff=2.28 cfs 0.207 af**Subcatchment44: Subcat 44**Runoff Area=2.114 ac 0.00% Impervious Runoff Depth>2.93"
Flow Length=363' Tc=10.2 min CN=59 Runoff=6.65 cfs 0.517 af**Subcatchment45: Subcat 45**Runoff Area=2.350 ac 0.00% Impervious Runoff Depth>2.94"
Flow Length=214' Tc=6.4 min CN=59 Runoff=8.38 cfs 0.575 af**Subcatchment46: Subcat 46**Runoff Area=3.063 ac 0.00% Impervious Runoff Depth>3.04"
Flow Length=522' Tc=11.7 min CN=60 Runoff=9.59 cfs 0.775 af**Subcatchment47: Subcat 47**Runoff Area=3.767 ac 0.00% Impervious Runoff Depth>1.91"
Flow Length=463' Tc=13.8 min CN=49 Runoff=6.52 cfs 0.600 af**Subcatchment48: Subcat 48**Runoff Area=5.342 ac 0.00% Impervious Runoff Depth>2.31"
Flow Length=376' Tc=12.5 min CN=53 Runoff=11.97 cfs 1.028 af**Subcatchment49: Subcat 49**Runoff Area=3.212 ac 0.00% Impervious Runoff Depth>2.11"
Flow Length=466' Tc=14.7 min CN=51 Runoff=6.12 cfs 0.564 af**Subcatchment50: Subcat 50**Runoff Area=7.384 ac 0.00% Impervious Runoff Depth>2.51"
Tc=14.7 min CN=55 Runoff=17.28 cfs 1.546 af**Subcatchment51: Subcat 51**Runoff Area=27.555 ac 0.00% Impervious Runoff Depth>3.11"
Flow Length=1,356' Tc=39.9 min CN=61 Runoff=53.52 cfs 7.137 af

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Page 129

Subcatchment53: Subcat 53Runoff Area=4.763 ac 0.00% Impervious Runoff Depth>1.09"
Tc=0.0 min CN=40 Runoff=5.30 cfs 0.432 af**Subcatchment54: Subcat 54**Runoff Area=4.936 ac 0.00% Impervious Runoff Depth>1.26"
Tc=0.0 min CN=42 Runoff=7.18 cfs 0.520 af**Subcatchment55: Subcat 55**Runoff Area=2.683 ac 0.00% Impervious Runoff Depth>2.92"
Flow Length=790' Tc=23.0 min CN=59 Runoff=6.21 cfs 0.652 af**Subcatchment56: Subcat 56**Runoff Area=7.230 ac 0.00% Impervious Runoff Depth>3.16"
Tc=0.0 min CN=61 Runoff=32.89 cfs 1.903 af**Subcatchment57: Subcat 57**Runoff Area=5.692 ac 0.00% Impervious Runoff Depth>3.03"
Flow Length=567' Tc=17.8 min CN=60 Runoff=15.23 cfs 1.437 af**Subcatchment58: Subcat 58**Runoff Area=2.853 ac 0.00% Impervious Runoff Depth>1.62"
Flow Length=591' Tc=14.0 min CN=46 Runoff=3.98 cfs 0.386 af**Subcatchment59: Subcat 59**Runoff Area=4.073 ac 0.00% Impervious Runoff Depth>1.44"
Flow Length=316' Tc=12.3 min CN=44 Runoff=5.01 cfs 0.488 af**Subcatchment60: Subcat 60**Runoff Area=7.389 ac 0.00% Impervious Runoff Depth>2.90"
Flow Length=1,003' Tc=38.2 min CN=59 Runoff=13.61 cfs 1.785 af**Subcatchment62: Subcat 62**Runoff Area=24.202 ac 2.00% Impervious Runoff Depth>3.02"
Flow Length=1,288' Tc=29.7 min CN=60 Runoff=52.13 cfs 6.082 af**Subcatchment64: Subcat 64**Runoff Area=1.772 ac 0.08% Impervious Runoff Depth>2.31"
Flow Length=404' Tc=15.4 min CN=53 Runoff=3.68 cfs 0.341 af**Subcatchment65: Subcat 65**Runoff Area=3.565 ac 0.00% Impervious Runoff Depth>2.92"
Flow Length=599' Tc=25.1 min CN=59 Runoff=7.97 cfs 0.866 af**Subcatchment66: Subcat 66**Runoff Area=1.913 ac 0.49% Impervious Runoff Depth>3.14"
Flow Length=379' Tc=14.2 min CN=61 Runoff=5.79 cfs 0.501 af**Pond 37P: (new Pond)**Peak Elev=166.58' Storage=3,180 cf Inflow=3.22 cfs 0.299 af
Outflow=2.92 cfs 0.240 af**Pond 38P: (new Pond)**Peak Elev=164.66' Storage=17,244 cf Inflow=12.59 cfs 1.262 af
Outflow=8.85 cfs 0.953 af**Pond 39P: (new Pond)**Peak Elev=165.37' Storage=23,355 cf Inflow=6.87 cfs 0.537 af
Outflow=0.00 cfs 0.000 af**Pond 44P: (new Pond)**Peak Elev=159.02' Storage=17,804 cf Inflow=6.65 cfs 0.517 af
Outflow=0.41 cfs 0.112 af**Pond 45P: (new Pond)**Peak Elev=155.83' Storage=25,046 cf Inflow=8.38 cfs 0.575 af
Outflow=0.00 cfs 0.000 af

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Page 130

Total Runoff Area = 145.958 ac Runoff Volume = 33.255 af Average Runoff Depth = 2.73"
99.63% Pervious = 145.421 ac 0.37% Impervious = 0.537 ac