

Levy Nuclear Plant Units 1 and 2 Detailed Floodplain Analysis for the Site

Prepared for

Progress Energy Florida, Inc.

Prepared by



February 2010

Subject to Revision Based Upon Comments Received from Review Agencies

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Acronyms and Abbreviations

CADD	Computer-Aided Drafting and Design
CBC	concrete box culvert
CFR	Code of Federal Regulations
CN	curve number
CR	County Road
DTM	digital terrain model
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
ERP	Environmental Resource Permit
F.A.C.	Florida Administrative Code
FDEP	Florida Department of Environmental Protection
FDOT	Florida Department of Transportation
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FIS	Flood Insurance Study
FLUCCS	Florida Land Use, Cover, and Forms Classification System
GIS	Geographical Information System
LiDAR	Light Detection and Ranging
LNP	Levy Nuclear Plant Units 1 and 2
NAVD	North American Vertical Datum
NFIP	National Flood Insurance Program
NGVD	National Geodetic Vertical Datum
NRC	U.S. Nuclear Regulatory Commission
NRCS	Natural Resources Conservation Service
PEF	Progress Energy Florida, Inc.
SCS	Soil Conservation Service
SHGW	seasonal high groundwater
SR	State Road
SWFWMD	Southwest Florida Water Management District
SWMM	Storm Water Management Model
TR	Technical Release

Acronyms and Abbreviations, Continued

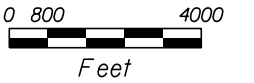
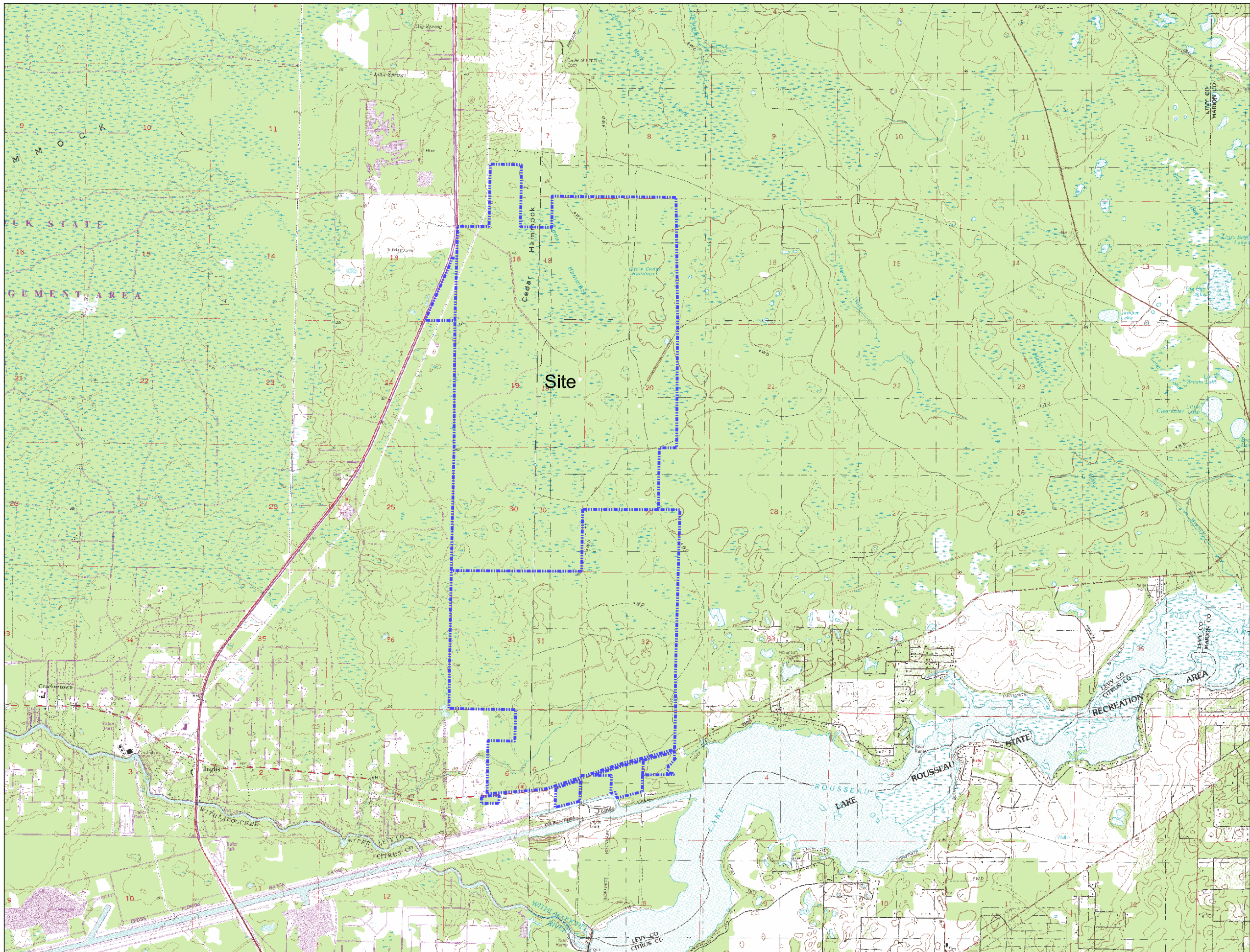
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USGS	U.S. Geological Survey

1.0 Introduction

Progress Energy Florida, Inc. (PEF) identified a location in southwestern Levy County, Florida, for the construction of a new nuclear power plant, as shown on Figure 1-1. The proposed facility is the Levy Nuclear Plant Units 1 and 2 (LNP).

The U.S. Nuclear Regulatory Commission (NRC) and the U.S. Army Corps of Engineers (USACE) are preparing an Environmental Impact Statement (EIS) as part of the federal approval process for the proposed LNP site and associated transmission facilities. A component of the EIS is an assessment of the potential impact to the Federal Emergency Management Agency (FEMA) floodplain. The FEMA-adopted floodplains in the vicinity of the LNP site are shown on Figure 1-2. Identified as Zone A on the 1984 Flood Insurance Rate Maps (FIRMs) for Levy County (FEMA, 1984a), FEMA defines Zone A as “areas of 100-year flood; base flood elevations and flood hazard factors not determined.” The objective of this analysis is to define the elevation and extent of the onsite floodplains that meet FEMA requirements for map updates. To that end, the LNP site and surrounding area were modeled for the existing site conditions (based on the Light Detection and Ranging [LiDAR] survey in 2006) and the proposed general arrangement and associated fill (PEF, 2009a).

This technical memorandum provides the results of the floodplain modeling used to determine the base flood elevations, the extent of onsite floodplains, and if onsite compensation storage is required.



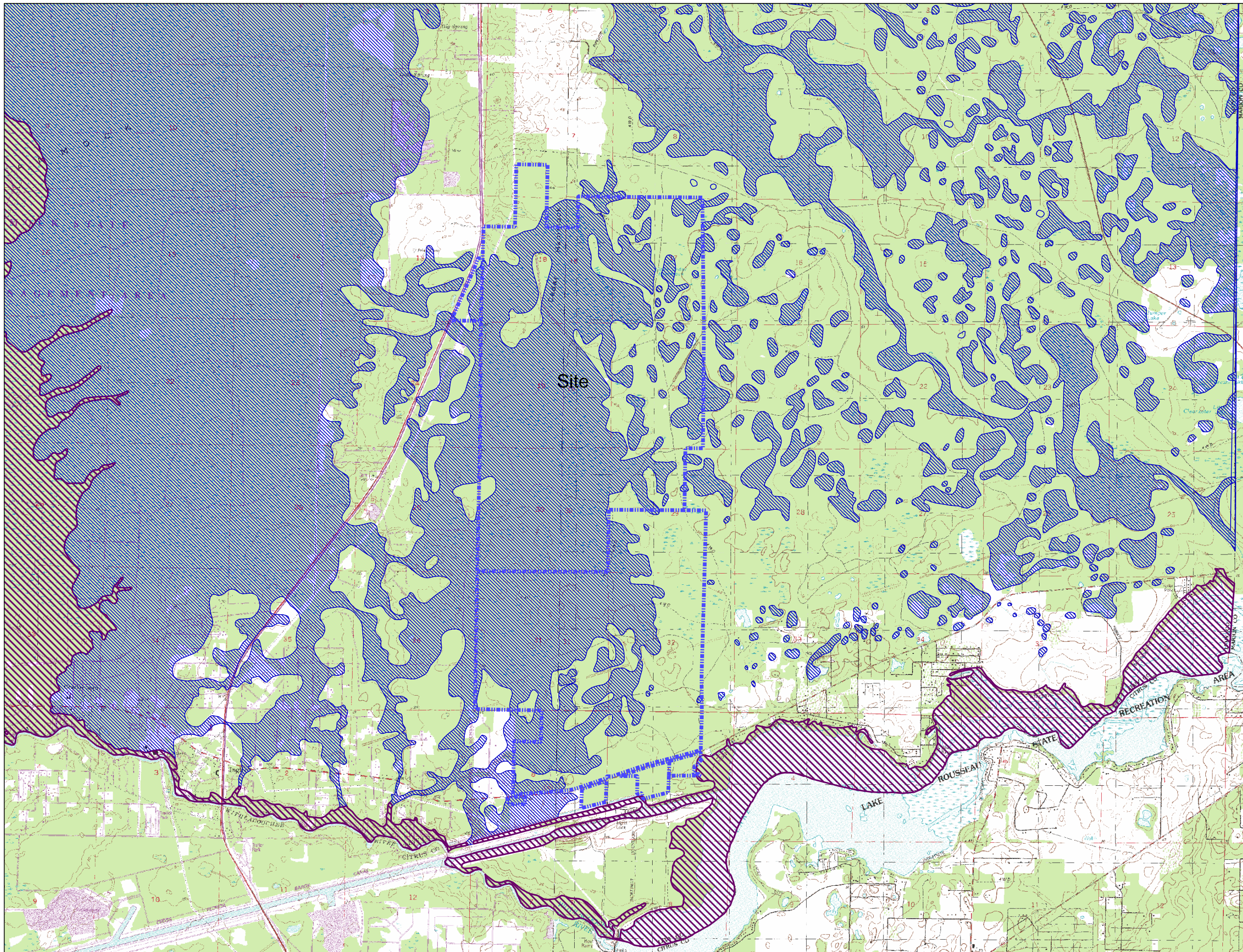
Legend:

■■■■■■■■■■ Property Owned by Progress Energy

Source: USGS Quadrangle Maps
Yankeetown, Yankeetown SE,
Dunnellon, and Tidewater

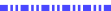


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Site**

**Figure 1-1
Location Map**



0 800 4000
Feet

Legend:

-  Property Owned by Progress Energy
-  FEMA Zone A, Levy County
-  FEMA Zone AE, Levy County

Source: USGS Quadrangle Maps
Yankeetown, Yankeetown SE,
Dunnellon, and Tidewater

1996 FEMA Special Flood Hazard Areas
FGDL - GIS Files

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**Figure 1-2
FEMA Floodplain Map**

2.0 Regulatory Requirements

The proposed LNP facility will require fill within the 100-year floodplain as mapped by FEMA. The activities are subject to federal, state, and local regulatory requirements.

2.1 FEMA Floodplain Mapping

The FEMA-adopted floodplains at the LNP site are mapped as Zone A, which are “areas of 100-year flood; base flood elevations and flood hazard factors not determined.” The FIRM Zone A line appears to have been set primarily by using soils data and U.S. Geological Survey (USGS) Quadrangle maps to identify approximate areas of probable flooding. The mapped Zone A areas correspond fairly well with the wetland land use mapping for the overall project site, based on the approved wetland flags where available and the Florida Land Use, Cover, and Forms Classification System (FLUCCS) mapping by Southwest Florida Water Management District (SWFWMD) (SWFWMD, 2007). Because the Zone A mappings are set using approximate methods, refinements to the mappings based on more detailed site topographic data and computer simulation are permitted.

2.2 State and Local Regulatory Framework

State and local regulations are identified in the state approval process. The Florida Governor and Cabinet, sitting as the State of Florida Siting Board, approved the *Final Order on Certification for the Progress Energy Levy Nuclear Power Plant Units 1 & 2* on August 26, 2009. The Final Order included Conditions of Certification (Florida Department of Environmental Protection [FDEP], 2009). The floodplain requirements of the Levy County Code of Ordinances, *Chapter 50 Article VI Flood Damage Protection* (Levy County, 1991), and the SWFWMD, a regional state agency, are incorporated into the Conditions of Certification. The FDEP is identified as the lead review agency for local and state requirements.

From a local standpoint, in addition to requirements for finished floor elevations and/or flood-proofing of buildings, the Levy County rules require consistency with SWFWMD rules, with provisions for no adverse impact to offsite property owners.

Similarly, the SWFWMD requirements are to protect adjacent property owners from increased flood stages in addition to lesser event water quality and water quantity requirements to maintain drainage conditions as shown in the SWFWMD Environmental Resource Permit (ERP) Basis of Review (SWFWMD, 2005) as adopted by the FDEP. The Basis of Review (see Rule 62-330.200(3), Florida Administrative Code [F.A.C.]) contains definitions and requirements for onsite fill as follows:

- Isolated wetlands “owned or controlled by the applicant may be used for flood attenuation purposes.”
- For floodplains, no net encroachment “up to that encompassed by the 100-year event, which will adversely affect either conveyance, storage, water quality or adjacent lands

will be allowed. Any required compensation storage shall be equivalently provided between the seasonal high water level and the 100 year flood level to allow storage function during all lesser flood events.”

- “Provision must be made to replace or otherwise mitigate the loss of historic basin storage provided by the project site,” which is defined as the “depression storage available on the site in the predevelopment condition.” Historic basin storage maintains groundwater recharge opportunities with site development.

The separation between floodplain storage (that is, peak flood ponding) and historic basin storage depends on the landscape. In general, floodplain storage is the detention volume above the elevation where stormwater runoff occurs by sheet flow from natural low areas; historic basin storage is the detention and/or retention volume below this discharge elevation. The historic basin storage volume remains onsite and percolates to recharge the surficial aquifer system. Normal surface water levels (that is, non-flooding) are most often no higher than the seasonal high groundwater (SHGW) elevation, and SHGW is the typical starting elevation used for flood evaluations. This SHGW elevation is often below the elevation when sheet flow begins, so overlap in historic basin storage and flooding volumes is possible and they are not mutually exclusive (that is, not additive).

FDEP will use SWFWMD criteria and policies for evaluation of LNP submittals; therefore, the standard permitting practices and policies for SWFWMD are applicable to the LNP. Based on a SWFWMD presentation (SWFWMD, 2008), the procedures to address impacts to the floodplain and historic basin storage, in order of SWFWMD preference, are as follows:

- Provide volume compensation storage onsite for fill in the floodplain.
- Purchase the land or flooding rights to the property affected by the fill.
- Use dynamic modeling to demonstrate no adverse offsite impact of the fill.
- Apply for a variance (Section 120.542, Florida Statutes and Rule 28-104, F.A.C).

Generally, the procedures above are in order of decreasing land requirements and increasing site data. The most straightforward permitting approach is to provide the volume compensation, which is at a 1:1 ratio and locally referred to as cup-for-cup compensation. SWFWMD allows for dynamic modeling to evaluate the need for volume compensation and PEF has the site data required for this work. Therefore, an updated floodplain impact analysis utilizing dynamic modeling was conducted.

3.0 Methodology and Site Conditions

This section describes the methodology used to complete the hydraulic analyses of the floodplain in the vicinity of the LNP site. Further detail of the information sources, the site location and conditions, and the hydrologic and hydraulic modeling approach and software are provided below.

3.1 Information Sources

Information sources used in developing this report include the following:

- LiDAR mapping - datum North American Vertical Datum (NAVD) (Sargent & Lundy, 2007)
- FIRMS for Levy County Community Panel Numbers (FEMA, 1984a):
 - 120145 0640 D
 - 120145 0625 D
 - 120145 0650 D
- Levy County Flood Insurance Study (FIS) – datum National Geodetic Vertical Datum (NGVD) (FEMA, 1984b)
- USGS Florida Maps for Quadrangles - datum NGVD:
 - Yankeetown (1955, revised 1993)
 - Yankeetown Southeast (1991)
 - Dunnellon (1991)
 - Tidewater (1991)
- As-Built Florida Department of Transportation (FDOT) Plans, Financial Project Identification 210376-2-52-01, Levy County (34050), State Road 55 (SR 55, also known as US 19), received December 16, 2008, Engineer of Record Kelly, Collins and Gentry, Inc. for milling and resurfacing and the addition of turn lanes - datum NAVD
- Geographical Information System (GIS) files
 - FDEP Basins (FDEP, 1998)
 - FEMA floodplain (FEMA, 1996)
 - FLUCCS (SWFWMD, 2007)
 - Natural Resources Conservation Service (NRCS) Soils (USDA, 1990)
- Site Plan from the Combined License Application's *Environmental Report* (PEF, 2009b)

The accuracy certification and datum for the LiDAR data are provided as Attachment A. Note the conversion between NAVD and NGVD in the study area is as follows:

NAVD = NGVD - 1.0 foot.

3.2 Site Location and Conditions

The LNP site is located in Levy County, Florida, east of US 19, north of County Road 40 (CR 40), and just north of the Levy-Citrus County border. The nearest incorporated municipality is the Town of Inglis, located southwest of the site. This area is located in a primarily rural region and is sparsely populated. Generally, the site drains from northeast to southwest and ultimately discharges to the Gulf of Mexico, located 12.8 kilometers (7.9 miles) west of the LNP site.

Much of the property, particularly at the locations of the proposed site development, has been in intensive silviculture production for over a century. Tree production and harvesting operations have extensively altered the natural configuration of the vegetation and the land surface by creating a series of elevated beds, separated by shallow furrows. In addition, existing onsite and offsite unpaved roads functionally block stormwater runoff compared with the conditions prior to disturbance to the site, which causes more flood storage.

Due to the rural character of this area, no gauge or monitoring data for historic upland flood stages are available. Similarly, the review of historical aerials provided no indication of the extent of historical flooding.

3.3 Hydrologic and Hydraulic Modeling Approach and Software

Hydrologic and hydraulic floodplain analyses conducted for the LNP site used the U.S. Environmental Protection Agency (EPA) Storm Water Management Model (SWMM) Version 5 software, Build 5.0.017. SWMM is a publicly available and widely used software that is approved by FEMA. The hydraulic routines in SWMM solve dynamically the full equations of momentum and conservation and accounts for channel storage, tailwater effects, entrance/exit losses, flow reversal, and pressurized flow, thus satisfying SWFWMD's requirement for dynamic modeling.

The LNP site and access road system are within three major drainage watersheds as delineated by FDEP in 1998:

- Spring Run
- Runoff to Gulf
- Withlacoochee River

A small portion of the southern parcel not projected to be disturbed drains to the Lake Rousseau Basin. The drainage watersheds are shown on Figure 3-1.

General flow patterns are from northeast to southwest to existing culverts under US 19 and CR 40, as shown on Figure 3-2. The floodplain model was further subdivided into sub-basins representing both onsite and offsite flood routing and storage (that is, ponding) units. As the 100-year event is extreme with extensive flooding, hydraulic interconnection between the basins and roadway overtopping were included in the model.

3.3.1 Hydrology

Runoff was estimated using Dynamic Wave Routing, which solves Manning's equation for overland flow for continuity and momentum. The following input parameters are required for Dynamic Wave Routing in SWMM:

- Rain: A rain file was created to reflect a single 100-year, 24-hour design storm event. The total rainfall of 11.3 inches with a 24-hour Soil Conservation Service (SCS) Type II storm, Florida-Modified rainfall distribution was used per the SWFWMD Design Aids, as presented in Attachment B, *SWFWMD Rainfall Data*.
- Roughness: Manning's equation is applied to estimate overland flow rates for the impervious and pervious components. For these existing and proposed models, a value of 0.013 was used to reflect impervious flow cover. A value of 0.4 was used for pervious flow cover as it reflects woods with light underbrush or thick grass/brush.
- Depth of Depression Storage: The depth of depression storage varies with land cover. SWMM uses two values, one for the impervious portion of the subcatchment and one for the pervious portion of the subcatchment. A value of 0.3 was applied to pervious land and reflects the land use type of forest with litter, which was the dominant use in the model area.
- Areas and Land Use: The sub-basin boundaries were input into GIS and used in conjunction with GIS coverage of the FLUCCS data, onsite FDEP-approved wetlands, and NRCS soils to determine the appropriate curve number (CN) and percent impervious for each land use type. CN is used to estimate excess precipitation (runoff) using NRCS methodology. The composite CN values were computed based on the associations listed in Table 3-1, *Correlation between Curve Number and FLUCCS Codes*, which are land use by hydrologic condition as defined in the SCS (now known as NRCS) Technical Release (TR) 55 (United States Department of Agriculture [USDA], 1986). Similarly, the percent impervious for each sub-basin was developed based on the percent impervious associated with each land use as defined in TR 55 and shown in Table 3-1. The results of the GIS spatial analysis to develop the composite CN and percent impervious are provided in Attachment C, *Hydrology Input Calculations*.

TABLE 3-1
Correlation between Curve Number and FLUCCS Codes

TR-55 Land Cover Description	Curve Numbers for Hydrologic Soil Group ⁽⁵⁾				FLUCCS Code and Description
	A	B	C	D	
Residential					
1/3-acre average lot size 30% impervious	57	72	81	86	1200 - Residential Medium Density 2 to less than-5 units/acre
1/2-acre average lot size 25% impervious	54	70	80	85	1100 - Residential Low Density Less than 2 units per acre
Woods ^(1, 4)	30	55	70	77	4100 - Pine Flatwoods 4110 - Upland Conifer Forest 4340 - Hardwood Conifer Mixed
Woods—grass combination (orchard or tree farm) ⁽⁴⁾	32	58	72	79	4400 - Tree Plantations
Pasture, grassland, or range— continuous forage for grazing ^(2, 4)	39	61	74	80	1900 - Open Land 2100 - Cropland and Pastureland 2600 - Other Open Lands (Rural) 8300 - Utilities
Brush—brush-weed-grass mixture with brush the major element ^(3, 4)	30	48	65	73	3200 - Shrub and Brushland
Commercial and business					
85% impervious	89	92	94	95	1400 - Commercial and Services
Roadways and Site Development					
Assumed 98% impervious	98	98	98	98	8100 - Transportation Limits of Construction
Wetland Features ⁽⁴⁾	100	100	100	100	6170 - Mixed Wetland Hardwoods 6210 - Cypress 6240 - Cypress-Pine-Cabbage Palm 6300 - Wetland Forested Mixed 6410 - Freshwater Marshes 6430 - Wet Prairies 6440 - Emergent Aquatic Vegetation
Impervious Water Features Assumed 100% impervious	100	100	100	100	5200 - Lakes 5300 - Reservoirs 6150 - Stream and Lake Swamps 6530 - Intermittent Ponds

Notes:

1. Assumed to be in Good Condition, defined in TR 55 as "Woods are protected from grazing, and litter and brush adequately cover the soil."
2. Assumed to be in Good Condition, defined in TR 55 as "> 75% ground cover and lightly or only occasionally grazed."
3. Assumed to be in Good Condition, defined in TR 55 as "> 75% ground cover."
4. Woods, woods-grass combination, pasture, brush, and wetland land uses were considered 0% impervious for the purpose of overland flow calculations.
5. Soils listed as B/D hydrologic soil groups were considered to be D soils for existing and proposed models.

The SWMM model was set up to estimate runoff with no infiltration and no evaporation to remain conservative and consistent with standard practices for single event floodplain modeling. The hydrology simulation was calibrated by adjusting the slope and width values for each sub-basin until results were comparable with the total storm runoff volumes and rates estimated using the TR 55 equation (USDA, 1986). This effort was to ensure consistency with SWFWMD design aids and guidance.

3.3.2 Hydraulics

The hydraulics of the site are modeled as a network of storage units, including the wetland depressions, with conduits, such as channels and culverts, to mimic the natural conditions and interconnection of the flatwoods landscape. Existing ground elevations with no reduction in storage for seasonal high groundwater were used so that the model addressed both the floodplain and historic basin storage.

For onsite storage units, the elevation and associated area for each sub-basin were measured using a Microstation Computer-Aided Drafting and Design (CADD) program with the 1-foot contour LiDAR data. Similarly, input for offsite sub-basins were determined using the 1-foot contour LiDAR data where available and the USGS 5-foot contour data elsewhere.

The overland flow between depressional areas was connected in the model with trapezoidal channels and the bottom width and side slopes were determined from the 1-foot contour data. A Manning's n value of 0.04 was selected to represent the vegetation and tree cover of this region.

In addition, natural channels were modeled as irregular transects measured in Microstation. The natural channels are irregular profile with fairly uniform side slopes in the main channel and wide overbank areas. A Manning's n value of 0.04 was selected for the main channel, and a value of 0.05 was selected for the overbanks.

The downstream boundary conditions are the US 19 and CR 40 culverts, shown on Figures 3-3 through 3-6, that generally serve as drainage outlets. The culverts are described as follows:

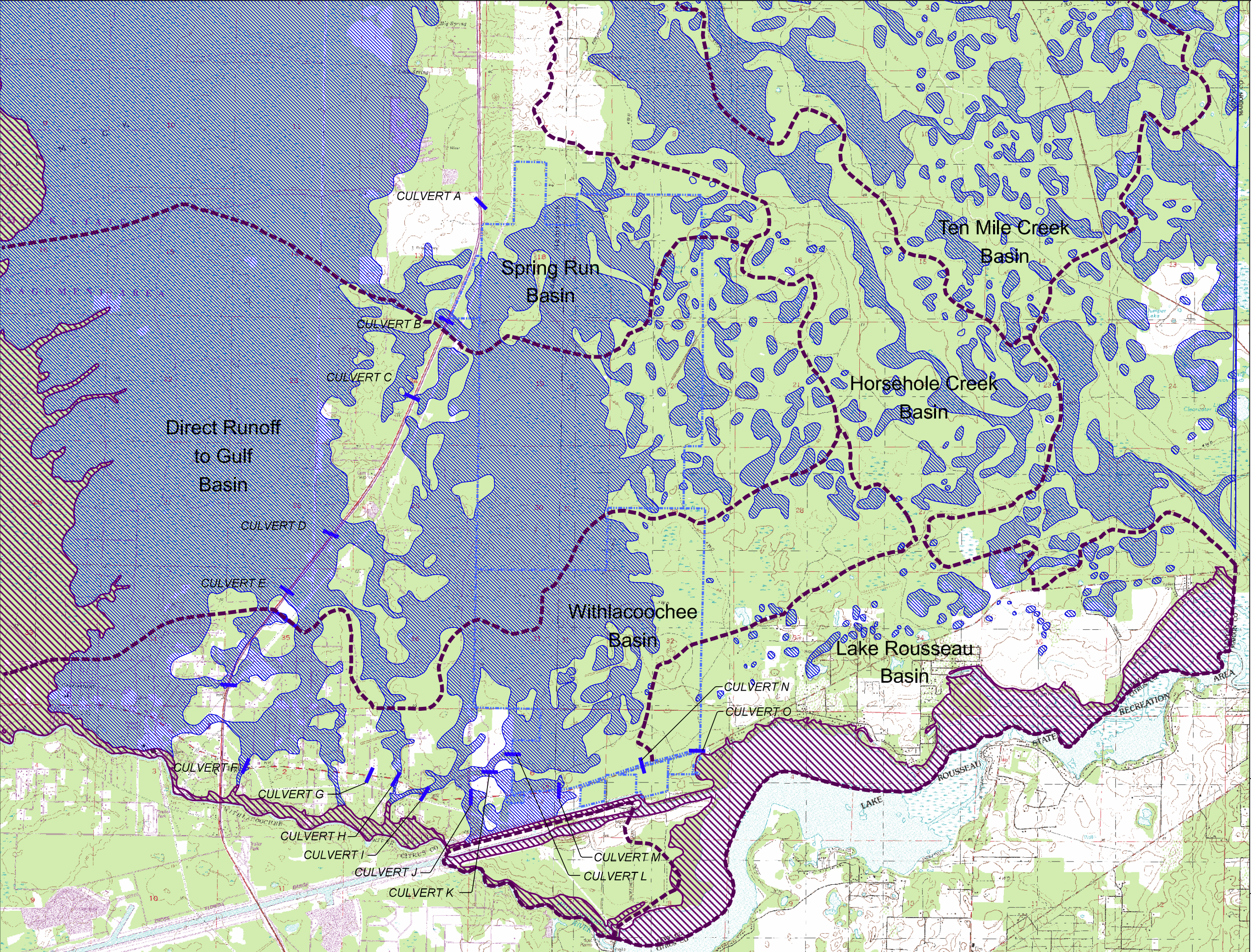
- Culvert A is a double 7-foot-wide, 6-foot-high concrete box culvert (CBC). Based on FDOT US 19 plans, the flow line is approximately elevation 29.5 feet and is likely flat. A minimum slope was assumed with a normal depth downstream control. The road profile is above elevation 40 feet in this vicinity, higher than peak flood levels; therefore, an overtopping link was not included.
- Culvert B is a double 8-foot-wide, 3-foot-high CBC. Based on FDOT US 19 plans, the flow line is approximately elevation 33.0 feet and is likely flat. A minimum slope was assumed with a normal depth downstream control. The road profile is above elevation 41 feet in this vicinity, higher than peak flood levels; therefore, an overtopping link was not included.
- Culvert C is a single 7-foot-wide, 3-foot-high CBC. Based on FDOT US 19 plans, the flow line is approximately elevation 36.3 feet and is likely flat. A minimum slope was assumed with a normal depth downstream control. The road profile is above elevation 42 feet in this vicinity, higher than peak flood levels; therefore, an overtopping link was not included.

- Culvert D is a triple 8-foot-wide, 3-foot-high CBC. Based on FDOT US 19 plans, the flow line is approximately elevation 14.0 feet and is likely flat. A minimum slope was assumed with a normal depth downstream control. The road profile is approximately elevation 22 feet in this vicinity, which has been reflected in the model; however, it was higher than the peak flood levels.
- Culvert E is a triple 10-foot-wide, 3-foot-high CBC. Based on FDOT US 19 plans, the flow line is approximately elevation 14.5 feet and is likely flat. A minimum slope was assumed with a normal depth downstream control. The road profile is approximately elevation 20 feet in this vicinity, which has been reflected in the model. Also, there is a low area along the unpaved driveway/road from US 19 just above elevation 17 feet, which has been included in the model.
- Culvert F is outside of the modeled area.
- Culvert G is a single CBC based on field observation. No data were available from Levy County regarding the cross drains along CR 40; therefore, a 2.5-foot-wide, 2-foot-high CBC with normal depth downstream was assumed. Because this is located in the vicinity in which 1-foot contours were not available, a profile elevation was estimated based on the USGS Quadrangle information, GoogleEarth, the adjacent 1-foot contours, and culvert inspections conducted as shown on Figure 3-7.
- Culvert H is a single CBC based on field observation. No data were available from Levy County regarding the cross drains along CR 40; therefore, a 4-foot-wide, 2-foot-high CBC with normal depth downstream was assumed. Because this is located in the vicinity in which 1-foot contours were not available, a profile elevation was estimated based on the USGS Quadrangle information, GoogleEarth, the adjacent 1-foot contours, and culvert inspections as shown on Figure 3-7.
- Culvert I is a single CBC based on field observation. No data were available from Levy County regarding the cross drains along CR 40; therefore, a 10-foot-wide, 8-foot-high CBC with normal depth downstream was assumed. Because this is located in the vicinity in which 1-foot contours were not available, a profile elevation was estimated based on the USGS Quadrangle information, GoogleEarth, the adjacent 1-foot contours, and culvert inspections as shown on Figure 3-7. Note Culvert J appears to provide roadway drainage only and was not viewed to be significant conveyance for flood routing. Culverts K and L are internal to the flood routing system.
- Culvert M is a single cross drain; however, there is no effective culvert flow for flood conditions. An observed downstream berm was verified with the 1-foot contours to be higher than the road profile; therefore, only roadway overtopping was considered as a discharge at this location.
- Culvert N is a single cross drain; however, there is no effective culvert flow for flood conditions. An observed downstream berm was verified with the 1-foot contours to be higher than the road profile; therefore, only roadway overtopping was considered as a discharge at this location. Culvert O is outside of the modeled area.

Note the use of normal depth as tailwater for the downstream culverts is consistent with the published downstream flood profiles. To the west, the limits of the FEMA FIS modeling is at least 2 miles west of US 19 (11 NGVD), well below the culvert flow lines and normal depth

tailwater values used for Culverts A through E. Culverts G, H, and I discharge to the Withlacoochee River (10 NGVD), which is below the normal depth and roadway overtopping values used for these culverts (FEMA, 1984a, 1984b). Finally, the berms downstream of Culverts M and N are well above the flood elevation of the Inglis Lock Bypass Channel (28 NGVD) (FEMA, 1984a, 1984b).

Hydraulics input data are found in Attachment D.



Legend:

- Property Owned by Progress Energy
- FDEP Watersheds
- FEMA Zone A, Levy County
- FEMA Zone AE, Levy County
- Existing Culvert

Source: USGS Quadrangle Maps
Yankeetown, Yankeetown SE,
Dunnellon, and Tidewater

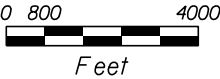
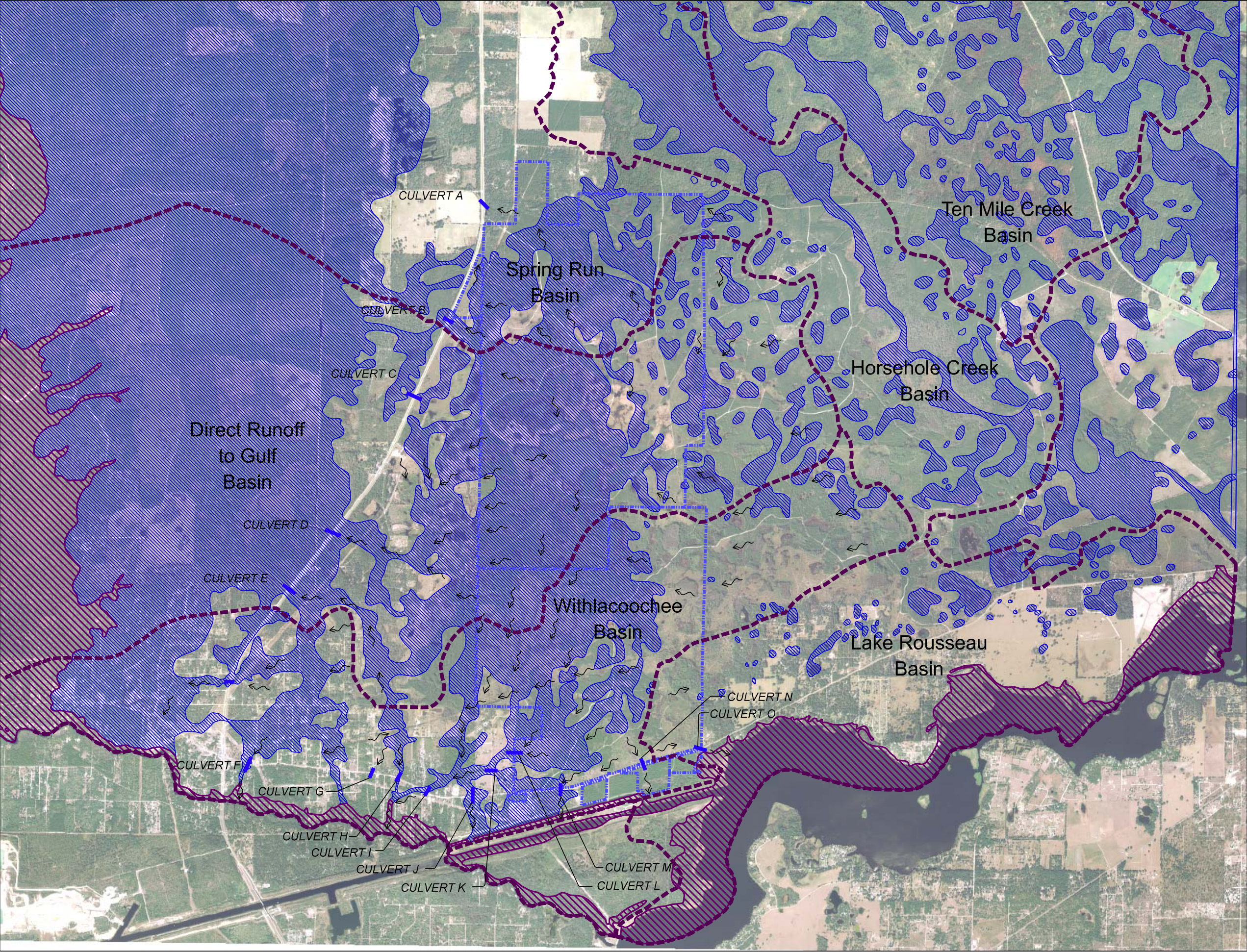
1998 FDEP Watersheds GIS files

1996 FEMA Special Flood Hazard Areas
FGDL - GIS Files

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**Figure 3-1
Drainage Basins**

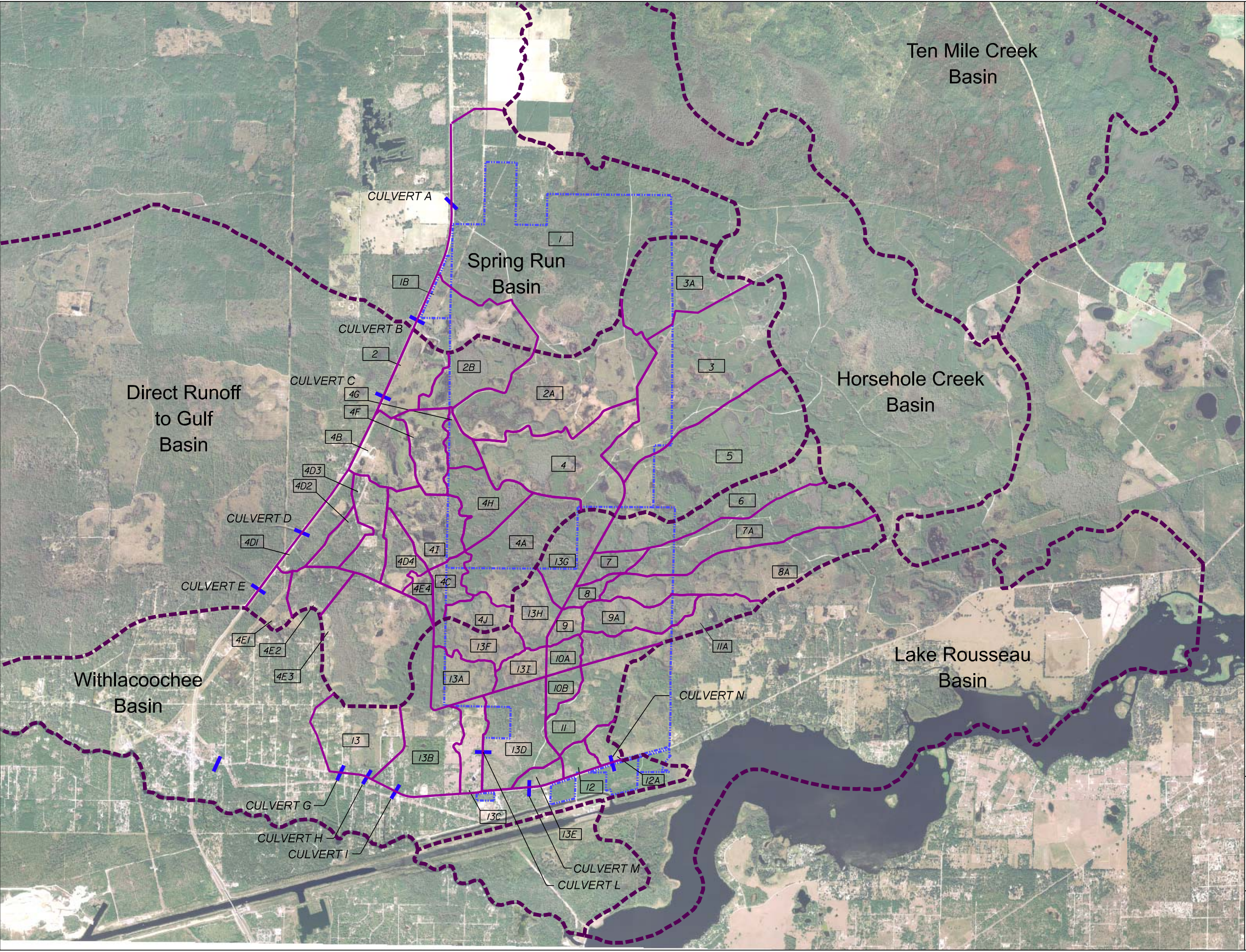


- Legend:
- Property Owned by Progress Energy
 - FDEP Watersheds
 - FEMA Zone A, Levy County
 - FEMA Zone AE, Levy County
 - Existing Culvert
 - Flow Arrow

Source: 2006 Labins Digital Imagery
1998 FDEP Watersheds GIS files
1996 FEMA Special Flood Hazard Areas
FGDL - GIS Files

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**Figure 3-2
General Drainage Characteristics**

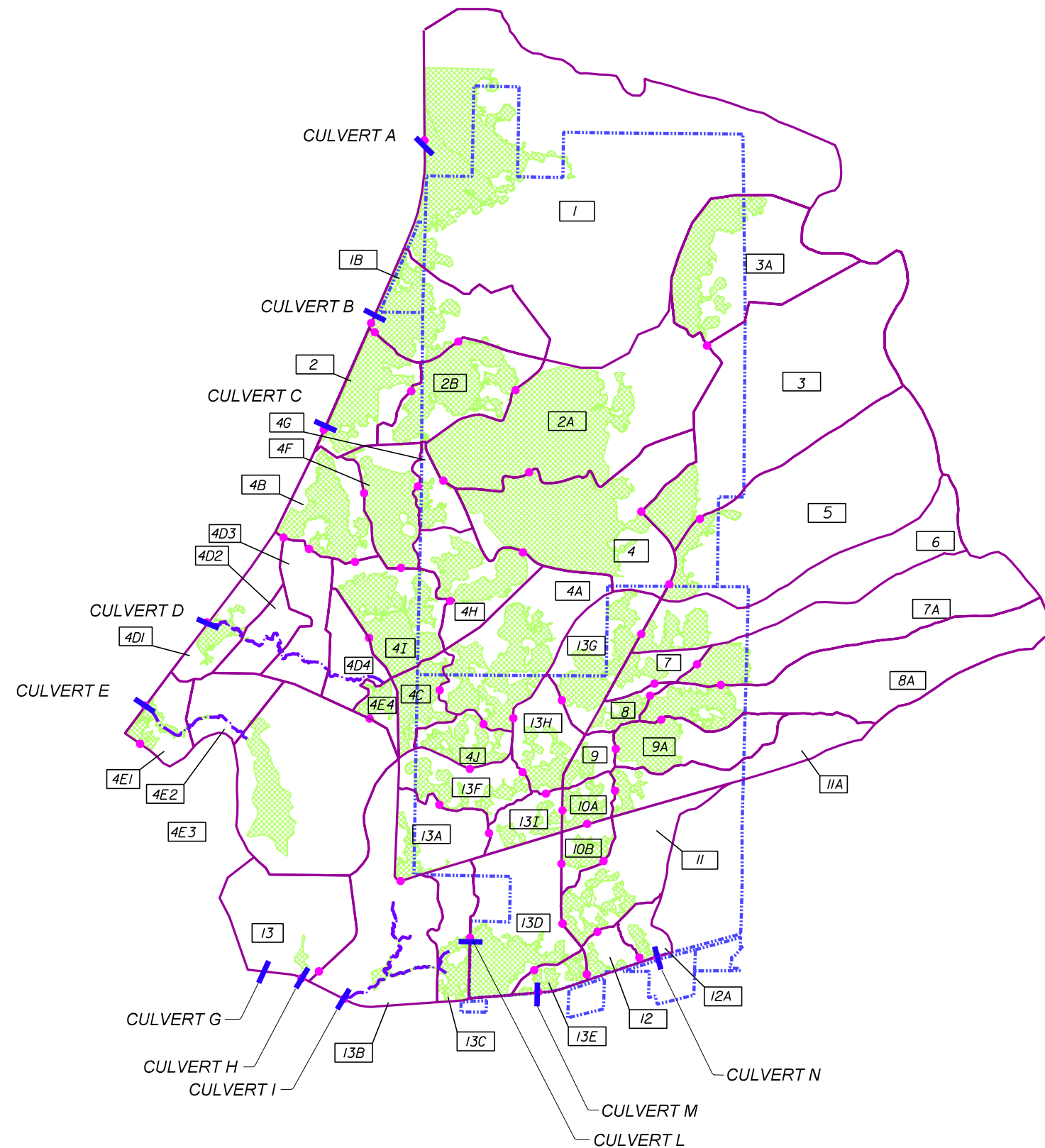


- Legend:
- Property Owned by Progress Energy
 - FDEP Watersheds
 - Subbasin Boundary Line
 - Subbasin Number
 - Existing Culvert

Source: 2006 Labins Digital Imagery
1998 FDEP Watersheds GIS files

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**Figure 3-3
Model Basins for Existing Conditions**

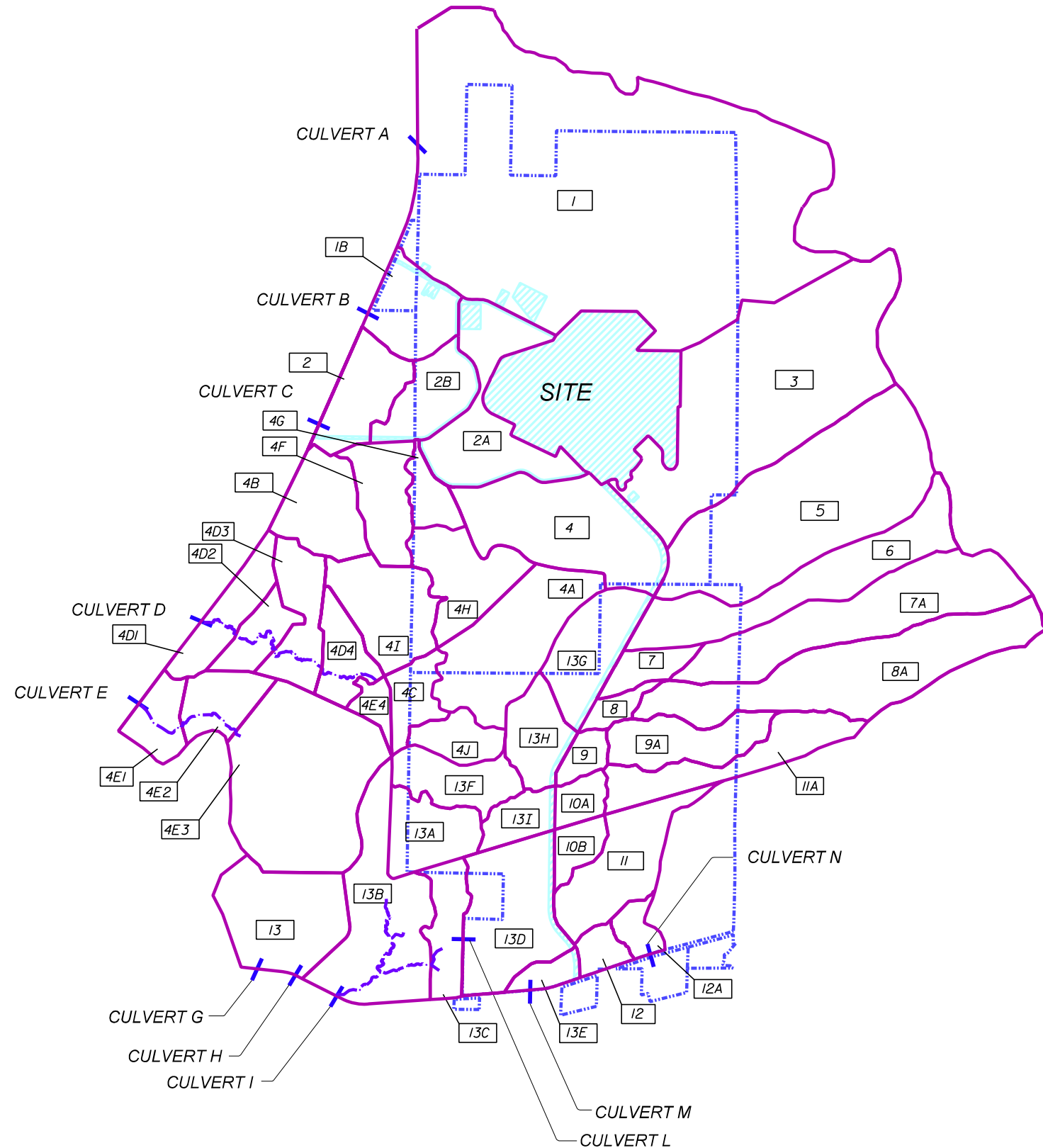
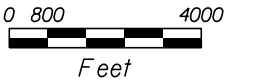
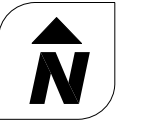


- Legend:
- - - - - Property Owned by Progress Energy
 - Subbasin Boundary Line
 - 8A Subbasin Number
 - Existing Culvert
 - Links
 - Storage Node
 - - - - - Channel

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**Figure 3-4
Model Input for Existing Conditions**

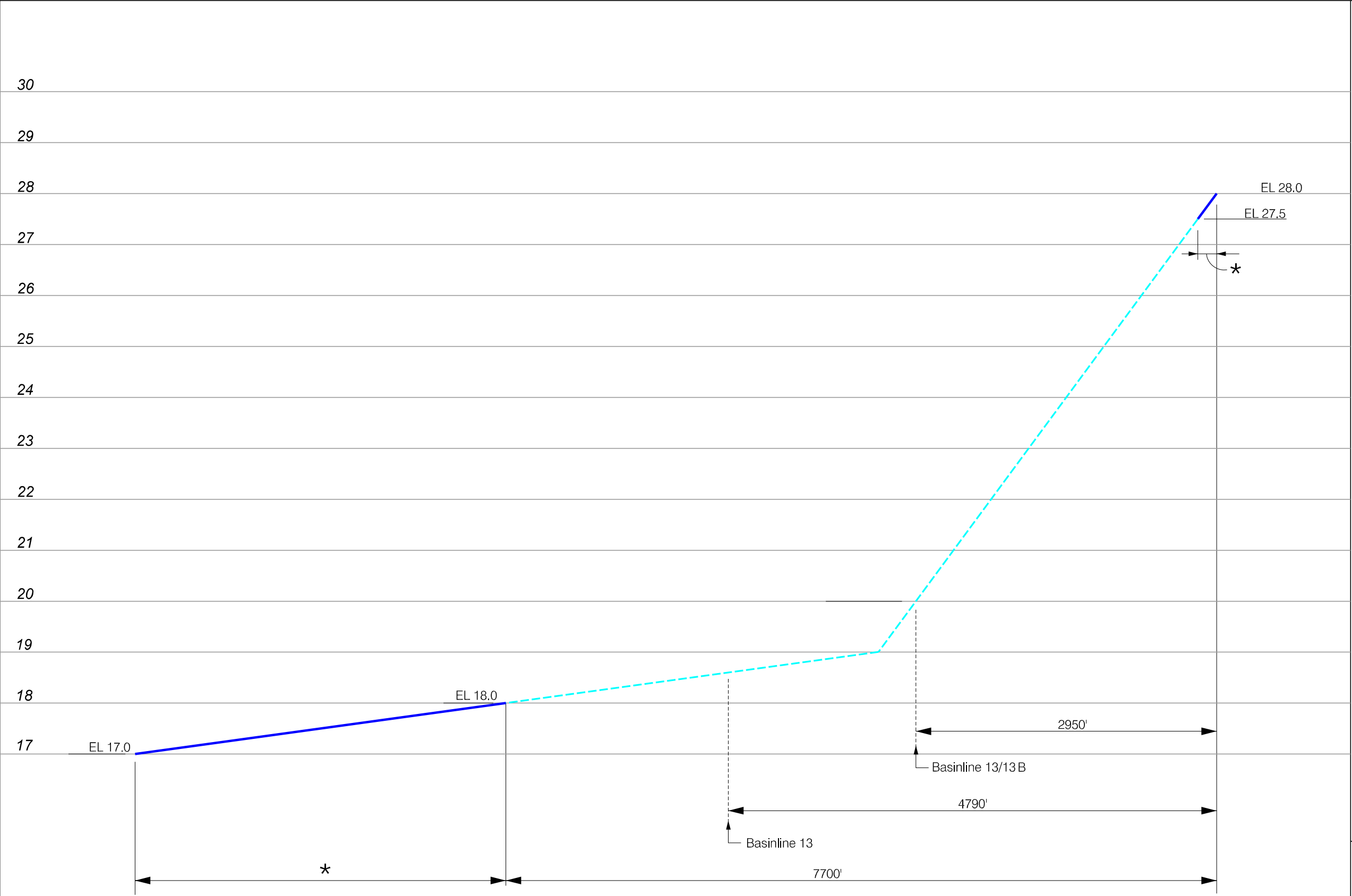


- Legend:
- Property Owned by Progress Energy
 - Subbasin Boundary Line
 - Subbasin Number
 - Existing Culvert
 - Site
 - Channel

Source: 2006 Labins Digital Imagery
1998 FDEP Watersheds GIS files

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Units 1 and 2
Detailed Floodplain Analysis
for the
Site**

**Figure 3-5
Model Basins for
Proposed General Arrangement**



Legend:

- From 1 Ft Contours
- Estimated Profile

NOTE: FROM PROFILE ESTIMATED ABOVE THE FOLLOWING INPUT USED:

1. OVERTOPPING FROM 13 USE 18.8
L= 1000 FT

2. OVERTOPPING FROM 13B USE 19.5
L= 1000 FT

* MEASURED FROM 1 FT. CONTOURS

Progress Energy Florida

**Levy Nuclear Plant
Units 1 and 2
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Site**

**Figure 3-7
Model Input for CR 40 Profile**

4.0 Existing Conditions and Proposed General Arrangement Models

The LNP site and surrounding area were modeled for the existing site conditions (based on the LiDAR survey in 2006) and the proposed general arrangement and associated fill (PEF, 2009a). The proposed LNP general arrangement is shown on the figure included as Attachment E, *Wetlands and Potential Areas of Disturbance on the Levy Nuclear Plant Site*.

As discussed in Section 3, the FDEP designated watersheds were further subdivided into sub-basins. Sub-basins were created to reflect the ponding areas created by the roadway/trail system, to group depression areas with similar hydraulic connections, and to provide a reference to compare the results of the proposed future conditions. Figure 3-3 illustrates the existing model sub-basins used with a 2006 aerial photograph as a background. Figure 3-4 depicts the storage units, links, and outfalls used to model the floodplain conditions. The depression storage was grouped as a single unit for each sub-basin and not explicitly modeled for each individual depression because that would require extensive sub-dividing of the study area for model input and there would be little difference in the results since each sub-basin is relatively flat and interconnected by the floodplain.

An overlay of the proposed LNP general arrangement with the existing condition model sub-basins yielded the post-project model sub-basins for the proposed conditions (see Figures 3-5 and 3-6). The proposed dry swale stormwater treatment systems along the proposed roads were not included as flood storage to allow for flexibility in sizing and locating these in the final construction plans. Similarly, the three wet detention ponds were considered to have vertical walls with 1 foot of initial depth in the pond as a conservative measure as well. The affected storage units were modified assuming vertical walls along the limits of construction. In addition to reductions for the site fill, the roadway network creates dikes that provide increased storage potential even with the proposed cross culverts. Figure 3-6 shows the storage units, conduit locations, and the outfalls used for the proposed conditions model. The sub-basin, storage unit, and conduit input data for the majority of the sub-basins do not change from the existing model.

Runoff was calibrated with the total storm runoff determined from the TR-55 equation with less than 2 percent difference in both existing and proposed conditions as shown in Attachment F, *Pre-Development and Post-Development Calibrations*. Finally, the SWMM computer simulation printouts for the existing and proposed conditions models are found in Attachment G, *SWMM Printout for Existing Conditions Model*, and Attachment H, *SWMM Printout for Proposed General Arrangement Model*, respectively. Table 3-2, *Comparison of Existing and Proposed Floodplain Models*, provides a comparison of the peak stages in each storage unit for the existing and proposed conditions models, and the results are mapped in Figure 4-1. Enlarged maps (smaller scale) with the 1-foot contour background are provided in Attachment I, *Floodplain Contour Mapping*.

TABLE 3-2
Comparison of Existing and Proposed Floodplain Models

Existing Node Name	Existing Model Flood Stage	Occurrence		Proposed Node Name	Proposed Model Flood Stage	Occurrence		Difference [Post-Pre]	Comments
	Ft-NAVD	Day	Hr:Min		Ft-NAVD	Day	Hr:Min	Ft	
1Storage	37.57	0	19:03	1Storage	37.58	0	12:37	0.01	Not measurable change
1AStorage	34.30	0	19:03	1AStorage	33.15	0	12:37	-1.15	
1BStorage	35.17	0	16:03	1BStorage	35.25	0	12:35	0.08	Minor change, within footprint of previous Zone A mapping
2Storage	38.74	0	12:30	2Storage	38.78	0	12:30	0.04	Minor change, within footprint of previous Zone A mapping
2aStorage	42.27	0	18:02	2aStorage	46.16	0	12:40	3.89	All onsite, infield of access roads and plant
2bStorage	42.11	0	16:03	2bStorage	42.15	0	13:59	0.04	Not measurable change, within footprint of previous Zone A mapping
3Storage	42.38	0	18:03	3Storage	45.13	0	21:28	2.75	All onsite, El. 45.5 at property line ¹ 3a combined with 3 for Post
3aStorage	46.03	0	16:02						
4Storage	42.26	0	18:03	4Storage	42.30	0	19:06	0.04	All onsite
4aStorage	39.57	0	18:02	4aStorage	39.61	0	19:02	0.04	All onsite
4bStorage	39.89	0	12:39	4bStorage	39.89	0	12:39	0	
4cStorage	35.81	0	17:03	4cStorage	35.84	0	18:42	0.03	Not measureable change, within footprint of previous Zone A mapping
4d1Storage	18.39	0	17:13	4d1Storage	18.43	0	19:05	0.04	Not measureable change, within footprint of previous Zone A mapping
4d2-Dummy	24.69	0	18:03	4d2-Dummy	24.73	0	19:20	0.04	Not measureable change, within footprint of previous Zone A mapping
4d3-Dummy	29.49	0	17:44	4d3-Dummy	29.53	0	19:02	0.04	Not measureable change, within footprint of previous Zone A mapping

TABLE 3-2
Comparison of Existing and Proposed Floodplain Models

Existing Node Name	Existing Model Flood Stage	Occurrence		Proposed Node Name	Proposed Model Flood Stage	Occurrence		Difference [Post-Pre]	Comments
	Ft-NAVD	Day	Hr:Min		Ft-NAVD	Day	Hr:Min	Ft	
4d4-Dummy	29.56	0	17:30	4d4-Dummy	29.59	0	19:01	0.03	Not measureable change, within footprint of previous Zone A mapping
4e1Storage	17.66	0	17:49	4e1Storage	17.70	0	19:17	0.04	Discharge toward Inglis, not measurable change, within footprint of previous Zone A mapping
4e2-Dummy	18.57	1	11:57	4e3Storage	19.37	0	18:24	0.02	Not measureable change, within footprint of previous Zone A mapping
4e3Storage	19.35	0	17:00	4e2-Dummy	18.57	1	11:11	0	
4e4Storage	33.87	0	16:31	4e4Storage	33.90	0	18:34	0.03	Not measureable change, within footprint of previous Zone A mapping
4fStorage	39.79	0	14:54	4fStorage	39.80	0	17:39	0.01	Not measureable change, within footprint of previous Zone A mapping
4gStorage	42.21	0	18:06	4gStorage	42.24	0	19:01	0.03	All onsite
4hStorage	42.25	0	18:03	4hStorage	42.27	0	19:05	0.02	All onsite
4iStorage	38.13	0	18:00	4iStorage	38.16	0	19:00	0.03	All onsite
4jStorage	37.32	0	17:50	4jStorage	37.02	0	18:26	-0.3	All onsite
5Storage	42.85	0	20:00	5Storage	45.13	0	21:29	2.28	All onsite, existing road containment El 45.5 inside property line
6Storage	44.47	0	19:00	6Storage	44.77	0	19:01	0.3	All onsite, El. 46.1 at property line ¹
7aStorage	43.75	0	19:01	7aStorage	43.75	0	19:01	0	Existing extends offsite, El. 42.5 at property line ¹
8aStorage	42.17	0	23:13	8aStorage	42.17	0	23:13	0	Existing extends offsite, El. 41.9 at property line ¹
9aStorage	38.81	0	21:51	9aStorage	38.84	0	21:51	0.03	All onsite, El. 40.2 at property line ¹

TABLE 3-2
Comparison of Existing and Proposed Floodplain Models

Existing Node Name	Existing Model Flood Stage	Occurrence		Proposed Node Name	Proposed Model Flood Stage	Occurrence		Difference [Post-Pre]	Comments
	Ft-NAVD	Day	Hr:Min		Ft-NAVD	Day	Hr:Min	Ft	
11aStorage	38.04	0	20:54	11aStorage	38.06	0	21:01	0.02	All onsite, El. 40.1 at property line ¹
12aStorage	32.74	0	15:33	12aStorage	32.74	0	15:33	0	
13Storage	18.96	0	12:30	13Storage	18.96	0	12:30	0	
13aStorage	33.84	0	17:48	13aStorage	33.70	0	18:33	-0.14	Minor change, within footprint of previous Zone A mapping
13bStorage	20.07	0	18:00	13bStorage	20.05	0	19:00	-0.02	Not measurable change, minor roadway overtopping
13cStorage	25.65	0	18:00	13cStorage	25.71	0	12:49	0.06	Minor change, within footprint of previous Zone A mapping
13c-Dummy	23.93	0	18:03	13c-Dummy	23.80	0	19:11	-0.13	Minor change, within footprint of previous Zone A mapping
13dStorage	29.20	0	18:01	13dStorage	29.22	0	20:08	0	All onsite, Existing 13d split by road into 13d on west side and 10b on east side
				10bStorage	37.96	1	10:54		
				13eStorage	30.27	0	12:40	-0.01	
13eStorage	30.28	0	15:05	11Storage	33.36	0	20:42		All onsite, Existing 13e split by road into 13e on west side, 11 and 12 on east side
				12Storage	31.11	0	16:03		
13fStorage	37.32	0	17:50	13fStorage	37.01	0	18:25	-0.31	Minor change
13gStorage	40.84	0	16:11	13gStorage	40.89	0	12:36	0.05	All onsite, Existing 13g split by road into 13g on west side, 7 and 8 on east side
				7Storage	41.55	0	18:02		
				8Storage	41.27	0	16:49		

TABLE 3-2
Comparison of Existing and Proposed Floodplain Models

Existing Node Name	Existing Model Flood Stage	Occurrence		Proposed Node Name	Proposed Model Flood Stage	Occurrence		Difference [Post-Pre]	Comments
	Ft-NAVD	Day	Hr:Min		Ft-NAVD	Day	Hr:Min	Ft	
13hStorage	37.97	0	18:00	13hStorage	37.82	0	18:13	-0.15	All onsite, Existing 13h storage split by road into 13h on west side, 9 on east side
				9Storage	37.50	0	19:19		
13iStorage	36.80	0	16:36	13iStorage	37.49	1	10:38	0.69	All onsite north of former railroad grade; Existing 13i storage split by road into 13i on west side, 10a on east side
				10aStorage	37.46	0	19:16		
---	---	---	---	PondA	49.89	0	18:26		Ponds within limits of construction
				PondB	49.80	0	16:09		
				PondC	49.90	0	16:18		

Notes:

1. Attachment J provides a profile of existing ground surface approximately 100 feet inside the east property line of the site. Lowest elevation within each basin used as limit of increased stage allowed.

4.1.1 Floodplain Mapping

Four methods were applied to develop the floodplain map limits for Figure 4-1 and Attachment I, *Floodplain Contour Mapping*. The methodology depended on whether the sub-basins had depression storage or natural channels as the primary flooding unit and on the availability of the 1-foot contour data, as follows:

- Depression storage (1, 1A, 1B, 2, 2A, 2B, 3, 4, 4A, 4B, 4C, 4F, 4G, 4H, 4I, 4J, 5, 6, 7, 7A, 8, 8A, 9, 9A, 10, 11, 11A, 12, 12A, 13, 13A, 13D, 13E, 13F, 13G, 13H, and 13I): Using the digital terrain model (DTM) files created from the 1-foot contours, the GEOPAK software within the Microstation CADD platform was used to select the interpolated flood elevation.
- Channels within 1-foot contour areas (4D1, 4D2, 4D3, 4D4, 4E1, 4E2, 4E4, and 13C): The flood elevation at each cross section was plotted and the floodplain shape was created by manually interpolating along the channel cross sections on the contour maps.
- Channels not fully within the 1-foot contour areas (13b and 4e3) flood elevations were manually interpolated in CADD using the USGS and 1-foot contour data.
- Depression storage not fully within the 1-foot contour areas (13 and 4e4) flood elevations were manually interpolated in CADD using the USGS and 1-foot contour data.

In addition, the areas between the discrete mapping units above were interpolated where relevant. The accuracy of the 1-foot contour maps is certified to be 0.5-foot. Elevations were rounded to the tenth for this mapping exercise. Typically, FEMA mapping is performed to the nearest foot or half-foot interval for Zone A using USGS Quadrangle maps. The map modernization practices require 2-foot contour intervals and 0.6-foot accuracy for Zone AE for flat topography, similar to that found at LNP. As the accuracy of the LiDAR survey is 0.5-foot, a rounding to the half-foot would be valid to meet FEMA requirements.

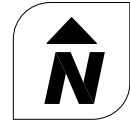
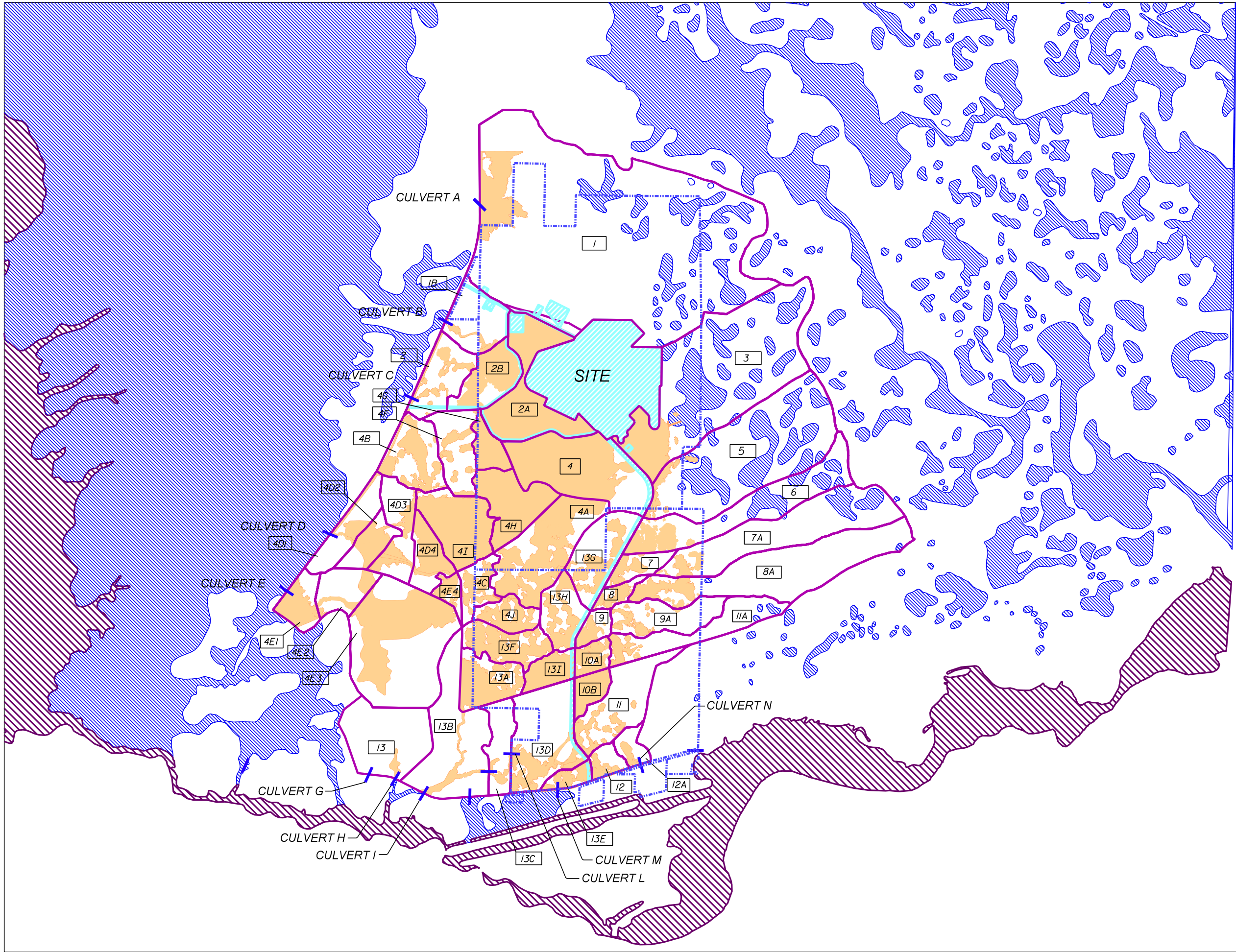
SWFWMD generally evaluates flooding to a higher accuracy with dynamic modeling results, which is why Table 3-2 shows results to the hundredth. Although this level of accuracy is reported for the purposes of review, it does not suggest a precision to the hundredth when using contours accurate to the 0.5 foot.

4.1.2 Historic Basin Storage

The project changes to storage onsite, both floodplain and historic basin storage, are addressed by the use of the detailed dynamic modeling that takes the existing and proposed ground contours into account. Fill in isolated wetlands that is not addressed explicitly by the models will be offset by the permanent pool volume in the large stormwater ponds in the general arrangement.

Per SWFWMD policy as outlined in a floodplain presentation by Hank Higgenbotham (Higgenbotham, 2008) to the Florida Engineering Society and American Society of Civil Engineers, the permanent pool volume of the proposed wet detention ponds onsite can serve as compensation storage for the isolated floodplain historic basin storage loss. Based on the site plan developed for the *Environmental Report* (PEF, 2009b), there are three wet detention ponds proposed, covering 105 acres (Sargent and Lundy, 2009). Typically a 6-foot average depth is desirable in the permanent pool of wet detention ponds to avoid the

establishment of nuisance species, such as cattails, which will yield a large volume that can maintain infiltration capacity onsite and address isolated historic basin storage loss not explicitly calculated in this modeling effort.



0 800 4000
Feet

Legend:

- - - - - Property Owned by Progress Energy
- Basin Boundary Line
- 8A Subbasin Number
- Existing Pipe
- Site
- FEMA Zone A, Levy County
- FEMA Zone AE, Levy County
- Modeled Floodplain

Progress Energy Florida
**Levy Nuclear Plant
Units 1 and 2
Detailed Floodplain Analysis
for the
Site**

**Figure 4-1
Floodplain for
Proposed General Arrangement**

5.0 Conclusion

The FEMA Zone A map units located within or adjacent to the proposed LNP limits of construction contain both small, isolated onsite floodplains and portions of a larger forested wetland along the western half of the property that extends offsite. Because the Zone A mappings were conducted by using approximate methods, refinements to the mapping were conducted for the Conditions of Certification and EIS based on detailed topographic data and computer simulation. Unlike the current FEMA mapping, PEF has detailed topography (1-foot contour intervals) for much of the study area, allowing for better mapping of low areas that collect runoff.

For this evaluation of floodplain water levels, hydrologic and hydraulic floodplain analyses were conducted for the LNP site using the EPA SWMM computer model, which is a FEMA-approved software program used to determine the elevation of the 100-year floodplain. The SWMM dynamic modeling allowed for estimating channel storage, tailwater effects, entrance/exit losses, flow reversal, and pressurized flow, which are critical for flood modeling in flat landscapes. Existing ground elevations with no reduction in storage for seasonal high groundwater was used to address both the floodplain and historic basin storage requirements of the SWFWMD regulations.

The area studied (both LNP and adjacent lands) is within three watersheds that have been delineated by FDEP: Spring Run, Runoff to Gulf, and Withlacoochee River. This evaluation included offsite lands up-gradient and down-gradient of the LNP project. The drainage within the modeled area is generally from northeast to southwest toward existing culverts under US 19 and CR 40. The watersheds were further subdivided into sub-basins for modeling representing both onsite and offsite flood routing and storage (that is, ponding) units. As the 100-year storm is an extreme event, interconnection between the FDEP basins and roadway overtopping were included in the models. A single event storm for the 100 year/24-hour event was based on SCS Type II storm, Florida-Modified rainfall distribution per the SWFWMD guidance documents (SWFWMD, 1996). Conservative assumptions, such as no infiltration or evaporation during the simulations, were included.

No historic flood elevation data are available for comparison with these model results because there was no previous detailed evaluation of the existing floodplains, only approximate mapping methods were used to develop the existing FEMA maps. New maps of the floodplain were generated (Figure 4-1 and Attachment I). Consequently, the impact of the LNP project was evaluated by conducting new simulations of the pre- and post-project conditions and these two results were compared, as listed in Table 3-2 above.

Results of the post-project conditions indicate 1) higher flood stages behind the new roads and raised areas of the power plant site and 2) minor changes, both slightly lower and slightly higher flood stages in the downstream elevations.

1. All upgradient (that is west and north of the property) increases in the flood levels remain onsite. The landscape slopes enough upgradient of the new facilities such that all increases in flood elevations remain on PEF-owned property.

2. This evaluation indicated that some down-gradient (that is, west and south of the property) offsite sub-basins having either a slight reduction or a slight increase to flood stages (rise of 1 inch or less). This is due to the new facilities creating slight changes in the timing of the peak storm as well as the numerical accuracy of the model input data and the way that the numerical model estimates water levels given the input data. These downstream changes would be immeasurable and are not considered significant within the accuracy of the modeling approach or accuracy of the topographic data.

Based on the storage created onsite by the ponds and internal road system as well as the accuracy of the modeling effort and mapping standards, there are not adverse changes offsite. Consequently, no additional compensation storage (cup-to-cup compensation) is required according to SWFWMD policy since there are no offsite effects (Higginbotham, 2008).

According to FEMA policy as outlined in the National Flood Insurance Program (NFIP) regulations, Title 44 Code of Federal Regulations (CFR) Chapter I Part 65, this project will require updating of the FEMA floodplain maps after the work is complete. These models will be updated in the future to reflect the as-built conditions for the mapping update. For purposes of the Conditions of Certification and EIS requirements, these results are sufficient to provide reasonable assurance that the LNP project will not adversely affect offsite floodplains.

6.0 References

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ATTACHMENT A

LiDAR Accuracy Statement

SARGENT & LUNDY, L.L.C.
Photogrammetric Mapping
(Florida Site)
Accuracy Statement

Office Locations
Anchorage, Alaska
Fort Collins, Colorado
Minneapolis, Minnesota
Kansas City, Missouri
Dallas, Texas
Dulles, Virginia
Virginia Beach, Virginia
Seattle, Washington
Chilton, Wisconsin
Sheboygan, Wisconsin

Sargent & Lundy Specification Number: P-2800
Project Number: 11945-013

Contractor: AERO-METRIC, Inc.
4020 Technology Parkway
Sheboygan, Wisconsin 53083
Project Number: 1-061008

Photo Scale: 1"=660'
LiDAR Altitude: 3,609'
Planimetric Mapping: 1"=100'
Contour Interval: 1'
Digital Ortho Photo Pixel Resolution: 0.5' GSD
Units: United States Survey Foot
Coordinate System: Florida State Plane Coordinate System, West Zone
Horizontal Datum: North American Datum 1983/1999 (NAD 83/99)
Vertical Datum: North American Vertical Datum 1988 (NAVD 88)

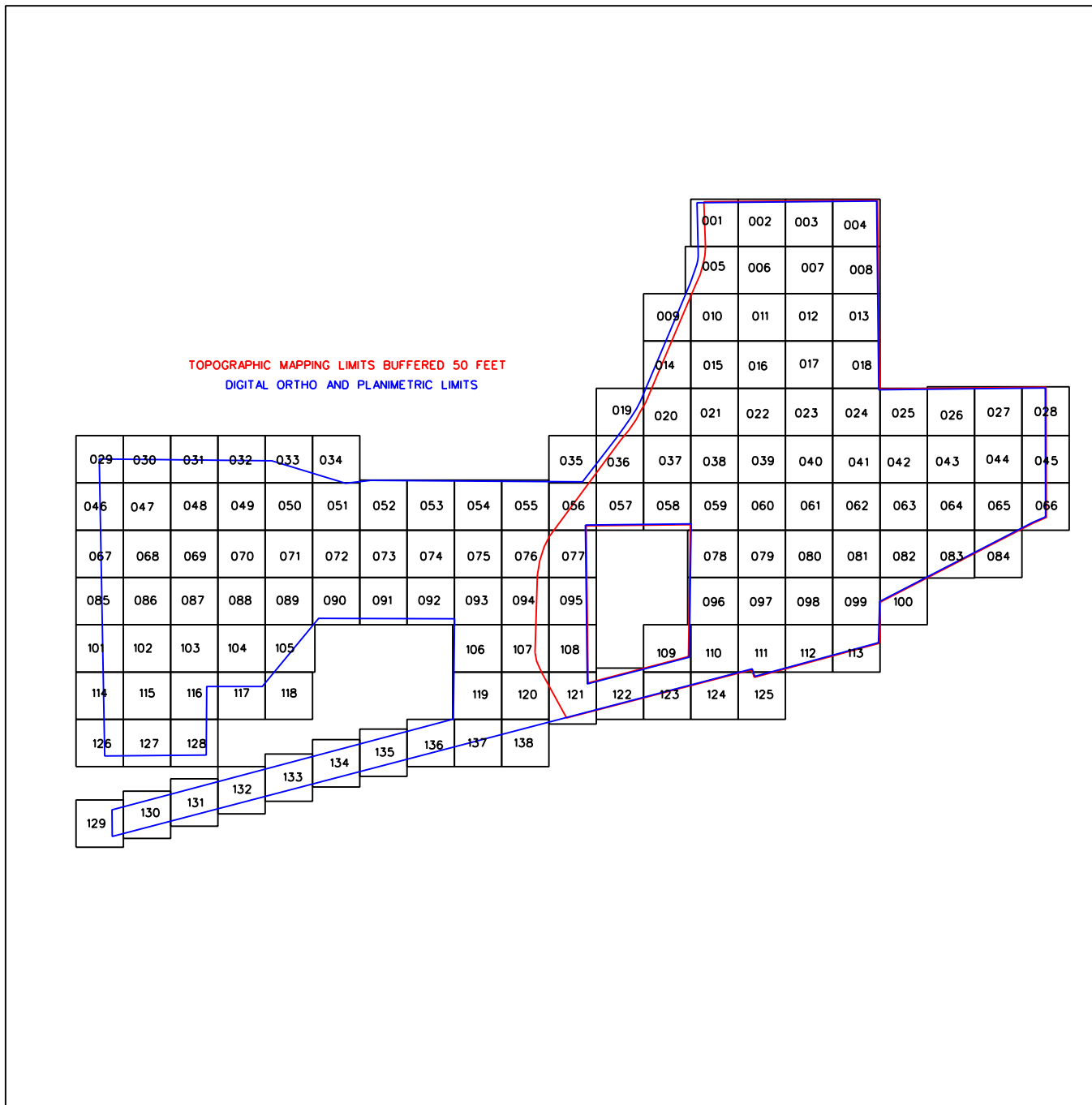
Photogrammetric Mapping Accuracy Statement:

The final project photogrammetric mapping deliverables included a combination of planimetric, LiDAR DTM, contours and digital orthophoto mapping. The mapping was produced according to procedures that have been demonstrated to comply with the United States National Map Accuracy Standards (NMAS) for a target horizontal scale of 1"=100' and a specified contour interval of one foot. The Lidar DTM data was produced to meet the Federal Emergency Management Agency (FEMA) floodplain mapping specifications.

Signed: Andrew Piscitello
Andrew Piscitello, Vice President Production
ASPRS, Certified Photogrammetrist, #R799

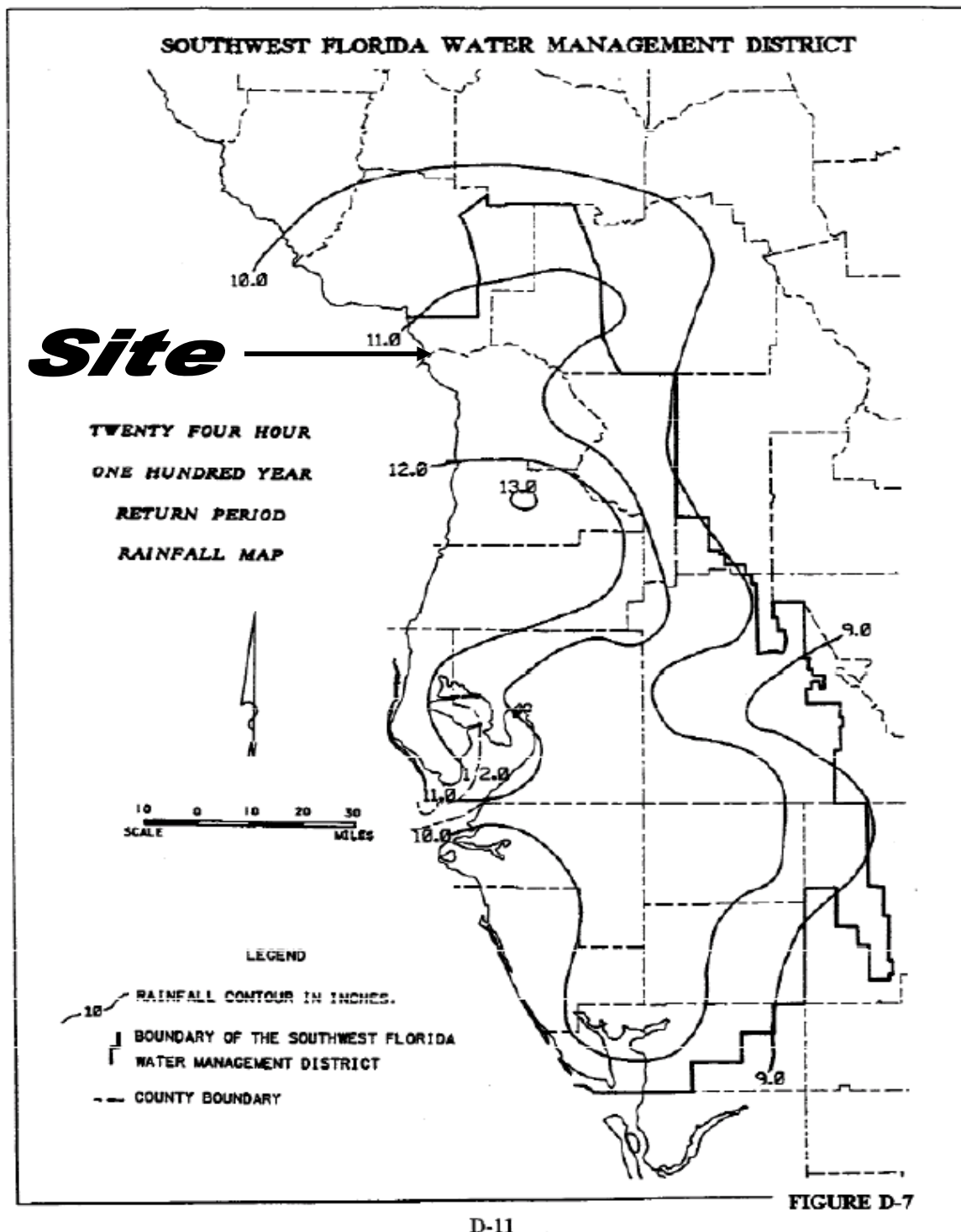
Date: 7 Mar '07





ATTACHMENT B

SWFWMD – Rainfall Design Data



D-11

Source: SWFWMD Part D Project Design Aids, Management and Storage of Surface Waters,
July 1996, page D-11

TABLE D-1
RAINFALL RATIOS (ACCUMULATED 24-HOUR TOTAL)

<u>TIME (HR.)</u>	<u>SCS TYPE II FL. MODIFIED</u>
0.0	.000
0.5	.006
1.0	.012
1.5	.019
2.0	.025
2.5	.032
3.0	.039
3.5	.047
4.0	.054
4.5	.062
5.0	.071
5.5	.080
6.0	.089
6.5	.099
7.0	.110
7.5	.122
8.0	.134
8.5	.148
9.0	.164
9.5	.181
10.0	.201
10.5	.226
11.0	.258
11.5	.308
12.0	.507
12.5	.719
13.0	.757
13.5	.785
14.0	.807
14.5	.826
15.0	.842
15.5	.857
16.0	.870
16.5	.882
17.0	.893
17.5	.904
18.0	.913
18.5	.923
19.0	.931
19.5	.940
20.0	.948
20.5	.955
21.0	.962
21.5	.969
22.0	.976
22.5	.983
23.0	.989
23.5	.995
24.0	1.000

D-13

Source: SWFWMD Part D Project Design Aids, Management and Storage of Surface Waters,
July 1996, page D-13

Attachment B - SWFWMD Rainfall Data
File/Tab: SWMM rainfall.xls / Rainfall

Year 24 hour = 11.3 inch

SCS II FLMOD	Time	Rain (inch)
0	0:00	0
0.006	0:30	0.0678
0.012	1:00	0.1356
0.019	1:30	0.2147
0.025	2:00	0.2825
0.032	2:30	0.3616
0.039	3:00	0.4407
0.047	3:30	0.5311
0.054	4:00	0.6102
0.062	4:30	0.7006
0.071	5:00	0.8023
0.08	5:30	0.904
0.089	6:00	1.0057
0.099	6:30	1.1187
0.11	7:00	1.243
0.122	7:30	1.3786
0.134	8:00	1.5142
0.148	8:30	1.6724
0.164	9:00	1.8532
0.181	9:30	2.0453
0.21	10:00	2.373
0.226	10:30	2.5538
0.258	11:00	2.9154
0.308	11:30	3.4804
0.607	12:00	6.8591
0.719	12:30	8.1247
0.757	13:00	8.5541
0.785	13:30	8.8705
0.807	14:00	9.1191
0.826	14:30	9.3338
0.842	15:00	9.5146
0.857	15:30	9.6841
0.87	16:00	9.831
0.882	16:30	9.9666
0.893	17:00	10.0909
0.904	17:30	10.2152
0.913	18:00	10.3169
0.923	18:30	10.4299
0.931	19:00	10.5203
0.94	19:30	10.622
0.948	20:00	10.7124
0.955	20:30	10.7915
0.962	21:00	10.8706
0.969	21:30	10.9497
0.976	22:00	11.0288
0.983	22:30	11.1079
0.989	23:00	11.1757
0.995	23:30	11.2435
1	0:00	11.3

ATTACHMENT C

Hydrology Input Calculations

Attachment C - Hydrology Input Calculations
Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Pre-CN

BASIN	FLUCCS	FLUCDESC	HYDRGRP	ACRES	Associated CN	Area x CN	Composite CN
1	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	A	9.07	54	489.86	
1	2100	CROPLAND AND PASTURELAND	A	35.70	39	1,392.39	
1	2100	CROPLAND AND PASTURELAND	B/D	0.86	80	68.79	
1	2600	OTHER OPEN LANDS <RURAL>	B/D	1.70	80	135.82	
1	2600	OTHER OPEN LANDS <RURAL>	D	0.01	80	0.86	
1	3200	SHRUB AND BRUSHLAND	A	5.94	30	178.22	
1	3200	SHRUB AND BRUSHLAND	B/D	23.45	73	1,711.72	
1	3200	SHRUB AND BRUSHLAND	C	6.42	65	417.30	
1	3200	SHRUB AND BRUSHLAND	D	10.08	73	736.19	
1	4110	PINE FLATWOODS	A	43.26	30	1,297.74	
1	4110	PINE FLATWOODS	B/D	102.60	77	7,900.15	
1	4110	PINE FLATWOODS	C	11.48	85	976.14	
1	4110	PINE FLATWOODS	D	9.12	77	702.23	
1	4340	HARDWOOD CONIFER MIXED	A	116.58	30	3,497.55	
1	4340	HARDWOOD CONIFER MIXED	B/D	3.94	77	303.08	
1	4340	HARDWOOD CONIFER MIXED	C	15.67	85	1,331.76	
1	4400	TREE PLANTATIONS	A	97.56	32	3,122.02	
1	4400	TREE PLANTATIONS	B/D	312.14	79	24,659.27	
1	4400	TREE PLANTATIONS	C	4.68	86	402.11	
1	4400	TREE PLANTATIONS	D	34.78	79	2,747.59	
1	5200	LAKES	A	0.11	100	11.23	
1	6150	STREAM AND LAKE SWAMPS (BOTTOMLAND)	B/D	0.62	100	62.07	
1	6185	MIXED WETLAND HARDWOODS	A	0.89	100	88.59	
1	6185	MIXED WETLAND HARDWOODS	B/D	153.38	100	15,338.15	
1	6185	MIXED WETLAND HARDWOODS	C	1.26	100	125.50	
1	6185	MIXED WETLAND HARDWOODS	D	383.15	100	38,315.45	
1	6210	CYPRESS	A	2.57	100	257.08	
1	6210	CYPRESS	B/D	91.59	100	9,159.25	
1	6210	CYPRESS	D	102.46	100	10,245.96	
1	6300	WETLAND FORESTED MIXED	B/D	0.25	100	24.91	
1	6300	WETLAND FORESTED MIXED	C	5.08	100	508.14	
1	6300	WETLAND FORESTED MIXED	D	15.23	100	1,523.01	
1	6410	FRESHWATER MARSHES	A	2.33	100	233.11	
1	6410	FRESHWATER MARSHES	B/D	3.83	100	383.28	
1	6410	FRESHWATER MARSHES	D	10.79	100	1,079.43	
1	6430	WET PRAIRIES	B/D	2.28	100	228.20	
1	6440	EMERGENT AQUATIC VEGETATION	D	0.35	100	34.80	
1	8100	TRANSPORTATION	A	9.86	98	966.24	
1	8100	TRANSPORTATION	B/D	3.37	98	329.90	
1	8100	TRANSPORTATION	C	1.16	98	114.08	
1	8300	UTILITIES	A	11.18	39	436.09	
1	8300	UTILITIES	B/D	1.86	80	148.79	
1	8300	UTILITIES	C	0.99	74	73.25	
		Total	Basin 1	1,649.65		131,757.29	79.9

Attachment C - Hydrology Input Calculations
Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Pre-CN

BASIN	FLUCCS	FLUCDESC	HYDRGRP	ACRES	Associated CN	Area x CN	Composite CN
1B	2600	OTHER OPEN LANDS <RURAL>	B/D	20.89	80	1,671.24	
1B	2600	OTHER OPEN LANDS <RURAL>	D	0.82	80	65.45	
1B	4100	UPLAND CONIFEROUS FOREST	B/D	1.53	77	117.76	
1B	4400	TREE PLANTATIONS	B	0.41	79	32.74	
1B	4400	TREE PLANTATIONS	B/D	64.17	79	5,069.45	
1B	4400	TREE PLANTATIONS	D	3.71	79	293.12	
1B	6185	MIXED WETLAND HARDWOODS	B/D	0.05	100	5.37	
1B	6210	CYPRESS		0.08	100	7.74	
1B	6210	CYPRESS	B/D	55.98	100	5,597.55	
1B	6210	CYPRESS	D	57.34	100	5,733.55	
1B	6300	WETLAND FORESTED MIXED	B/D	0.00	100	0.20	
1B	6300	WETLAND FORESTED MIXED	D	0.05	100	5.22	
1B	6410	FRESHWATER MARSHES		2.13	100	212.58	
1B	6410	FRESHWATER MARSHES	B/D	1.90	100	190.14	
1B	6410	FRESHWATER MARSHES	D	0.53	100	52.51	
1B	6430	WET PRAIRIES	B/D	0.17	100	17.26	
1B	8100	TRANSPORTATION	B/D	5.15	98	504.43	
1B	8300	UTILITIES	B/D	1.94	80	154.97	
1B	8300	UTILITIES	D	0.20	80	15.67	
		Total	Basin 1B	217.03		19,746.94	91.0
2	4100	UPLAND CONIFEROUS FOREST	B/D	1.22	77	94.16	
2	4100	UPLAND CONIFEROUS FOREST	D	0.17	77	13.45	
2	4340	HARDWOOD CONIFER MIXED	B/D	2.29	77	176.56	
2	4400	TREE PLANTATIONS		0.38	79	29.63	
2	4400	TREE PLANTATIONS	B/D	89.76	79	7,091.31	
2	4400	TREE PLANTATIONS	D	2.08	79	164.47	
2	6210	CYPRESS	B/D	8.11	100	811.47	
2	6210	CYPRESS	D	6.23	100	622.81	
2	6410	FRESHWATER MARSHES		3.21	100	320.97	
2	6410	FRESHWATER MARSHES	B/D	4.87	100	486.81	
2	6410	FRESHWATER MARSHES	D	1.04	100	103.72	
2	8100	TRANSPORTATION	B/D	6.27	98	614.55	
2	8300	UTILITIES	B/D	6.18	80	494.33	
2	8300	UTILITIES	D	0.10	80	7.69	
		Total	Basin 2	131.91		11,031.91	83.6
2A	2600	OTHER OPEN LANDS <RURAL>	B/D	55.46	80	4,437.15	
2A	2600	OTHER OPEN LANDS <RURAL>	D	2.78	80	222.59	
2A	4400	TREE PLANTATIONS	B/D	136.90	79	10,814.76	
2A	4400	TREE PLANTATIONS	D	7.02	79	554.71	
2A	6150	STREAM AND LAKE SWAMPS (BOTTOMLAND)	B/D	0.01	100	1.20	
2A	6185	MIXED WETLAND HARDWOODS	B/D	10.57	100	1,057.41	
2A	6185	MIXED WETLAND HARDWOODS	D	2.45	100	244.96	
2A	6210	CYPRESS	B/D	134.69	100	13,468.54	
2A	6210	CYPRESS	D	176.06	100	17,606.18	
2A	6410	FRESHWATER MARSHES	B/D	0.98	100	97.70	
2A	6410	FRESHWATER MARSHES	D	0.08	100	8.30	
2A	6430	WET PRAIRIES	B/D	0.89	100	88.58	
		Total	Basin 2A	527.89		48,602.09	92.1

Attachment C - Hydrology Input Calculations
Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Pre-CN

BASIN	FLUCCS	FLUCSDESC	HYDRGRP	ACRES	Associated CN	Area x CN	Composite CN
2B	2600	OTHER OPEN LANDS <RURAL>	B/D	0.16	80	12.71	
2B	4400	TREE PLANTATIONS	B/D	40.91	79	3,232.10	
2B	4400	TREE PLANTATIONS	D	1.02	79	80.85	
2B	6210	CYPRESS	B/D	51.60	100	5,160.39	
2B	6210	CYPRESS	D	84.89	100	8,488.57	
2B	6300	WETLAND FORESTED MIXED	B/D	0.02	100	2.33	
2B	6300	WETLAND FORESTED MIXED	D	0.05	100	4.66	
2B	6410	FRESHWATER MARSHES	B/D	0.67	100	67.28	
2B	6410	FRESHWATER MARSHES	D	2.96	100	295.69	
		Total	Basin 2B	182.28		17,344.58	95.2
3	2600	OTHER OPEN LANDS <RURAL>	B/D	5.59	80	447.22	
3	2600	OTHER OPEN LANDS <RURAL>	C	0.95	74	70.25	
3	2600	OTHER OPEN LANDS <RURAL>	D	0.00	80	0.26	
3	3200	SHRUB AND BRUSHLAND	B/D	2.02	73	147.47	
3	3200	SHRUB AND BRUSHLAND	C	10.26	65	667.16	
3	4400	TREE PLANTATIONS	B/D	529.16	79	41,803.84	
3	4400	TREE PLANTATIONS	C	48.96	86	4,210.64	
3	4400	TREE PLANTATIONS	D	47.05	79	3,716.56	
3	6210	CYPRESS	B/D	142.54	100	14,254.29	
3	6210	CYPRESS	C	0.41	100	40.85	
3	6210	CYPRESS	D	164.30	100	16,429.58	
3	6300	WETLAND FORESTED MIXED	B/D	1.66	100	166.02	
3	6300	WETLAND FORESTED MIXED	D	16.84	100	1,684.35	
3	6410	FRESHWATER MARSHES	B/D	4.75	100	474.91	
3	6410	FRESHWATER MARSHES	C	0.25	100	24.55	
3	6410	FRESHWATER MARSHES	D	10.60	100	1,060.27	
3	6430	WET PRAIRIES	B/D	0.15	100	14.93	
		Total	Basin 3 & 3A	985.49		85,213.14	86.5
4	2600	OTHER OPEN LANDS <RURAL>	B/D	36.12	80	2,889.68	
4	2600	OTHER OPEN LANDS <RURAL>	D	1.49	80	119.52	
4	4100	UPLAND CONIFEROUS FOREST	B/D	2.08	77	160.37	
4	4100	UPLAND CONIFEROUS FOREST	D	0.00	77	0.22	
4	4400	TREE PLANTATIONS	B/D	83.34	79	6,584.20	
4	4400	TREE PLANTATIONS	D	3.39	79	268.05	
4	6210	CYPRESS	B/D	89.12	100	8,911.50	
4	6210	CYPRESS	D	174.70	100	17,470.36	
4	6300	WETLAND FORESTED MIXED	B/D	0.01	100	0.86	
4	6300	WETLAND FORESTED MIXED	D	0.01	100	1.28	
4	6410	FRESHWATER MARSHES	B/D	0.24	100	24.20	
4	6430	WET PRAIRIES	B/D	1.91	100	190.75	
		Total	Basin 4	392.43		36,621.00	93.3
4A	2600	OTHER OPEN LANDS <RURAL>	B/D	18.33	80	1,466.67	
4A	2600	OTHER OPEN LANDS <RURAL>	D	0.00	80	0.30	
4A	3200	SHRUB AND BRUSHLAND	B/D	5.13	73	374.65	
4A	3200	SHRUB AND BRUSHLAND	D	0.26	73	18.72	
4A	4400	TREE PLANTATIONS	B/D	41.59	79	3,285.83	
4A	4400	TREE PLANTATIONS	D	1.56	79	123.49	
4A	6210	CYPRESS	B/D	114.60	100	11,460.43	
4A	6210	CYPRESS	D	88.47	100	8,846.53	
4A	6300	WETLAND FORESTED MIXED	B/D	0.81	100	80.95	
4A	6300	WETLAND FORESTED MIXED	D	0.05	100	4.66	
4A	6410	FRESHWATER MARSHES	B/D	0.17	100	16.95	
4A	6410	FRESHWATER MARSHES	D	0.00	100	0.03	
		Total	Basin 4A	270.98		25,679.21	94.8

Attachment C - Hydrology Input Calculations
Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Pre-CN

BASIN	FLUCCS	FLUCDESC	HYDRGRP	ACRES	Associated CN	Area x CN	Composite CN
4B	1400	COMMERCIAL AND SERVICES	B/D	1.44	92	132.35	
4B	2600	OTHER OPEN LANDS <RURAL>	B/D	28.97	80	2,317.32	
4B	2600	OTHER OPEN LANDS <RURAL>	D	0.42	80	33.77	
4B	3200	SHRUB AND BRUSHLAND	B/D	4.73	73	345.58	
4B	4100	UPLAND CONIFEROUS FOREST	B/D	7.85	77	604.24	
4B	4100	UPLAND CONIFEROUS FOREST	D	0.00	77	0.02	
4B	4340	HARDWOOD CONIFER MIXED	B/D	9.26	77	713.34	
4B	4340	HARDWOOD CONIFER MIXED	D	2.18	77	168.19	
4B	4400	TREE PLANTATIONS	B/D	26.87	79	2,122.41	
4B	4400	TREE PLANTATIONS	D	4.69	79	370.81	
4B	5300	RESERVOIRS	B/D	1.21	100	121.45	
4B	6210	CYPRESS	B/D	8.44	100	844.28	
4B	6210	CYPRESS	D	20.31	100	2,031.01	
4B	6300	WETLAND FORESTED MIXED	B/D	3.79	100	379.39	
4B	6300	WETLAND FORESTED MIXED	D	2.39	100	239.27	
4B	6410	FRESHWATER MARSHES	B/D	5.87	100	586.63	
4B	6410	FRESHWATER MARSHES	D	4.90	100	490.12	
4B	8100	TRANSPORTATION	B/D	5.94	98	582.12	
4B	8300	UTILITIES	B/D	3.51	80	280.95	
4B	8300	UTILITIES	D	0.67	80	53.90	
		Total	Basin 4B	143.46		12,417.13	86.6
4C	2600	OTHER OPEN LANDS <RURAL>	B/D	3.86	80	308.88	
4C	2600	OTHER OPEN LANDS <RURAL>	D	0.21	80	17.20	
4C	3200	SHRUB AND BRUSHLAND	B/D	0.20	73	14.70	
4C	3200	SHRUB AND BRUSHLAND	D	0.38	73	27.75	
4C	4400	TREE PLANTATIONS	B/D	18.19	79	1,437.21	
4C	4400	TREE PLANTATIONS	D	1.67	79	132.30	
4C	6210	CYPRESS	B/D	19.95	100	1,995.08	
4C	6210	CYPRESS	D	19.42	100	1,942.18	
4C	6300	WETLAND FORESTED MIXED	B/D	4.53	100	453.47	
4C	6300	WETLAND FORESTED MIXED	D	2.11	100	211.04	
4C	6410	FRESHWATER MARSHES	B/D	0.78	100	78.24	
		Total	Basin 4C	71.32		6,618.06	92.8
4D1	1400	COMMERCIAL AND SERVICES	D	1.51	95	143.89	
4D1	2600	OTHER OPEN LANDS <RURAL>	B/D	0.17	80	13.32	
4D1	3200	SHRUB AND BRUSHLAND	D	12.97	73	946.56	
4D1	4100	UPLAND CONIFEROUS FOREST	B	0.01	77	0.65	
4D1	4100	UPLAND CONIFEROUS FOREST	B/D	15.38	77	1,183.94	
4D1	4100	UPLAND CONIFEROUS FOREST	D	12.28	77	945.55	
4D1	4340	HARDWOOD CONIFER MIXED	B	0.36	77	27.47	
4D1	4340	HARDWOOD CONIFER MIXED	B/D	8.01	77	617.12	
4D1	4340	HARDWOOD CONIFER MIXED	D	6.23	77	479.66	
4D1	6300	WETLAND FORESTED MIXED		0.33	100	32.85	
4D1	6300	WETLAND FORESTED MIXED	B/D	25.61	100	2,560.82	
4D1	6300	WETLAND FORESTED MIXED	D	1.02	100	102.35	
4D1	6410	FRESHWATER MARSHES		7.85	100	785.11	
4D1	6410	FRESHWATER MARSHES	B/D	0.28	100	28.12	
4D1	6410	FRESHWATER MARSHES	D	1.48	100	148.01	
4D1	6430	WET PRAIRIES	B/D	2.26	100	226.48	
4D1	6430	WET PRAIRIES	D	0.00	100	0.12	
4D1	8100	TRANSPORTATION	B/D	4.02	98	394.19	
4D1	8100	TRANSPORTATION	D	5.64	98	552.71	
4D1	8300	UTILITIES	B/D	0.08	80	6.39	
4D1	8300	UTILITIES	D	2.03	80	162.54	
		Total	Basin 4D1	107.53		9,357.86	87.0

Attachment C - Hydrology Input Calculations

Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Pre-CN

BASIN	FLUCCS	FLUCSDISC	HYDRGRP	ACRES	Associated CN	Area x CN	Composite CN
4D2	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	B/D	1.26	85	107.27	
4D2	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	C	4.24	80	339.24	
4D2	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	D	6.68	85	567.88	
4D2	2600	OTHER OPEN LANDS <RURAL>	B/D	4.48	80	358.33	
4D2	4100	UPLAND CONIFEROUS FOREST	B/D	7.52	77	579.35	
4D2	4340	HARDWOOD CONIFER MIXED	B/D	3.25	77	250.20	
4D2	4340	HARDWOOD CONIFER MIXED	C	4.79	85	407.23	
4D2	4340	HARDWOOD CONIFER MIXED	D	0.44	77	33.88	
4D2	4400	TREE PLANTATIONS	B/D	0.04	79	3.47	
4D2	6300	WETLAND FORESTED MIXED	B/D	31.98	100	3,197.51	
4D2	6300	WETLAND FORESTED MIXED	C	0.02	100	1.76	
4D2	6410	FRESHWATER MARSHES	B/D	0.16	100	15.83	
4D2	8300	UTILITIES	B/D	3.45	80	276.22	
4D2	8300	UTILITIES	D	1.46	80	116.51	
		Total	Basin 4D2	69.77		6,254.68	89.6
4D3	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	B/D	22.81	85	1,938.95	
4D3	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	C	15.97	80	1,277.24	
4D3	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	D	0.52	85	43.93	
4D3	1400	COMMERCIAL AND SERVICES	B/D	4.80	92	441.65	
4D3	2600	OTHER OPEN LANDS <RURAL>	B/D	3.91	80	312.72	
4D3	3200	SHRUB AND BRUSHLAND	B/D	20.18	73	1,473.50	
4D3	4100	UPLAND CONIFEROUS FOREST	B/D	3.64	77	280.24	
4D3	4340	HARDWOOD CONIFER MIXED	B/D	6.22	77	479.06	
4D3	4400	TREE PLANTATIONS	B/D	19.10	79	1,509.16	
4D3	4400	TREE PLANTATIONS	C	0.09	86	8.02	
4D3	4400	TREE PLANTATIONS	D	0.51	79	40.09	
4D3	6210	CYPRESS	B/D	1.22	100	121.99	
4D3	6210	CYPRESS	D	0.62	100	62.47	
4D3	6300	WETLAND FORESTED MIXED	B/D	10.77	100	1,076.70	
4D3	6300	WETLAND FORESTED MIXED	C	1.35	100	135.37	
4D3	6300	WETLAND FORESTED MIXED	D	8.08	100	807.97	
4D3	6410	FRESHWATER MARSHES	B/D	1.88	100	188.19	
4D3	8300	UTILITIES	B/D	2.59	80	207.50	
		Total	Basin 4D3	124.27		10,404.77	83.7
4D4	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	C	1.82	80	145.25	
4D4	2600	OTHER OPEN LANDS <RURAL>	B/D	32.45	80	2,596.24	
4D4	2600	OTHER OPEN LANDS <RURAL>	C	0.78	74	57.81	
4D4	2600	OTHER OPEN LANDS <RURAL>	D	6.20	80	496.22	
4D4	3300	MIXED RANGELAND	B/D	1.43	80	114.75	
4D4	3300	MIXED RANGELAND	D	1.48	80	118.46	
4D4	4100	UPLAND CONIFEROUS FOREST	D	0.81	77	62.33	
4D4	4400	TREE PLANTATIONS	B/D	17.89	79	1,413.16	
4D4	4400	TREE PLANTATIONS	C	0.12	86	10.15	
4D4	4400	TREE PLANTATIONS	D	0.18	79	14.23	
4D4	6210	CYPRESS	B/D	0.56	100	56.13	
4D4	6210	CYPRESS	D	4.17	100	416.73	
4D4	6300	WETLAND FORESTED MIXED	B/D	8.15	100	814.70	
4D4	6300	WETLAND FORESTED MIXED	C	0.73	100	73.08	
4D4	6300	WETLAND FORESTED MIXED	D	36.63	100	3,663.20	
4D4	6410	FRESHWATER MARSHES	B/D	0.89	100	88.57	
4D4	6410	FRESHWATER MARSHES	D	2.77	100	276.63	
4D4	6430	WET PRAIRIES	B/D	0.68	100	67.93	
4D4	6430	WET PRAIRIES	D	0.70	100	70.16	
		Total	Basin 4D4	118.43		10,555.74	89.1

Attachment C - Hydrology Input Calculations
Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Pre-CN

BASIN	FLUCCS	FLUCSDESC	HYDRGRP	ACRES	Associated CN	Area x CN	Composite CN
4E1	1400	COMMERCIAL AND SERVICES	D	3.34	95	316.92	
4E1	2600	OTHER OPEN LANDS <RURAL>	B/D	13.25	80	1,060.23	
4E1	2600	OTHER OPEN LANDS <RURAL>	D	0.29	80	23.52	
4E1	4100	UPLAND CONIFEROUS FOREST	D	10.56	77	812.78	
4E1	4340	HARDWOOD CONIFER MIXED	B/D	0.20	77	15.65	
4E1	4340	HARDWOOD CONIFER MIXED	D	25.66	77	1,975.67	
4E1	6300	WETLAND FORESTED MIXED	B/D	5.07	100	507.10	
4E1	6300	WETLAND FORESTED MIXED	D	2.77	100	276.69	
4E1	6410	FRESHWATER MARSHES	B/D	0.22	100	21.91	
4E1	6410	FRESHWATER MARSHES	D	1.08	100	108.05	
4E1	8100	TRANSPORTATION	D	2.91	98	285.63	
4E1	8300	UTILITIES	B/D	1.51	80	120.67	
4E1	8300	UTILITIES	D	6.57	80	525.63	
		Total	Basin 4E1	73.43		6,050.46	82.4
4E2	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	B/D	0.87	85	73.99	
4E2	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	C	12.49	80	999.18	
4E2	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	D	4.42	85	375.99	
4E2	2600	OTHER OPEN LANDS <RURAL>	B/D	5.82	80	465.61	
4E2	2600	OTHER OPEN LANDS <RURAL>	D	0.22	80	17.97	
4E2	4100	UPLAND CONIFEROUS FOREST	B/D	4.88	77	375.41	
4E2	4100	UPLAND CONIFEROUS FOREST	D	1.31	77	100.80	
4E2	4340	HARDWOOD CONIFER MIXED	B/D	9.12	77	702.61	
4E2	4340	HARDWOOD CONIFER MIXED	C	7.01	85	595.57	
4E2	4340	HARDWOOD CONIFER MIXED	D	30.02	77	2,311.20	
4E2	6210	CYPRESS	C	0.66	100	65.82	
4E2	6210	CYPRESS	D	0.75	100	74.77	
4E2	6300	WETLAND FORESTED MIXED	B/D	1.16	100	115.92	
4E2	6300	WETLAND FORESTED MIXED	D	10.06	100	1,005.91	
4E2	6410	FRESHWATER MARSHES	B/D	0.25	100	24.87	
4E2	6410	FRESHWATER MARSHES	D	0.50	100	50.30	
4E2	8300	UTILITIES	D	1.81	80	144.78	
		Total	Basin 4E2	91.35		7,500.71	82.1

Attachment C - Hydrology Input Calculations
Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Pre-CN

BASIN	FLUCCS	FLUCDESC	HYDRGRP	ACRES	Associated CN	Area x CN	Composite CN
4E3	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	B/D	0.96	85	81.46	
4E3	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	C	13.75	80	1,099.96	
4E3	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	D	0.40	85	34.05	
4E3	1900	OPEN LAND	B/D	1.17	80	93.76	
4E3	2600	OTHER OPEN LANDS <RURAL>	B/D	111.18	80	8,894.34	
4E3	2600	OTHER OPEN LANDS <RURAL>	C	1.50	74	111.04	
4E3	2600	OTHER OPEN LANDS <RURAL>	D	21.26	80	1,700.45	
4E3	4100	UPLAND CONIFEROUS FOREST	B/D	0.00	77	0.01	
4E3	4100	UPLAND CONIFEROUS FOREST	C	3.10	85	263.63	
4E3	4340	HARDWOOD CONIFER MIXED	B/D	1.05	77	81.02	
4E3	4340	HARDWOOD CONIFER MIXED	C	0.96	85	81.88	
4E3	4340	HARDWOOD CONIFER MIXED	D	1.53	77	117.43	
4E3	4400	TREE PLANTATIONS	B/D	50.78	79	4,011.49	
4E3	4400	TREE PLANTATIONS	C	20.78	86	1,787.31	
4E3	4400	TREE PLANTATIONS	D	2.28	79	180.11	
4E3	5200	LAKES	C	0.02	100	2.45	
4E3	5200	LAKES	D	1.07	100	106.84	
4E3	6210	CYPRESS	B/D	2.95	100	295.49	
4E3	6210	CYPRESS	C	1.13	100	112.67	
4E3	6210	CYPRESS	D	70.70	100	7,070.03	
4E3	6300	WETLAND FORESTED MIXED	B/D	16.93	100	1,693.48	
4E3	6300	WETLAND FORESTED MIXED	C	8.78	100	878.47	
4E3	6300	WETLAND FORESTED MIXED	D	105.00	100	10,500.34	
4E3	6410	FRESHWATER MARSHES	B/D	5.85	100	584.51	
4E3	6410	FRESHWATER MARSHES	C	1.66	100	165.77	
4E3	6410	FRESHWATER MARSHES	D	5.40	100	540.43	
4E3	6430	WET PRAIRIES	B/D	5.19	100	519.00	
4E3	6430	WET PRAIRIES	D	0.42	100	42.45	
4E3	6530	INTERMITTENT PONDS	B/D	0.02	100	2.04	
		Total	Basin 4E3	455.84		41,051.88	90.1
4F	2600	OTHER OPEN LANDS <RURAL>	B/D	41.91	80	3,352.63	
4F	2600	OTHER OPEN LANDS <RURAL>	D	4.91	80	392.40	
4F	4400	TREE PLANTATIONS	B/D	26.41	79	2,086.05	
4F	4400	TREE PLANTATIONS	D	1.24	79	98.10	
4F	6210	CYPRESS	B/D	5.58	100	557.68	
4F	6210	CYPRESS	D	25.43	100	2,542.58	
4F	6300	WETLAND FORESTED MIXED	B/D	2.79	100	279.11	
4F	6300	WETLAND FORESTED MIXED	D	6.72	100	671.78	
4F	6410	FRESHWATER MARSHES	B/D	3.76	100	376.01	
4F	6410	FRESHWATER MARSHES	D	2.26	100	226.08	
4F	6430	WET PRAIRIES	B/D	1.92	100	192.15	
4F	6430	WET PRAIRIES	D	2.77	100	277.15	
4F	8300	UTILITIES	B/D	0.01	80	1.16	
		Total	Basin 4F	125.70		11,052.88	87.9

Attachment C - Hydrology Input Calculations
Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Pre-CN

BASIN	FLUCCS	FLUCSDESC	HYDRGRP	ACRES	Associated CN	Area x CN	Composite CN
4G	2600	OTHER OPEN LANDS <RURAL>	B/D	3.66	80	292.50	
4G	2600	OTHER OPEN LANDS <RURAL>	D	0.04	80	3.00	
4G	4400	TREE PLANTATIONS	B/D	21.01	79	1,659.59	
4G	4400	TREE PLANTATIONS	D	0.20	79	16.00	
4G	6210	CYPRESS	B/D	10.01	100	1,000.93	
4G	6210	CYPRESS	D	16.09	100	1,608.64	
4G	6300	WETLAND FORESTED MIXED	B/D	0.05	100	4.55	
4G	6300	WETLAND FORESTED MIXED	D	0.94	100	93.70	
4G	6410	FRESHWATER MARSHES	B/D	0.14	100	13.71	
4G	6410	FRESHWATER MARSHES	D	1.03	100	103.34	
4G	6430	WET PRAIRIES	B/D	0.46	100	45.81	
4G	6430	WET PRAIRIES	D	0.46	100	45.72	
		Total	Basin 4G	54.07		4,887.48	90.4
4H	2600	OTHER OPEN LANDS <RURAL>	B/D	2.19	80	175.05	
4H	2600	OTHER OPEN LANDS <RURAL>	D	0.04	80	2.97	
4H	4400	TREE PLANTATIONS	B/D	37.11	79	2,931.52	
4H	4400	TREE PLANTATIONS	D	0.68	79	53.50	
4H	6210	CYPRESS	B/D	54.65	100	5,465.21	
4H	6210	CYPRESS	D	60.58	100	6,057.98	
4H	6300	WETLAND FORESTED MIXED	D	0.16	100	16.15	
4H	6410	FRESHWATER MARSHES	B/D	0.26	100	25.55	
4H	6430	WET PRAIRIES	B/D	0.35	100	34.97	
		Total	Basin 4H	156.01		14,762.90	94.6
4I	2600	OTHER OPEN LANDS <RURAL>	B/D	28.43	80	2,274.25	
4I	2600	OTHER OPEN LANDS <RURAL>	D	4.19	80	335.26	
4I	3200	SHRUB AND BRUSHLAND	B/D	1.08	73	79.09	
4I	3200	SHRUB AND BRUSHLAND	D	0.00	73	0.20	
4I	4100	UPLAND CONIFEROUS FOREST	B/D	2.80	77	215.81	
4I	4100	UPLAND CONIFEROUS FOREST	D	1.03	77	79.08	
4I	4400	TREE PLANTATIONS	B/D	14.99	79	1,184.31	
4I	4400	TREE PLANTATIONS	D	0.62	79	48.98	
4I	6210	CYPRESS	B/D	11.95	100	1,194.60	
4I	6210	CYPRESS	D	52.92	100	5,291.86	
4I	6300	WETLAND FORESTED MIXED	B/D	27.44	100	2,744.04	
4I	6300	WETLAND FORESTED MIXED	D	27.92	100	2,792.45	
4I	6410	FRESHWATER MARSHES	B/D	0.12	100	12.07	
4I	6410	FRESHWATER MARSHES	D	2.24	100	224.40	
		Total	Basin 4I	175.74		16,476.40	93.8
4J	2600	OTHER OPEN LANDS <RURAL>	B/D	15.37	80	1,229.24	
4J	2600	OTHER OPEN LANDS <RURAL>	D	0.92	80	73.31	
4J	3200	SHRUB AND BRUSHLAND	B/D	0.00	73	0.19	
4J	4400	TREE PLANTATIONS	B/D	3.05	79	240.59	
4J	4400	TREE PLANTATIONS	D	0.05	79	3.81	
4J	6210	CYPRESS	B/D	23.07	100	2,306.55	
4J	6210	CYPRESS	D	27.00	100	2,700.30	
		Total	Basin 4J	69.45		6,553.99	94.4

Attachment C - Hydrology Input Calculations
Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Pre-CN

BASIN	FLUCCS	FLUCDESC	HYDRGRP	ACRES	Associated CN	Area x CN	Composite CN
5	2600	OTHER OPEN LANDS <RURAL>	B/D	11.54	80	922.83	
5	2600	OTHER OPEN LANDS <RURAL>	D	1.28	80	102.13	
5	4100	UPLAND CONIFEROUS FOREST	B/D	28.00	77	2,155.98	
5	4100	UPLAND CONIFEROUS FOREST	D	4.23	77	325.33	
5	4400	TREE PLANTATIONS	B/D	348.73	79	27,549.56	
5	4400	TREE PLANTATIONS	D	37.52	79	2,963.74	
5	6210	CYPRESS	B/D	44.45	100	4,444.95	
5	6210	CYPRESS	D	76.11	100	7,611.13	
5	6300	WETLAND FORESTED MIXED	B/D	0.45	100	44.74	
5	6300	WETLAND FORESTED MIXED	D	1.73	100	172.64	
5	6410	FRESHWATER MARSHES	B/D	11.97	100	1,196.90	
5	6410	FRESHWATER MARSHES	D	27.67	100	2,766.54	
5	6430	WET PRAIRIES	B/D	1.44	100	144.12	
		Total	Basin 5	595.09		50,400.59	84.7
6	2600	OTHER OPEN LANDS <RURAL>	B/D	41.07	80	3,285.71	
6	2600	OTHER OPEN LANDS <RURAL>	C	1.50	74	110.99	
6	2600	OTHER OPEN LANDS <RURAL>	D	3.97	80	317.54	
6	4100	UPLAND CONIFEROUS FOREST	B/D	4.54	77	349.51	
6	4100	UPLAND CONIFEROUS FOREST	D	0.12	77	9.36	
6	4400	TREE PLANTATIONS	B/D	145.22	79	11,472.70	
6	4400	TREE PLANTATIONS	C	1.03	86	88.49	
6	4400	TREE PLANTATIONS	D	4.55	79	359.84	
6	6210	CYPRESS	B/D	27.75	100	2,775.21	
6	6210	CYPRESS	C	0.06	100	5.88	
6	6210	CYPRESS	D	33.52	100	3,352.03	
6	6410	FRESHWATER MARSHES	B/D	8.77	100	877.48	
6	6410	FRESHWATER MARSHES	D	12.94	100	1,294.47	
6	6430	WET PRAIRIES	B/D	1.23	100	122.83	
		Total	Basin 6	286.29		24,422.05	85.3
7	2600	OTHER OPEN LANDS <RURAL>	B/D	32.51	80	2,600.54	
7	2600	OTHER OPEN LANDS <RURAL>	C	1.15	74	85.17	
7	2600	OTHER OPEN LANDS <RURAL>	D	2.29	80	182.91	
7	4100	UPLAND CONIFEROUS FOREST	B/D	0.77	77	59.33	
7	4100	UPLAND CONIFEROUS FOREST	D	0.35	77	26.81	
7	4340	HARDWOOD CONIFER MIXED	B/D	3.24	77	249.41	
7	4400	TREE PLANTATIONS	B/D	231.00	79	18,249.22	
7	4400	TREE PLANTATIONS	C	1.28	86	109.90	
7	4400	TREE PLANTATIONS	D	9.42	79	744.32	
7	6210	CYPRESS	B/D	48.09	100	4,809.15	
7	6210	CYPRESS	D	42.21	100	4,220.98	
7	6410	FRESHWATER MARSHES	B/D	13.77	100	1,377.03	
7	6410	FRESHWATER MARSHES	D	18.88	100	1,887.68	
7	6430	WET PRAIRIES	B/D	0.01	100	0.96	
		Total	Basin 7 & 7A	404.96		34,603.43	85.4

Attachment C - Hydrology Input Calculations
Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Pre-CN

BASIN	FLUCCS	FLUCDESC	HYDRGRP	ACRES	Associated CN	Area x CN	Composite CN
8	2600	OTHER OPEN LANDS <RURAL>	B/D	110.59	80	8,847.39	
8	2600	OTHER OPEN LANDS <RURAL>	C	33.36	74	2,468.33	
8	2600	OTHER OPEN LANDS <RURAL>	D	1.95	80	156.00	
8	4340	HARDWOOD CONIFER MIXED	B/D	0.58	77	44.66	
8	4400	TREE PLANTATIONS	B/D	133.49	79	10,545.48	
8	4400	TREE PLANTATIONS	C	24.08	86	2,070.78	
8	4400	TREE PLANTATIONS	D	6.15	79	486.24	
8	5200	LAKES	C	0.33	100	32.53	
8	6210	CYPRESS	B/D	59.06	100	5,905.88	
8	6210	CYPRESS	C	1.80	100	180.21	
8	6210	CYPRESS	D	34.08	100	3,407.94	
8	6410	FRESHWATER MARSHES	B/D	4.55	100	454.83	
8	6410	FRESHWATER MARSHES	D	15.80	100	1,579.88	
8	6430	WET PRAIRIES	B/D	14.33	100	1,433.15	
		Total	Basin 8 & 8A	440.14		37,613.32	85.5
9	2600	OTHER OPEN LANDS <RURAL>	B/D	58.97	80	4,717.83	
9	2600	OTHER OPEN LANDS <RURAL>	C	1.87	74	138.52	
9	2600	OTHER OPEN LANDS <RURAL>	D	0.57	80	45.69	
9	4400	TREE PLANTATIONS	B/D	20.43	79	1,614.16	
9	4400	TREE PLANTATIONS	C	5.43	86	466.87	
9	6210	CYPRESS	B/D	34.42	100	3,442.05	
9	6210	CYPRESS	D	6.82	100	682.49	
9	6300	WETLAND FORESTED MIXED	B/D	0.05	100	4.70	
9	6410	FRESHWATER MARSHES	B/D	4.10	100	409.67	
9	6410	FRESHWATER MARSHES	D	3.23	100	322.87	
9	6430	WET PRAIRIES	B/D	31.40	100	3,140.15	
9	6430	WET PRAIRIES	C	1.04	100	104.29	
9	6430	WET PRAIRIES	D	7.22	100	722.43	
		Total	Basin 9 & 9A	175.56		15,811.72	90.1
10A	2600	OTHER OPEN LANDS <RURAL>	B/D	6.22	80	497.87	
10A	2600	OTHER OPEN LANDS <RURAL>	C	0.56	74	41.41	
10A	4400	TREE PLANTATIONS	B/D	12.00	79	947.74	
10A	4400	TREE PLANTATIONS	C	15.40	86	1,324.29	
10A	6210	CYPRESS	B/D	3.80	100	379.96	
10A	6410	FRESHWATER MARSHES	C	0.11	100	10.83	
10A	6430	WET PRAIRIES	C	6.68	100	667.56	
		Total	Basin 10A	44.76		3,869.66	86.4
10B	2600	OTHER OPEN LANDS <RURAL>	B/D	0.37	80	29.99	
10B	2600	OTHER OPEN LANDS <RURAL>	C	2.83	74	209.53	
10B	4400	TREE PLANTATIONS	B/D	6.95	79	549.32	
10B	4400	TREE PLANTATIONS	C	26.76	86	2,301.64	
10B	6210	CYPRESS	B/D	0.05	100	4.62	
10B	6410	FRESHWATER MARSHES	C	1.39	100	138.97	
10B	6430	WET PRAIRIES	B/D	0.01	100	1.01	
10B	6430	WET PRAIRIES	C	10.42	100	1,041.66	
		Total	Basin 10B	48.79		4,276.74	87.7

Attachment C - Hydrology Input Calculations
Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Pre-CN

BASIN	FLUCCS	FLUCSDISC	HYDRGRP	ACRES	Associated CN	Area x CN	Composite CN
11	2100	CROPLAND AND PASTURELAND	B/D	1.14	80	91.36	
11	2100	CROPLAND AND PASTURELAND	C	0.28	74	20.38	
11	2100	CROPLAND AND PASTURELAND	D	3.36	80	268.51	
11	2600	OTHER OPEN LANDS <RURAL>	B/D	75.37	80	6,029.58	
11	2600	OTHER OPEN LANDS <RURAL>	C	17.10	74	1,265.63	
11	2600	OTHER OPEN LANDS <RURAL>	D	1.69	80	134.80	
11	4340	HARDWOOD CONIFER MIXED	B/D	16.61	77	1,279.35	
11	4340	HARDWOOD CONIFER MIXED	C	10.66	85	906.12	
11	4340	HARDWOOD CONIFER MIXED	D	0.42	77	32.18	
11	4400	TREE PLANTATIONS	B/D	68.24	79	5,390.88	
11	4400	TREE PLANTATIONS	C	36.10	86	3,104.77	
11	4400	TREE PLANTATIONS	D	1.77	79	139.94	
11	6210	CYPRESS	B/D	32.74	100	3,274.22	
11	6210	CYPRESS	C	14.77	100	1,477.21	
11	6210	CYPRESS	D	19.52	100	1,951.93	
11	6300	WETLAND FORESTED MIXED	B/D	0.06	100	6.30	
11	6300	WETLAND FORESTED MIXED	C	0.01	100	0.91	
11	6410	FRESHWATER MARSHES	B/D	7.76	100	776.41	
11	6410	FRESHWATER MARSHES	C	1.69	100	169.01	
11	6410	FRESHWATER MARSHES	D	2.42	100	242.10	
11	6430	WET PRAIRIES	B/D	19.01	100	1,901.45	
11	6430	WET PRAIRIES	C	13.28	100	1,327.95	
11	6430	WET PRAIRIES	D	3.20	100	320.03	
11	6440	EMERGENT AQUATIC VEGETATION	C	0.02	100	1.89	
11	6440	EMERGENT AQUATIC VEGETATION	D	2.97	100	297.28	
		Total	Basin 11&11A	350.20		30,410.20	86.8
12	2600	OTHER OPEN LANDS <RURAL>	B/D	4.35	80	347.88	
12	2600	OTHER OPEN LANDS <RURAL>	C	6.07	74	449.50	
12	4400	TREE PLANTATIONS	B/D	25.96	79	2,050.45	
12	4400	TREE PLANTATIONS	C	0.68	86	58.61	
12	6210	CYPRESS	B/D	0.95	100	95.50	
12	6210	CYPRESS	C	0.29	100	28.62	
		Total	Basin 12	38.30		3,030.57	79.1
12A	2600	OTHER OPEN LANDS <RURAL>	B/D	2.30	80	184.32	
12A	2600	OTHER OPEN LANDS <RURAL>	C	4.48	74	331.62	
12A	4400	TREE PLANTATIONS	B/D	7.12	79	562.42	
12A	4400	TREE PLANTATIONS	C	13.89	86	1,194.65	
12A	4400	TREE PLANTATIONS	D	0.54	79	42.62	
12A	6210	CYPRESS	B/D	0.34	100	33.77	
12A	6210	CYPRESS	C	5.41	100	541.15	
12A	6210	CYPRESS	D	5.11	100	510.76	
12A	6300	WETLAND FORESTED MIXED	C	0.02	100	2.30	
		Total	Basin 12A	39.22		3,403.60	86.8

Attachment C - Hydrology Input Calculations

Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Pre-CN

BASIN	FLUCCS	FLUCDESC	HYDRGRP	ACRES	Associated CN	Area x CN	Composite CN
13	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	A	1.87	84	156.69	
13	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	B/D	80.62	85	6,852.78	
13	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	C	9.18	80	734.21	
13	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	D	4.07	85	345.81	
13	1200	RESIDENTIAL MED DENSITY 2->5 DWELLING UNIT	C	3.68	81	298.02	
13	1900	OPEN LAND	B/D	3.71	80	297.09	
13	2600	OTHER OPEN LANDS <RURAL>	A	2.28	39	88.75	
13	2600	OTHER OPEN LANDS <RURAL>	B/D	13.49	80	1,079.24	
13	2600	OTHER OPEN LANDS <RURAL>	C	2.57	74	190.06	
13	2600	OTHER OPEN LANDS <RURAL>	D	18.82	80	1,505.47	
13	3200	SHRUB AND BRUSHLAND	B/D	8.41	73	613.85	
13	3200	SHRUB AND BRUSHLAND	C	1.73	65	112.65	
13	4100	UPLAND CONIFEROUS FOREST	B/D	0.24	77	18.26	
13	4100	UPLAND CONIFEROUS FOREST	C	3.98	85	338.70	
13	4110	PINE FLATWOODS	B/D	6.60	77	508.15	
13	4110	PINE FLATWOODS	C	4.71	85	400.46	
13	4340	HARDWOOD CONIFER MIXED	A	4.20	30	126.04	
13	4340	HARDWOOD CONIFER MIXED	B/D	4.27	77	328.88	
13	4340	HARDWOOD CONIFER MIXED	C	2.19	85	185.92	
13	4340	HARDWOOD CONIFER MIXED	D	0.47	77	36.17	
13	4400	TREE PLANTATIONS	B/D	2.10	79	165.72	
13	4400	TREE PLANTATIONS	C	1.23	86	105.95	
13	4400	TREE PLANTATIONS	D	0.76	79	59.92	
13	5300	RESERVOIRS	B/D	0.35	100	34.95	
13	5300	RESERVOIRS	D	0.31	100	30.75	
13	6210	CYPRESS	B/D	0.09	100	9.46	
13	6210	CYPRESS	D	2.30	100	229.54	
13	6300	WETLAND FORESTED MIXED	A	1.33	100	132.61	
13	6300	WETLAND FORESTED MIXED	B/D	4.86	100	486.25	
13	6300	WETLAND FORESTED MIXED	D	26.55	100	2,654.68	
13	6410	FRESHWATER MARSHES	A	0.21	100	20.90	
13	6410	FRESHWATER MARSHES	B/D	0.00	100	0.47	
13	6410	FRESHWATER MARSHES	D	1.96	100	195.79	
13	6530	INTERMITTENT PONDS	B/D	3.71	100	371.43	
13	8300	UTILITIES	B/D	7.56	80	604.91	
13	8300	UTILITIES	D	0.00	80	0.05	
		Total	Basin 13	230.40		19,320.54	83.9
13A	2600	OTHER OPEN LANDS <RURAL>	B/D	34.64	80	-	
13A	2600	OTHER OPEN LANDS <RURAL>	C	1.28	74	94.45	
13A	2600	OTHER OPEN LANDS <RURAL>	D	0.20	80	16.07	
13A	4340	HARDWOOD CONIFER MIXED	B/D	1.93	77	148.90	
13A	4340	HARDWOOD CONIFER MIXED	C	1.17	85	99.62	
13A	4340	HARDWOOD CONIFER MIXED	D	1.15	77	88.28	
13A	4400	TREE PLANTATIONS	B/D	7.13	79	563.27	
13A	4400	TREE PLANTATIONS	C	18.12	86	1,558.37	
13A	4400	TREE PLANTATIONS	D	0.04	79	3.23	
13A	6210	CYPRESS	B/D	45.64	100	4,564.27	
13A	6210	CYPRESS	C	2.70	100	270.48	
13A	6210	CYPRESS	D	0.06	100	1,103.65	
13A	6300	WETLAND FORESTED MIXED	B/D	1.61	100	160.85	
13A	6300	WETLAND FORESTED MIXED	C	2.34	100	621.07	
13A	6300	WETLAND FORESTED MIXED	D	0.36	100	35.75	
13A	6410	FRESHWATER MARSHES	B/D	0.01	100	0.65	
13A	6410	FRESHWATER MARSHES	D	0.81	100	80.53	
		Total	Basin 13A	119.19		9,409.45	78.9

Attachment C - Hydrology Input Calculations
Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Pre-CN

BASIN	FLUCCS	FLUCDESC	HYDRGRP	ACRES	Associated CN	Area x CN	Composite CN
13B	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	A	11.93	54	644.45	
13B	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	B/D	2.95	85	250.84	
13B	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	C	43.71	80	3,496.76	
13B	1200	RESIDENTIAL MED DENSITY 2->5 DWELLING UNIT	A	0.05	57	2.96	
13B	1200	RESIDENTIAL MED DENSITY 2->5 DWELLING UNIT	B/D	0.70	86	59.82	
13B	1200	RESIDENTIAL MED DENSITY 2->5 DWELLING UNIT	C	14.35	81	1,162.25	
13B	1400	COMMERCIAL AND SERVICES	A	4.19	89	372.58	
13B	1900	OPEN LAND	B/D	2.51	80	201.19	
13B	2600	OTHER OPEN LANDS <RURAL>	B/D	13.80	80	1,103.65	
13B	2600	OTHER OPEN LANDS <RURAL>	C	8.39	74	621.07	
13B	2600	OTHER OPEN LANDS <RURAL>	D	0.30	80	23.93	
13B	3200	SHRUB AND BRUSHLAND	B/D	1.63	73	119.14	
13B	3200	SHRUB AND BRUSHLAND	C	1.07	65	69.42	
13B	4100	UPLAND CONIFEROUS FOREST	B/D	0.88	77	67.92	
13B	4100	UPLAND CONIFEROUS FOREST	C	5.38	85	457.56	
13B	4110	PINE FLATWOODS	B/D	0.32	77	24.39	
13B	4110	PINE FLATWOODS	C	10.07	85	855.58	
13B	4340	HARDWOOD CONIFER MIXED	A	15.54	30	466.22	
13B	4340	HARDWOOD CONIFER MIXED	B/D	28.38	77	2,184.89	
13B	4340	HARDWOOD CONIFER MIXED	C	38.81	85	3,298.94	
13B	4340	HARDWOOD CONIFER MIXED	D	0.70	77	53.56	
13B	4400	TREE PLANTATIONS	B/D	19.38	79	1,530.67	
13B	4400	TREE PLANTATIONS	C	35.53	86	3,055.89	
13B	5300	RESERVOIRS	B/D	1.85	100	185.48	
13B	6210	CYPRESS	B/D	0.52	100	52.16	
13B	6210	CYPRESS	C	1.99	100	199.12	
13B	6210	CYPRESS	D	1.97	100	196.85	
13B	6300	WETLAND FORESTED MIXED	A	0.53	100	53.42	
13B	6300	WETLAND FORESTED MIXED	B/D	18.97	100	1,897.28	
13B	6300	WETLAND FORESTED MIXED	C	10.36	100	1,035.67	
13B	6300	WETLAND FORESTED MIXED	D	0.12	100	11.67	
13B	6410	FRESHWATER MARSHES	B/D	2.13	100	212.75	
13B	6410	FRESHWATER MARSHES	C	1.37	100	136.91	
13B	6410	FRESHWATER MARSHES	D	2.01	100	201.30	
		Total	Basin 13B	302.38		24,306.28	80.4
13C	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	B/D	0.67	85	56.92	
13C	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	C	54.79	80	4,382.94	
13C	2600	OTHER OPEN LANDS <RURAL>	B/D	11.54	80	922.82	
13C	2600	OTHER OPEN LANDS <RURAL>	C	10.30	74	762.29	
13C	4100	UPLAND CONIFEROUS FOREST	B/D	2.07	77	159.04	
13C	4100	UPLAND CONIFEROUS FOREST	C	0.93	85	78.87	
13C	4340	HARDWOOD CONIFER MIXED	B/D	0.17	77	13.00	
13C	4400	TREE PLANTATIONS	B/D	2.26	79	178.68	
13C	4400	TREE PLANTATIONS	C	0.02	86	1.90	
13C	5300	RESERVOIRS	C	0.77	100	77.04	
13C	6210	CYPRESS	B/D	3.54	100	353.99	
13C	6300	WETLAND FORESTED MIXED	B/D	1.61	100	160.96	
13C	6300	WETLAND FORESTED MIXED	C	3.29	100	328.70	
13C	6410	FRESHWATER MARSHES	C	0.20	100	19.73	
13C	6430	WET PRAIRIES	C	2.01	100	201.11	
		Total	Basin 13C	94.15		7,697.99	81.8

Attachment C - Hydrology Input Calculations
Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Pre-CN

BASIN	FLUCCS	FLUCDESC	HYDRGRP	ACRES	Associated CN	Area x CN	Composite CN
13D	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	B/D	0.18	85	15.41	
13D	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	C	0.24	80	19.36	
13D	2600	OTHER OPEN LANDS <RURAL>	B/D	15.89	80	1,271.34	
13D	2600	OTHER OPEN LANDS <RURAL>	C	49.36	74	3,652.48	
13D	4100	UPLAND CONIFEROUS FOREST	B/D	24.53	77	1,889.17	
13D	4100	UPLAND CONIFEROUS FOREST	C	14.93	85	1,269.23	
13D	4340	HARDWOOD CONIFER MIXED	B/D	7.30	77	562.15	
13D	4340	HARDWOOD CONIFER MIXED	C	5.00	85	424.67	
13D	4400	TREE PLANTATIONS	B/D	46.98	79	3,711.19	
13D	4400	TREE PLANTATIONS	C	24.15	86	2,077.20	
13D	6210	CYPRESS	B/D	20.82	100	2,081.99	
13D	6210	CYPRESS	C	0.42	100	42.16	
13D	6240	CYPRESS-PINE-CABBAGE PALM	B/D	1.83	100	182.74	
13D	6240	CYPRESS-PINE-CABBAGE PALM	C	27.23	100	2,722.54	
13D	6300	WETLAND FORESTED MIXED	B/D	2.26	100	226.39	
13D	6300	WETLAND FORESTED MIXED	C	4.68	100	468.35	
13D	6410	FRESHWATER MARSHES	B/D	1.15	100	114.58	
13D	6410	FRESHWATER MARSHES	C	1.54	100	153.60	
13D	6430	WET PRAIRIES	B/D	2.02	100	202.48	
13D	6430	WET PRAIRIES	C	1.30	100	129.74	
		Total	Basin 13D	251.81		21,216.78	84.3
13E	2600	OTHER OPEN LANDS <RURAL>	C	16.45	74	1,217.25	
13E	4340	HARDWOOD CONIFER MIXED	B/D	0.00	77	0.08	
13E	4340	HARDWOOD CONIFER MIXED	C	1.18	85	100.28	
13E	4400	TREE PLANTATIONS	B/D	0.80	79	63.58	
13E	4400	TREE PLANTATIONS	C	12.98	86	1,115.91	
13E	6210	CYPRESS	C	3.48	100	348.04	
		Total	Basin 13E	34.89		2,845.15	81.5
13F	2600	OTHER OPEN LANDS <RURAL>	B/D	20.66	80	1,653.17	
13F	2600	OTHER OPEN LANDS <RURAL>	D	1.06	80	85.07	
13F	4400	TREE PLANTATIONS	B/D	9.48	79	748.53	
13F	4400	TREE PLANTATIONS	C	0.13	86	11.16	
13F	4400	TREE PLANTATIONS	D	0.40	79	31.44	
13F	6210	CYPRESS	B/D	49.44	100	4,943.64	
13F	6210	CYPRESS	D	33.21	100	3,320.77	
13F	6300	WETLAND FORESTED MIXED	B/D	0.05	100	5.28	
13F	6410	FRESHWATER MARSHES	B/D	0.90	100	90.49	
13F	6410	FRESHWATER MARSHES	D	0.22	100	22.41	
		Total	Basin 13F	115.56		10,911.96	94.4
13G	4100	UPLAND CONIFEROUS FOREST	B/D	11.31	77	870.97	
13G	4100	UPLAND CONIFEROUS FOREST	D	0.03	77	2.55	
13G	4400	TREE PLANTATIONS	B/D	46.42	79	3,667.25	
13G	4400	TREE PLANTATIONS	D	0.70	79	55.12	
13G	6210	CYPRESS	B/D	49.56	100	4,955.72	
13G	6210	CYPRESS	D	51.43	100	5,143.36	
13G	6300	WETLAND FORESTED MIXED	D	0.06	100	5.93	
13G	6410	FRESHWATER MARSHES	B/D	0.49	100	48.82	
13G	6410	FRESHWATER MARSHES	D	0.00	100	0.02	
		Total	Basin 13G	160.00		14,749.75	92.2

Attachment C - Hydrology Input Calculations
Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Pre-CN

BASIN	FLUCCS	FLUCSDESC	HYDRGRP	ACRES	Associated CN	Area x CN	Composite CN
13H	2600	OTHER OPEN LANDS <RURAL>	B/D	33.88	80	2,710.53	
13H	2600	OTHER OPEN LANDS <RURAL>	D	0.27	80	21.38	
13H	4100	UPLAND CONIFEROUS FOREST	B/D	0.24	77	18.26	
13H	4400	TREE PLANTATIONS	B/D	17.13	79	1,353.01	
13H	6210	CYPRESS	B/D	51.02	100	5,101.69	
13H	6210	CYPRESS	D	2.91	100	291.29	
13H	6430	WET PRAIRIES	B/D	0.23	100	23.02	
		Total	Basin 13H	105.67		9,519.18	90.1
13I	2600	OTHER OPEN LANDS <RURAL>	B/D	17.74	80	1,419.33	
13I	4400	TREE PLANTATIONS	B/D	7.80	79	616.50	
13I	6210	CYPRESS	B/D	33.58	100	3,357.59	
13I	6210	CYPRESS	D	3.78	100	377.76	
		Total	Basin 13I	62.90		5,771.18	91.8

Attachment C - Hydrology Input Calculations

Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Pre-Percent-Impervious

BASIN	FLUCCS	FLUCDESC	ACRES	Percent Impervious	Area x % Impervious	Basin % Impervious
1	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	9.07	25.00%	2.27	
1	2100	CROPLAND AND PASTURELAND	35.70	0.00%	-	
1	2100	CROPLAND AND PASTURELAND	0.86	0.00%	-	
1	2600	OTHER OPEN LANDS <RURAL>	1.70	0.00%	-	
1	2600	OTHER OPEN LANDS <RURAL>	0.01	0.00%	-	
1	3200	SHRUB AND BRUSHLAND	5.94	0.00%	-	
1	3200	SHRUB AND BRUSHLAND	23.45	0.00%	-	
1	3200	SHRUB AND BRUSHLAND	6.42	0.00%	-	
1	3200	SHRUB AND BRUSHLAND	10.08	0.00%	-	
1	4110	PINE FLATWOODS	43.26	0.00%	-	
1	4110	PINE FLATWOODS	102.60	0.00%	-	
1	4110	PINE FLATWOODS	11.48	0.00%	-	
1	4110	PINE FLATWOODS	9.12	0.00%	-	
1	4340	HARDWOOD CONIFER MIXED	116.58	0.00%	-	
1	4340	HARDWOOD CONIFER MIXED	3.94	0.00%	-	
1	4340	HARDWOOD CONIFER MIXED	15.67	0.00%	-	
1	4400	TREE PLANTATIONS	97.56	0.00%	-	
1	4400	TREE PLANTATIONS	312.14	0.00%	-	
1	4400	TREE PLANTATIONS	4.68	0.00%	-	
1	4400	TREE PLANTATIONS	34.78	0.00%	-	
1	5200	LAKES	0.11	100.00%	0.11	
1	6150	STREAM AND LAKE SWAMPS (BOTTOMLAND)	0.62	100.00%	0.62	
1	6185	MIXED WETLAND HARDWOODS	0.89	0.00%	-	
1	6185	MIXED WETLAND HARDWOODS	153.38	0.00%	-	
1	6185	MIXED WETLAND HARDWOODS	1.26	0.00%	-	
1	6185	MIXED WETLAND HARDWOODS	383.15	0.00%	-	
1	6210	CYPRESS	2.57	0.00%	-	
1	6210	CYPRESS	91.59	0.00%	-	
1	6210	CYPRESS	102.46	0.00%	-	
1	6300	WETLAND FORESTED MIXED	0.25	0.00%	-	
1	6300	WETLAND FORESTED MIXED	5.08	0.00%	-	
1	6300	WETLAND FORESTED MIXED	15.23	0.00%	-	
1	6410	FRESHWATER MARSHES	2.33	0.00%	-	
1	6410	FRESHWATER MARSHES	3.83	0.00%	-	
1	6410	FRESHWATER MARSHES	10.79	0.00%	-	
1	6430	WET PRAIRIES	2.28	0.00%	-	
1	6440	EMERGENT AQUATIC VEGETATION	0.35	0.00%	-	
1	8100	TRANSPORTATION	9.86	98.00%	9.66	
1	8100	TRANSPORTATION	3.37	98.00%	3.30	
1	8100	TRANSPORTATION	1.16	98.00%	1.14	
1	8300	UTILITIES	11.18	0.00%	-	
1	8300	UTILITIES	1.86	0.00%	-	
1	8300	UTILITIES	0.99	0.00%	-	
		Total	1,649.65		17.10	1.04%

Attachment C - Hydrology Input Calculations

Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Pre-Percent-Impervious

BASIN	FLUCCS	FLUCDESC	ACRES	Percent Impervious	Area x % Impervious	Basin % Impervious
1B	2600	OTHER OPEN LANDS <RURAL>	20.89	0.00%	-	
1B	2600	OTHER OPEN LANDS <RURAL>	0.82	0.00%	-	
1B	4100	UPLAND CONIFEROUS FOREST	1.53	0.00%	-	
1B	4400	TREE PLANTATIONS	0.41	0.00%	-	
1B	4400	TREE PLANTATIONS	64.17	0.00%	-	
1B	4400	TREE PLANTATIONS	3.71	0.00%	-	
1B	6185	MIXED WETLAND HARDWOODS	0.05	0.00%	-	
1B	6210	CYPRESS	0.08	0.00%	-	
1B	6210	CYPRESS	55.98	0.00%	-	
1B	6210	CYPRESS	57.34	0.00%	-	
1B	6300	WETLAND FORESTED MIXED	0.00	0.00%	-	
1B	6300	WETLAND FORESTED MIXED	0.05	0.00%	-	
1B	6410	FRESHWATER MARSHES	2.13	0.00%	-	
1B	6410	FRESHWATER MARSHES	1.90	0.00%	-	
1B	6410	FRESHWATER MARSHES	0.53	0.00%	-	
1B	6430	WET PRAIRIES	0.17	0.00%	-	
1B	8100	TRANSPORTATION	5.15	98.00%	5.04	
1B	8300	UTILITIES	1.94	0.00%	-	
1B	8300	UTILITIES	0.20	0.00%	-	
		Total	217.03		5.04	2.32%
2	4100	UPLAND CONIFEROUS FOREST	1.22	0.00%	-	
2	4100	UPLAND CONIFEROUS FOREST	0.17	0.00%	-	
2	4340	HARDWOOD CONIFER MIXED	2.29	0.00%	-	
2	4400	TREE PLANTATIONS	0.38	0.00%	-	
2	4400	TREE PLANTATIONS	89.76	0.00%	-	
2	4400	TREE PLANTATIONS	2.08	0.00%	-	
2	6210	CYPRESS	8.11	0.00%	-	
2	6210	CYPRESS	6.23	0.00%	-	
2	6410	FRESHWATER MARSHES	3.21	0.00%	-	
2	6410	FRESHWATER MARSHES	4.87	0.00%	-	
2	6410	FRESHWATER MARSHES	1.04	0.00%	-	
2	8100	TRANSPORTATION	6.27	98.00%	6.15	
2	8300	UTILITIES	6.18	0.00%	-	
2	8300	UTILITIES	0.10	0.00%	-	
		Total	131.91		6.15	4.66%
2A	2600	OTHER OPEN LANDS <RURAL>	55.46	0.00%	-	
2A	2600	OTHER OPEN LANDS <RURAL>	2.78	0.00%	-	
2A	4400	TREE PLANTATIONS	136.90	0.00%	-	
2A	4400	TREE PLANTATIONS	7.02	0.00%	-	
2A	6150	STREAM AND LAKE SWAMPS (BOTTOMLAND)	0.01	100.00%	0.01	
2A	6185	MIXED WETLAND HARDWOODS	10.57	0.00%	-	
2A	6185	MIXED WETLAND HARDWOODS	2.45	0.00%	-	
2A	6210	CYPRESS	134.69	0.00%	-	
2A	6210	CYPRESS	176.06	0.00%	-	
2A	6410	FRESHWATER MARSHES	0.98	0.00%	-	
2A	6410	FRESHWATER MARSHES	0.08	0.00%	-	
2A	6430	WET PRAIRIES	0.89	0.00%	-	
		Total	527.89		0.01	0.00%

Attachment C - Hydrology Input Calculations

Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Pre-Percent-Impervious

BASIN	FLUCCS	FLUCSDESC	ACRES	Percent Impervious	Area x % Impervious	Basin % Impervious
2B	2600	OTHER OPEN LANDS <RURAL>	0.16	0.00%	-	
2B	4400	TREE PLANTATIONS	40.91	0.00%	-	
2B	4400	TREE PLANTATIONS	1.02	0.00%	-	
2B	6210	CYPRESS	51.60	0.00%	-	
2B	6210	CYPRESS	84.89	0.00%	-	
2B	6300	WETLAND FORESTED MIXED	0.02	0.00%	-	
2B	6300	WETLAND FORESTED MIXED	0.05	0.00%	-	
2B	6410	FRESHWATER MARSHES	0.67	0.00%	-	
2B	6410	FRESHWATER MARSHES	2.96	0.00%	-	
		Total	182.28		-	0.00%
3	2600	OTHER OPEN LANDS <RURAL>	5.59	0.00%	-	
3	2600	OTHER OPEN LANDS <RURAL>	0.95	0.00%	-	
3	2600	OTHER OPEN LANDS <RURAL>	0.00	0.00%	-	
3	3200	SHRUB AND BRUSHLAND	2.02	0.00%	-	
3	3200	SHRUB AND BRUSHLAND	10.26	0.00%	-	
3	4400	TREE PLANTATIONS	529.16	0.00%	-	
3	4400	TREE PLANTATIONS	48.96	0.00%	-	
3	4400	TREE PLANTATIONS	47.05	0.00%	-	
3	6210	CYPRESS	142.54	0.00%	-	
3	6210	CYPRESS	0.41	0.00%	-	
3	6210	CYPRESS	164.30	0.00%	-	
3	6300	WETLAND FORESTED MIXED	1.66	0.00%	-	
3	6300	WETLAND FORESTED MIXED	16.84	0.00%	-	
3	6410	FRESHWATER MARSHES	4.75	0.00%	-	
3	6410	FRESHWATER MARSHES	0.25	0.00%	-	
3	6410	FRESHWATER MARSHES	10.60	0.00%	-	
3	6430	WET PRAIRIES	0.15	0.00%	-	
		Total	985.49		-	0.00%
4	2600	OTHER OPEN LANDS <RURAL>	36.12	0.00%	-	
4	2600	OTHER OPEN LANDS <RURAL>	1.49	0.00%	-	
4	4100	UPLAND CONIFEROUS FOREST	2.08	0.00%	-	
4	4100	UPLAND CONIFEROUS FOREST	0.00	0.00%	-	
4	4400	TREE PLANTATIONS	83.34	0.00%	-	
4	4400	TREE PLANTATIONS	3.39	0.00%	-	
4	6210	CYPRESS	89.12	0.00%	-	
4	6210	CYPRESS	174.70	0.00%	-	
4	6300	WETLAND FORESTED MIXED	0.01	0.00%	-	
4	6300	WETLAND FORESTED MIXED	0.01	0.00%	-	
4	6410	FRESHWATER MARSHES	0.24	0.00%	-	
4	6430	WET PRAIRIES	1.91	0.00%	-	
		Total	392.43		-	0.00%
4A	2600	OTHER OPEN LANDS <RURAL>	18.33	0.00%	-	
4A	2600	OTHER OPEN LANDS <RURAL>	0.00	0.00%	-	
4A	3200	SHRUB AND BRUSHLAND	5.13	0.00%	-	
4A	3200	SHRUB AND BRUSHLAND	0.26	0.00%	-	
4A	4400	TREE PLANTATIONS	41.59	0.00%	-	
4A	4400	TREE PLANTATIONS	1.56	0.00%	-	
4A	6210	CYPRESS	114.60	0.00%	-	
4A	6210	CYPRESS	88.47	0.00%	-	
4A	6300	WETLAND FORESTED MIXED	0.81	0.00%	-	
4A	6300	WETLAND FORESTED MIXED	0.05	0.00%	-	
4A	6410	FRESHWATER MARSHES	0.17	0.00%	-	
4A	6410	FRESHWATER MARSHES	0.00	0.00%	-	
		Total	270.98		-	0.00%

Attachment C - Hydrology Input Calculations

Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Pre-Percent-Impervious

BASIN	FLUCCS	FLUCDESC	ACRES	Percent Impervious	Area x % Impervious	Basin % Impervious
4B	1400	COMMERCIAL AND SERVICES	1.44	85.00%	1.22	
4B	2600	OTHER OPEN LANDS <RURAL>	28.97	0.00%	-	
4B	2600	OTHER OPEN LANDS <RURAL>	0.42	0.00%	-	
4B	3200	SHRUB AND BRUSHLAND	4.73	0.00%	-	
4B	4100	UPLAND CONIFEROUS FOREST	7.85	0.00%	-	
4B	4100	UPLAND CONIFEROUS FOREST	0.00	0.00%	-	
4B	4340	HARDWOOD CONIFER MIXED	9.26	0.00%	-	
4B	4340	HARDWOOD CONIFER MIXED	2.18	0.00%	-	
4B	4400	TREE PLANTATIONS	26.87	0.00%	-	
4B	4400	TREE PLANTATIONS	4.69	0.00%	-	
4B	5300	RESERVOIRS	1.21	100.00%	1.21	
4B	6210	CYPRESS	8.44	0.00%	-	
4B	6210	CYPRESS	20.31	0.00%	-	
4B	6300	WETLAND FORESTED MIXED	3.79	0.00%	-	
4B	6300	WETLAND FORESTED MIXED	2.39	0.00%	-	
4B	6410	FRESHWATER MARSHES	5.87	0.00%	-	
4B	6410	FRESHWATER MARSHES	4.90	0.00%	-	
4B	8100	TRANSPORTATION	5.94	98.00%	5.82	
4B	8300	UTILITIES	3.51	0.00%	-	
4B	8300	UTILITIES	0.67	0.00%	-	
		Total	143.46		8.26	5.76%
4C	2600	OTHER OPEN LANDS <RURAL>	3.86	0.00%	-	
4C	2600	OTHER OPEN LANDS <RURAL>	0.21	0.00%	-	
4C	3200	SHRUB AND BRUSHLAND	0.20	0.00%	-	
4C	3200	SHRUB AND BRUSHLAND	0.38	0.00%	-	
4C	4400	TREE PLANTATIONS	18.19	0.00%	-	
4C	4400	TREE PLANTATIONS	1.67	0.00%	-	
4C	6210	CYPRESS	19.95	0.00%	-	
4C	6210	CYPRESS	19.42	0.00%	-	
4C	6300	WETLAND FORESTED MIXED	4.53	0.00%	-	
4C	6300	WETLAND FORESTED MIXED	2.11	0.00%	-	
4C	6410	FRESHWATER MARSHES	0.78	0.00%	-	
		Total	71.32		-	0.00%
4D1	1400	COMMERCIAL AND SERVICES	1.51	85.00%	1.29	
4D1	2600	OTHER OPEN LANDS <RURAL>	0.17	0.00%	-	
4D1	3200	SHRUB AND BRUSHLAND	12.97	0.00%	-	
4D1	4100	UPLAND CONIFEROUS FOREST	0.01	0.00%	-	
4D1	4100	UPLAND CONIFEROUS FOREST	15.38	0.00%	-	
4D1	4100	UPLAND CONIFEROUS FOREST	12.28	0.00%	-	
4D1	4340	HARDWOOD CONIFER MIXED	0.36	0.00%	-	
4D1	4340	HARDWOOD CONIFER MIXED	8.01	0.00%	-	
4D1	4340	HARDWOOD CONIFER MIXED	6.23	0.00%	-	
4D1	6300	WETLAND FORESTED MIXED	0.33	0.00%	-	
4D1	6300	WETLAND FORESTED MIXED	25.61	0.00%	-	
4D1	6300	WETLAND FORESTED MIXED	1.02	0.00%	-	
4D1	6410	FRESHWATER MARSHES	7.85	0.00%	-	
4D1	6410	FRESHWATER MARSHES	0.28	0.00%	-	
4D1	6410	FRESHWATER MARSHES	1.48	0.00%	-	
4D1	6430	WET PRAIRIES	2.26	0.00%	-	
4D1	6430	WET PRAIRIES	0.00	0.00%	-	
4D1	8100	TRANSPORTATION	4.02	98.00%	3.94	
4D1	8100	TRANSPORTATION	5.64	98.00%	5.53	
4D1	8300	UTILITIES	0.08	0.00%	-	
4D1	8300	UTILITIES	2.03	0.00%	-	
		Total	107.53		10.76	10.00%

Attachment C - Hydrology Input Calculations

Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Pre-Percent-Impervious

BASIN	FLUCCS	FLUCDESC	ACRES	Percent Impervious	Area x % Impervious	Basin % Impervious
4D2	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	1.26	25.00%	0.32	
4D2	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	4.24	25.00%	1.06	
4D2	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	6.68	25.00%	1.67	
4D2	2600	OTHER OPEN LANDS <RURAL>	4.48	0.00%	-	
4D2	4100	UPLAND CONIFEROUS FOREST	7.52	0.00%	-	
4D2	4340	HARDWOOD CONIFER MIXED	3.25	0.00%	-	
4D2	4340	HARDWOOD CONIFER MIXED	4.79	0.00%	-	
4D2	4340	HARDWOOD CONIFER MIXED	0.44	0.00%	-	
4D2	4400	TREE PLANTATIONS	0.04	0.00%	-	
4D2	6300	WETLAND FORESTED MIXED	31.98	0.00%	-	
4D2	6300	WETLAND FORESTED MIXED	0.02	0.00%	-	
4D2	6410	FRESHWATER MARSHES	0.16	0.00%	-	
4D2	8300	UTILITIES	3.45	0.00%	-	
4D2	8300	UTILITIES	1.46	0.00%	-	
		Total	69.77		3.05	4.37%
4D3	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	22.81	25.00%	5.70	
4D3	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	15.97	25.00%	3.99	
4D3	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	0.52	25.00%	0.13	
4D3	1400	COMMERCIAL AND SERVICES	4.80	85.00%	4.08	
4D3	2600	OTHER OPEN LANDS <RURAL>	3.91	0.00%	-	
4D3	3200	SHRUB AND BRUSHLAND	20.18	0.00%	-	
4D3	4100	UPLAND CONIFEROUS FOREST	3.64	0.00%	-	
4D3	4340	HARDWOOD CONIFER MIXED	6.22	0.00%	-	
4D3	4400	TREE PLANTATIONS	19.10	0.00%	-	
4D3	4400	TREE PLANTATIONS	0.09	0.00%	-	
4D3	4400	TREE PLANTATIONS	0.51	0.00%	-	
4D3	6210	CYPRESS	1.22	0.00%	-	
4D3	6210	CYPRESS	0.62	0.00%	-	
4D3	6300	WETLAND FORESTED MIXED	10.77	0.00%	-	
4D3	6300	WETLAND FORESTED MIXED	1.35	0.00%	-	
4D3	6300	WETLAND FORESTED MIXED	8.08	0.00%	-	
4D3	6410	FRESHWATER MARSHES	1.88	0.00%	-	
4D3	8300	UTILITIES	2.59	0.00%	-	
		Total	124.27		13.90	11.19%
4D4	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	1.82	25.00%	0.45	
4D4	2600	OTHER OPEN LANDS <RURAL>	32.45	0.00%	-	
4D4	2600	OTHER OPEN LANDS <RURAL>	0.78	0.00%	-	
4D4	2600	OTHER OPEN LANDS <RURAL>	6.20	0.00%	-	
4D4	3300	MIXED RANGELAND	1.43	0.00%	-	
4D4	3300	MIXED RANGELAND	1.48	0.00%	-	
4D4	4100	UPLAND CONIFEROUS FOREST	0.81	0.00%	-	
4D4	4400	TREE PLANTATIONS	17.89	0.00%	-	
4D4	4400	TREE PLANTATIONS	0.12	0.00%	-	
4D4	4400	TREE PLANTATIONS	0.18	0.00%	-	
4D4	6210	CYPRESS	0.56	0.00%	-	
4D4	6210	CYPRESS	4.17	0.00%	-	
4D4	6300	WETLAND FORESTED MIXED	8.15	0.00%	-	
4D4	6300	WETLAND FORESTED MIXED	0.73	0.00%	-	
4D4	6300	WETLAND FORESTED MIXED	36.63	0.00%	-	
4D4	6410	FRESHWATER MARSHES	0.89	0.00%	-	
4D4	6410	FRESHWATER MARSHES	2.77	0.00%	-	
4D4	6430	WET PRAIRIES	0.68	0.00%	-	
4D4	6430	WET PRAIRIES	0.70	0.00%	-	
		Total	118.43		0.45	0.38%

Attachment C - Hydrology Input Calculations

Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Pre-Percent-Impervious

BASIN	FLUCCS	FLUCSDISC	ACRES	Percent Impervious	Area x % Impervious	Basin % Impervious
4E1	1400	COMMERCIAL AND SERVICES	3.34	85.00%	2.84	
4E1	2600	OTHER OPEN LANDS <RURAL>	13.25	0.00%	-	
4E1	2600	OTHER OPEN LANDS <RURAL>	0.29	0.00%	-	
4E1	4100	UPLAND CONIFEROUS FOREST	10.56	0.00%	-	
4E1	4340	HARDWOOD CONIFER MIXED	0.20	0.00%	-	
4E1	4340	HARDWOOD CONIFER MIXED	25.66	0.00%	-	
4E1	6300	WETLAND FORESTED MIXED	5.07	0.00%	-	
4E1	6300	WETLAND FORESTED MIXED	2.77	0.00%	-	
4E1	6410	FRESHWATER MARSHES	0.22	0.00%	-	
4E1	6410	FRESHWATER MARSHES	1.08	0.00%	-	
4E1	8100	TRANSPORTATION	2.91	98.00%	2.86	
4E1	8300	UTILITIES	1.51	0.00%	-	
4E1	8300	UTILITIES	6.57	0.00%	-	
		Total	73.43		5.69	7.75%
4E2	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	0.87	25.00%	0.22	
4E2	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	12.49	25.00%	3.12	
4E2	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	4.42	25.00%	1.11	
4E2	2600	OTHER OPEN LANDS <RURAL>	5.82	0.00%	-	
4E2	2600	OTHER OPEN LANDS <RURAL>	0.22	0.00%	-	
4E2	4100	UPLAND CONIFEROUS FOREST	4.88	0.00%	-	
4E2	4100	UPLAND CONIFEROUS FOREST	1.31	0.00%	-	
4E2	4340	HARDWOOD CONIFER MIXED	9.12	0.00%	-	
4E2	4340	HARDWOOD CONIFER MIXED	7.01	0.00%	-	
4E2	4340	HARDWOOD CONIFER MIXED	30.02	0.00%	-	
4E2	6210	CYPRESS	0.66	0.00%	-	
4E2	6210	CYPRESS	0.75	0.00%	-	
4E2	6300	WETLAND FORESTED MIXED	1.16	0.00%	-	
4E2	6300	WETLAND FORESTED MIXED	10.06	0.00%	-	
4E2	6410	FRESHWATER MARSHES	0.25	0.00%	-	
4E2	6410	FRESHWATER MARSHES	0.50	0.00%	-	
4E2	8300	UTILITIES	1.81	0.00%	-	
		Total	91.35		4.45	4.87%

Attachment C - Hydrology Input Calculations

Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Pre-Percent-Impervious

BASIN	FLUCCS	FLUCDESC	ACRES	Percent Impervious	Area x % Impervious	Basin % Impervious
4E3	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	0.96	25.00%	0.24	
4E3	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	13.75	25.00%	3.44	
4E3	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	0.40	25.00%	0.10	
4E3	1900	OPEN LAND	1.17	0.00%	-	
4E3	2600	OTHER OPEN LANDS <RURAL>	111.18	0.00%	-	
4E3	2600	OTHER OPEN LANDS <RURAL>	1.50	0.00%	-	
4E3	2600	OTHER OPEN LANDS <RURAL>	21.26	0.00%	-	
4E3	4100	UPLAND CONIFEROUS FOREST	0.00	0.00%	-	
4E3	4100	UPLAND CONIFEROUS FOREST	3.10	0.00%	-	
4E3	4340	HARDWOOD CONIFER MIXED	1.05	0.00%	-	
4E3	4340	HARDWOOD CONIFER MIXED	0.96	0.00%	-	
4E3	4340	HARDWOOD CONIFER MIXED	1.53	0.00%	-	
4E3	4400	TREE PLANTATIONS	50.78	0.00%	-	
4E3	4400	TREE PLANTATIONS	20.78	0.00%	-	
4E3	4400	TREE PLANTATIONS	2.28	0.00%	-	
4E3	5200	LAKES	0.02	100.00%	0.02	
4E3	5200	LAKES	1.07	100.00%	1.07	
4E3	6210	CYPRESS	2.95	0.00%	-	
4E3	6210	CYPRESS	1.13	0.00%	-	
4E3	6210	CYPRESS	70.70	0.00%	-	
4E3	6300	WETLAND FORESTED MIXED	16.93	0.00%	-	
4E3	6300	WETLAND FORESTED MIXED	8.78	0.00%	-	
4E3	6300	WETLAND FORESTED MIXED	105.00	0.00%	-	
4E3	6410	FRESHWATER MARSHES	5.85	0.00%	-	
4E3	6410	FRESHWATER MARSHES	1.66	0.00%	-	
4E3	6410	FRESHWATER MARSHES	5.40	0.00%	-	
4E3	6430	WET PRAIRIES	5.19	0.00%	-	
4E3	6430	WET PRAIRIES	0.42	0.00%	-	
4E3	6530	INTERMITTENT PONDS	0.02	100.00%	0.02	
		Total	455.84		4.89	1.07%
4F	2600	OTHER OPEN LANDS <RURAL>	41.91	0.00%	-	
4F	2600	OTHER OPEN LANDS <RURAL>	4.91	0.00%	-	
4F	4400	TREE PLANTATIONS	26.41	0.00%	-	
4F	4400	TREE PLANTATIONS	1.24	0.00%	-	
4F	6210	CYPRESS	5.58	0.00%	-	
4F	6210	CYPRESS	25.43	0.00%	-	
4F	6300	WETLAND FORESTED MIXED	2.79	0.00%	-	
4F	6300	WETLAND FORESTED MIXED	6.72	0.00%	-	
4F	6410	FRESHWATER MARSHES	3.76	0.00%	-	
4F	6410	FRESHWATER MARSHES	2.26	0.00%	-	
4F	6430	WET PRAIRIES	1.92	0.00%	-	
4F	6430	WET PRAIRIES	2.77	0.00%	-	
4F	8300	UTILITIES	0.01	0.00%	-	
		Total	125.70		-	0.00%

Attachment C - Hydrology Input Calculations

Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Pre-Percent-Impervious

BASIN	FLUCCS	FLUCSDISC	ACRES	Percent Impervious	Area x % Impervious	Basin % Impervious
4G	2600	OTHER OPEN LANDS <RURAL>	3.66	0.00%	-	
4G	2600	OTHER OPEN LANDS <RURAL>	0.04	0.00%	-	
4G	4400	TREE PLANTATIONS	21.01	0.00%	-	
4G	4400	TREE PLANTATIONS	0.20	0.00%	-	
4G	6210	CYPRESS	10.01	0.00%	-	
4G	6210	CYPRESS	16.09	0.00%	-	
4G	6300	WETLAND FORESTED MIXED	0.05	0.00%	-	
4G	6300	WETLAND FORESTED MIXED	0.94	0.00%	-	
4G	6410	FRESHWATER MARSHES	0.14	0.00%	-	
4G	6410	FRESHWATER MARSHES	1.03	0.00%	-	
4G	6430	WET PRAIRIES	0.46	0.00%	-	
4G	6430	WET PRAIRIES	0.46	0.00%	-	
		Total	54.07		-	0.00%
4H	2600	OTHER OPEN LANDS <RURAL>	2.19	0.00%	-	
4H	2600	OTHER OPEN LANDS <RURAL>	0.04	0.00%	-	
4H	4400	TREE PLANTATIONS	37.11	0.00%	-	
4H	4400	TREE PLANTATIONS	0.68	0.00%	-	
4H	6210	CYPRESS	54.65	0.00%	-	
4H	6210	CYPRESS	60.58	0.00%	-	
4H	6300	WETLAND FORESTED MIXED	0.16	0.00%	-	
4H	6410	FRESHWATER MARSHES	0.26	0.00%	-	
4H	6430	WET PRAIRIES	0.35	0.00%	-	
		Total	156.01		-	0.00%
4I	2600	OTHER OPEN LANDS <RURAL>	28.43	0.00%	-	
4I	2600	OTHER OPEN LANDS <RURAL>	4.19	0.00%	-	
4I	3200	SHRUB AND BRUSHLAND	1.08	0.00%	-	
4I	3200	SHRUB AND BRUSHLAND	0.00	0.00%	-	
4I	4100	UPLAND CONIFEROUS FOREST	2.80	0.00%	-	
4I	4100	UPLAND CONIFEROUS FOREST	1.03	0.00%	-	
4I	4400	TREE PLANTATIONS	14.99	0.00%	-	
4I	4400	TREE PLANTATIONS	0.62	0.00%	-	
4I	6210	CYPRESS	11.95	0.00%	-	
4I	6210	CYPRESS	52.92	0.00%	-	
4I	6300	WETLAND FORESTED MIXED	27.44	0.00%	-	
4I	6300	WETLAND FORESTED MIXED	27.92	0.00%	-	
4I	6410	FRESHWATER MARSHES	0.12	0.00%	-	
4I	6410	FRESHWATER MARSHES	2.24	0.00%	-	
		Total	175.74		-	0.00%
4J	2600	OTHER OPEN LANDS <RURAL>	15.37	0.00%	-	
4J	2600	OTHER OPEN LANDS <RURAL>	0.92	0.00%	-	
4J	3200	SHRUB AND BRUSHLAND	0.00	0.00%	-	
4J	4400	TREE PLANTATIONS	3.05	0.00%	-	
4J	4400	TREE PLANTATIONS	0.05	0.00%	-	
4J	6210	CYPRESS	23.07	0.00%	-	
4J	6210	CYPRESS	27.00	0.00%	-	
		Total	69.45		-	0.00%

Attachment C - Hydrology Input Calculations

Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Pre-Percent-Impervious

BASIN	FLUCCS	FLUCDESC	ACRES	Percent Impervious	Area x % Impervious	Basin % Impervious
5	2600	OTHER OPEN LANDS <RURAL>	11.54	0.00%	-	
5	2600	OTHER OPEN LANDS <RURAL>	1.28	0.00%	-	
5	4100	UPLAND CONIFEROUS FOREST	28.00	0.00%	-	
5	4100	UPLAND CONIFEROUS FOREST	4.23	0.00%	-	
5	4400	TREE PLANTATIONS	348.73	0.00%	-	
5	4400	TREE PLANTATIONS	37.52	0.00%	-	
5	6210	CYPRESS	44.45	0.00%	-	
5	6210	CYPRESS	76.11	0.00%	-	
5	6300	WETLAND FORESTED MIXED	0.45	0.00%	-	
5	6300	WETLAND FORESTED MIXED	1.73	0.00%	-	
5	6410	FRESHWATER MARSHES	11.97	0.00%	-	
5	6410	FRESHWATER MARSHES	27.67	0.00%	-	
5	6430	WET PRAIRIES	1.44	0.00%	-	
		Total	595.09		-	0.00%
6	2600	OTHER OPEN LANDS <RURAL>	41.07	0.00%	-	
6	2600	OTHER OPEN LANDS <RURAL>	1.50	0.00%	-	
6	2600	OTHER OPEN LANDS <RURAL>	3.97	0.00%	-	
6	4100	UPLAND CONIFEROUS FOREST	4.54	0.00%	-	
6	4100	UPLAND CONIFEROUS FOREST	0.12	0.00%	-	
6	4400	TREE PLANTATIONS	145.22	0.00%	-	
6	4400	TREE PLANTATIONS	1.03	0.00%	-	
6	4400	TREE PLANTATIONS	4.55	0.00%	-	
6	6210	CYPRESS	27.75	0.00%	-	
6	6210	CYPRESS	0.06	0.00%	-	
6	6210	CYPRESS	33.52	0.00%	-	
6	6410	FRESHWATER MARSHES	8.77	0.00%	-	
6	6410	FRESHWATER MARSHES	12.94	0.00%	-	
6	6430	WET PRAIRIES	1.23	0.00%	-	
		Total	286.29		-	0.00%
7	2600	OTHER OPEN LANDS <RURAL>	32.51	0.00%	-	
7	2600	OTHER OPEN LANDS <RURAL>	1.15	0.00%	-	
7	2600	OTHER OPEN LANDS <RURAL>	2.29	0.00%	-	
7	4100	UPLAND CONIFEROUS FOREST	0.77	0.00%	-	
7	4100	UPLAND CONIFEROUS FOREST	0.35	0.00%	-	
7	4340	HARDWOOD CONIFER MIXED	3.24	0.00%	-	
7	4400	TREE PLANTATIONS	231.00	0.00%	-	
7	4400	TREE PLANTATIONS	1.28	0.00%	-	
7	4400	TREE PLANTATIONS	9.42	0.00%	-	
7	6210	CYPRESS	48.09	0.00%	-	
7	6210	CYPRESS	42.21	0.00%	-	
7	6410	FRESHWATER MARSHES	13.77	0.00%	-	
7	6410	FRESHWATER MARSHES	18.88	0.00%	-	
7	6430	WET PRAIRIES	0.01	0.00%	-	
		Total	404.96		-	0.00%

Attachment C - Hydrology Input Calculations

Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Pre-Percent-Impervious

BASIN	FLUCCS	FLUCDESC	ACRES	Percent Impervious	Area x % Impervious	Basin % Impervious
8	2600	OTHER OPEN LANDS <RURAL>	110.59	0.00%	-	
8	2600	OTHER OPEN LANDS <RURAL>	33.36	0.00%	-	
8	2600	OTHER OPEN LANDS <RURAL>	1.95	0.00%	-	
8	4340	HARDWOOD CONIFER MIXED	0.58	0.00%	-	
8	4400	TREE PLANTATIONS	133.49	0.00%	-	
8	4400	TREE PLANTATIONS	24.08	0.00%	-	
8	4400	TREE PLANTATIONS	6.15	0.00%	-	
8	5200	LAKES	0.33	100.00%	0.33	
8	6210	CYPRESS	59.06	0.00%	-	
8	6210	CYPRESS	1.80	0.00%	-	
8	6210	CYPRESS	34.08	0.00%	-	
8	6410	FRESHWATER MARSHES	4.55	0.00%	-	
8	6410	FRESHWATER MARSHES	15.80	0.00%	-	
8	6430	WET PRAIRIES	14.33	0.00%	-	
		Total	440.14		0.33	0.07%
9	2600	OTHER OPEN LANDS <RURAL>	58.97	0.00%	-	
9	2600	OTHER OPEN LANDS <RURAL>	1.87	0.00%	-	
9	2600	OTHER OPEN LANDS <RURAL>	0.57	0.00%	-	
9	4400	TREE PLANTATIONS	20.43	0.00%	-	
9	4400	TREE PLANTATIONS	5.43	0.00%	-	
9	6210	CYPRESS	34.42	0.00%	-	
9	6210	CYPRESS	6.82	0.00%	-	
9	6300	WETLAND FORESTED MIXED	0.05	0.00%	-	
9	6410	FRESHWATER MARSHES	4.10	0.00%	-	
9	6410	FRESHWATER MARSHES	3.23	0.00%	-	
9	6430	WET PRAIRIES	31.40	0.00%	-	
9	6430	WET PRAIRIES	1.04	0.00%	-	
9	6430	WET PRAIRIES	7.22	0.00%	-	
		Total	175.56		-	0.00%
10A	2600	OTHER OPEN LANDS <RURAL>	6.22	0.00%	-	
10A	2600	OTHER OPEN LANDS <RURAL>	0.56	0.00%	-	
10A	4400	TREE PLANTATIONS	12.00	0.00%	-	
10A	4400	TREE PLANTATIONS	15.40	0.00%	-	
10A	6210	CYPRESS	3.80	0.00%	-	
10A	6410	FRESHWATER MARSHES	0.11	0.00%	-	
10A	6430	WET PRAIRIES	6.68	0.00%	-	
		Total	44.76		-	0.00%
10B	2600	OTHER OPEN LANDS <RURAL>	0.37	0.00%	-	
10B	2600	OTHER OPEN LANDS <RURAL>	2.83	0.00%	-	
10B	4400	TREE PLANTATIONS	6.95	0.00%	-	
10B	4400	TREE PLANTATIONS	26.76	0.00%	-	
10B	6210	CYPRESS	0.05	0.00%	-	
10B	6410	FRESHWATER MARSHES	1.39	0.00%	-	
10B	6430	WET PRAIRIES	0.01	0.00%	-	
10B	6430	WET PRAIRIES	10.42	0.00%	-	
		Total	48.79		-	0.00%

Attachment C - Hydrology Input Calculations

Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Pre-Percent-Impervious

BASIN	FLUCCS	FLUCSDISC	ACRES	Percent Impervious	Area x % Impervious	Basin % Impervious
11	2100	CROPLAND AND PASTURELAND	1.14	0.00%	-	
11	2100	CROPLAND AND PASTURELAND	0.28	0.00%	-	
11	2100	CROPLAND AND PASTURELAND	3.36	0.00%	-	
11	2600	OTHER OPEN LANDS <RURAL>	75.37	0.00%	-	
11	2600	OTHER OPEN LANDS <RURAL>	17.10	0.00%	-	
11	2600	OTHER OPEN LANDS <RURAL>	1.69	0.00%	-	
11	4340	HARDWOOD CONIFER MIXED	16.61	0.00%	-	
11	4340	HARDWOOD CONIFER MIXED	10.66	0.00%	-	
11	4340	HARDWOOD CONIFER MIXED	0.42	0.00%	-	
11	4400	TREE PLANTATIONS	68.24	0.00%	-	
11	4400	TREE PLANTATIONS	36.10	0.00%	-	
11	4400	TREE PLANTATIONS	1.77	0.00%	-	
11	6210	CYPRESS	32.74	0.00%	-	
11	6210	CYPRESS	14.77	0.00%	-	
11	6210	CYPRESS	19.52	0.00%	-	
11	6300	WETLAND FORESTED MIXED	0.06	0.00%	-	
11	6300	WETLAND FORESTED MIXED	0.01	0.00%	-	
11	6410	FRESHWATER MARSHES	7.76	0.00%	-	
11	6410	FRESHWATER MARSHES	1.69	0.00%	-	
11	6410	FRESHWATER MARSHES	2.42	0.00%	-	
11	6430	WET PRAIRIES	19.01	0.00%	-	
11	6430	WET PRAIRIES	13.28	0.00%	-	
11	6430	WET PRAIRIES	3.20	0.00%	-	
11	6440	EMERGENT AQUATIC VEGETATION	0.02	0.00%	-	
11	6440	EMERGENT AQUATIC VEGETATION	2.97	0.00%	-	
		Total	350.20		-	0.00%
12	2600	OTHER OPEN LANDS <RURAL>	4.35	0.00%	-	
12	2600	OTHER OPEN LANDS <RURAL>	6.07	0.00%	-	
12	4400	TREE PLANTATIONS	25.96	0.00%	-	
12	4400	TREE PLANTATIONS	0.68	0.00%	-	
12	6210	CYPRESS	0.95	0.00%	-	
12	6210	CYPRESS	0.29	0.00%	-	
		Total	38.30		-	0.00%
12A	2600	OTHER OPEN LANDS <RURAL>	2.30	0.00%	-	
12A	2600	OTHER OPEN LANDS <RURAL>	4.48	0.00%	-	
12A	4400	TREE PLANTATIONS	7.12	0.00%	-	
12A	4400	TREE PLANTATIONS	13.89	0.00%	-	
12A	4400	TREE PLANTATIONS	0.54	0.00%	-	
12A	6210	CYPRESS	0.34	0.00%	-	
12A	6210	CYPRESS	5.41	0.00%	-	
12A	6210	CYPRESS	5.11	0.00%	-	
12A	6300	WETLAND FORESTED MIXED	0.02	0.00%	-	
		Total	39.22		-	0.00%

Attachment C - Hydrology Input Calculations

Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Pre-Percent-Impervious

BASIN	FLUCCS	FLUCDESC	ACRES	Percent Impervious	Area x % Impervious	Basin % Impervious
13	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	1.87	25.00%	0.47	
13	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	80.62	25.00%	20.16	
13	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	9.18	25.00%	2.29	
13	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	4.07	25.00%	1.02	
13	1200	RESIDENTIAL MED DENSITY 2->5 DWELLING UNIT	3.68	30.00%	1.10	
13	1900	OPEN LAND	3.71	0.00%	-	
13	2600	OTHER OPEN LANDS <RURAL>	2.28	0.00%	-	
13	2600	OTHER OPEN LANDS <RURAL>	13.49	0.00%	-	
13	2600	OTHER OPEN LANDS <RURAL>	2.57	0.00%	-	
13	2600	OTHER OPEN LANDS <RURAL>	18.82	0.00%	-	
13	3200	SHRUB AND BRUSHLAND	8.41	0.00%	-	
13	3200	SHRUB AND BRUSHLAND	1.73	0.00%	-	
13	4100	UPLAND CONIFEROUS FOREST	0.24	0.00%	-	
13	4100	UPLAND CONIFEROUS FOREST	3.98	0.00%	-	
13	4110	PINE FLATWOODS	6.60	0.00%	-	
13	4110	PINE FLATWOODS	4.71	0.00%	-	
13	4340	HARDWOOD CONIFER MIXED	4.20	0.00%	-	
13	4340	HARDWOOD CONIFER MIXED	4.27	0.00%	-	
13	4340	HARDWOOD CONIFER MIXED	2.19	0.00%	-	
13	4340	HARDWOOD CONIFER MIXED	0.47	0.00%	-	
13	4400	TREE PLANTATIONS	2.10	0.00%	-	
13	4400	TREE PLANTATIONS	1.23	0.00%	-	
13	4400	TREE PLANTATIONS	0.76	0.00%	-	
13	5300	RESERVOIRS	0.35	100.00%	0.35	
13	5300	RESERVOIRS	0.31	100.00%	0.31	
13	6210	CYPRESS	0.09	0.00%	-	
13	6210	CYPRESS	2.30	0.00%	-	
13	6300	WETLAND FORESTED MIXED	1.33	0.00%	-	
13	6300	WETLAND FORESTED MIXED	4.86	0.00%	-	
13	6300	WETLAND FORESTED MIXED	26.55	0.00%	-	
13	6410	FRESHWATER MARSHES	0.21	0.00%	-	
13	6410	FRESHWATER MARSHES	0.00	0.00%	-	
13	6410	FRESHWATER MARSHES	1.96	0.00%	-	
13	6530	INTERMITTENT PONDS	3.71	100.00%	3.71	
13	8300	UTILITIES	7.56	0.00%	-	
13	8300	UTILITIES	0.00	0.00%	-	
		Total	230.40		29.41	12.76%
13A	2600	OTHER OPEN LANDS <RURAL>	34.64	0.00%	-	
13A	2600	OTHER OPEN LANDS <RURAL>	1.28	0.00%	-	
13A	2600	OTHER OPEN LANDS <RURAL>	0.20	0.00%	-	
13A	4340	HARDWOOD CONIFER MIXED	1.93	0.00%	-	
13A	4340	HARDWOOD CONIFER MIXED	1.17	0.00%	-	
13A	4340	HARDWOOD CONIFER MIXED	1.15	0.00%	-	
13A	4400	TREE PLANTATIONS	7.13	0.00%	-	
13A	4400	TREE PLANTATIONS	18.12	0.00%	-	
13A	4400	TREE PLANTATIONS	0.04	0.00%	-	
13A	6210	CYPRESS	45.64	0.00%	-	
13A	6210	CYPRESS	2.70	0.00%	-	
13A	6210	CYPRESS	0.06	0.00%	-	
13A	6300	WETLAND FORESTED MIXED	1.61	0.00%	-	
13A	6300	WETLAND FORESTED MIXED	2.34	0.00%	-	
13A	6300	WETLAND FORESTED MIXED	0.36	0.00%	-	
13A	6410	FRESHWATER MARSHES	0.01	0.00%	-	
13A	6410	FRESHWATER MARSHES	0.81	0.00%	-	
		Total	119.19		-	0.00%

Attachment C - Hydrology Input Calculations

Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Pre-Percent-Impervious

BASIN	FLUCCS	FLUCDESC	ACRES	Percent Impervious	Area x % Impervious	Basin % Impervious
13B	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	11.93	25.00%	2.98	
13B	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	2.95	25.00%	0.74	
13B	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	43.71	25.00%	10.93	
13B	1200	RESIDENTIAL MED DENSITY 2->5 DWELLING UNIT	0.05	30.00%	0.02	
13B	1200	RESIDENTIAL MED DENSITY 2->5 DWELLING UNIT	0.70	30.00%	0.21	
13B	1200	RESIDENTIAL MED DENSITY 2->5 DWELLING UNIT	14.35	30.00%	4.30	
13B	1400	COMMERCIAL AND SERVICES	4.19	85.00%	3.56	
13B	1900	OPEN LAND	2.51	0.00%	-	
13B	2600	OTHER OPEN LANDS <RURAL>	13.80	0.00%	-	
13B	2600	OTHER OPEN LANDS <RURAL>	8.39	0.00%	-	
13B	2600	OTHER OPEN LANDS <RURAL>	0.30	0.00%	-	
13B	3200	SHRUB AND BRUSHLAND	1.63	0.00%	-	
13B	3200	SHRUB AND BRUSHLAND	1.07	0.00%	-	
13B	4100	UPLAND CONIFEROUS FOREST	0.88	0.00%	-	
13B	4100	UPLAND CONIFEROUS FOREST	5.38	0.00%	-	
13B	4110	PINE FLATWOODS	0.32	0.00%	-	
13B	4110	PINE FLATWOODS	10.07	0.00%	-	
13B	4340	HARDWOOD CONIFER MIXED	15.54	0.00%	-	
13B	4340	HARDWOOD CONIFER MIXED	28.38	0.00%	-	
13B	4340	HARDWOOD CONIFER MIXED	38.81	0.00%	-	
13B	4340	HARDWOOD CONIFER MIXED	0.70	0.00%	-	
13B	4400	TREE PLANTATIONS	19.38	0.00%	-	
13B	4400	TREE PLANTATIONS	35.53	0.00%	-	
13B	5300	RESERVOIRS	1.85	100.00%	1.85	
13B	6210	CYPRESS	0.52	0.00%	-	
13B	6210	CYPRESS	1.99	0.00%	-	
13B	6210	CYPRESS	1.97	0.00%	-	
13B	6300	WETLAND FORESTED MIXED	0.53	0.00%	-	
13B	6300	WETLAND FORESTED MIXED	18.97	0.00%	-	
13B	6300	WETLAND FORESTED MIXED	10.36	0.00%	-	
13B	6300	WETLAND FORESTED MIXED	0.12	0.00%	-	
13B	6410	FRESHWATER MARSHES	2.13	0.00%	-	
13B	6410	FRESHWATER MARSHES	1.37	0.00%	-	
13B	6410	FRESHWATER MARSHES	2.01	0.00%	-	
		Total	302.38		24.59	8.13%
13C	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	0.67	25.00%	0.17	
13C	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	54.79	25.00%	13.70	
13C	2600	OTHER OPEN LANDS <RURAL>	11.54	0.00%	-	
13C	2600	OTHER OPEN LANDS <RURAL>	10.30	0.00%	-	
13C	4100	UPLAND CONIFEROUS FOREST	2.07	0.00%	-	
13C	4100	UPLAND CONIFEROUS FOREST	0.93	0.00%	-	
13C	4340	HARDWOOD CONIFER MIXED	0.17	0.00%	-	
13C	4400	TREE PLANTATIONS	2.26	0.00%	-	
13C	4400	TREE PLANTATIONS	0.02	0.00%	-	
13C	5300	RESERVOIRS	0.77	100.00%	0.77	
13C	6210	CYPRESS	3.54	0.00%	-	
13C	6300	WETLAND FORESTED MIXED	1.61	0.00%	-	
13C	6300	WETLAND FORESTED MIXED	3.29	0.00%	-	
13C	6410	FRESHWATER MARSHES	0.20	0.00%	-	
13C	6430	WET PRAIRIES	2.01	0.00%	-	
		Total	94.15		14.63	15.54%

Attachment C - Hydrology Input Calculations
Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Pre-Percent-Impervious

BASIN	FLUCCS	FLUCDESC	ACRES	Percent Impervious	Area x % Impervious	Basin % Impervious
13D	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	0.18	25.00%	0.05	
13D	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	0.24	25.00%	0.06	
13D	2600	OTHER OPEN LANDS <RURAL>	15.89	0.00%	-	
13D	2600	OTHER OPEN LANDS <RURAL>	49.36	0.00%	-	
13D	4100	UPLAND CONIFEROUS FOREST	24.53	0.00%	-	
13D	4100	UPLAND CONIFEROUS FOREST	14.93	0.00%	-	
13D	4340	HARDWOOD CONIFER MIXED	7.30	0.00%	-	
13D	4340	HARDWOOD CONIFER MIXED	5.00	0.00%	-	
13D	4400	TREE PLANTATIONS	46.98	0.00%	-	
13D	4400	TREE PLANTATIONS	24.15	0.00%	-	
13D	6210	CYPRESS	20.82	0.00%	-	
13D	6210	CYPRESS	0.42	0.00%	-	
13D	6240	CYPRESS-PINE-CABBAGE PALM	1.83	0.00%	-	
13D	6240	CYPRESS-PINE-CABBAGE PALM	27.23	0.00%	-	
13D	6300	WETLAND FORESTED MIXED	2.26	0.00%	-	
13D	6300	WETLAND FORESTED MIXED	4.68	0.00%	-	
13D	6410	FRESHWATER MARSHES	1.15	0.00%	-	
13D	6410	FRESHWATER MARSHES	1.54	0.00%	-	
13D	6430	WET PRAIRIES	2.02	0.00%	-	
13D	6430	WET PRAIRIES	1.30	0.00%	-	
		Total	251.81		0.11	0.04%
13E	2600	OTHER OPEN LANDS <RURAL>	16.45	0.00%	-	
13E	4340	HARDWOOD CONIFER MIXED	0.00	0.00%	-	
13E	4340	HARDWOOD CONIFER MIXED	1.18	0.00%	-	
13E	4400	TREE PLANTATIONS	0.80	0.00%	-	
13E	4400	TREE PLANTATIONS	12.98	0.00%	-	
13E	6210	CYPRESS	3.48	0.00%	-	
		Total	34.89		-	0.00%
13F	2600	OTHER OPEN LANDS <RURAL>	20.66	0.00%	-	
13F	2600	OTHER OPEN LANDS <RURAL>	1.06	0.00%	-	
13F	4400	TREE PLANTATIONS	9.48	0.00%	-	
13F	4400	TREE PLANTATIONS	0.13	0.00%	-	
13F	4400	TREE PLANTATIONS	0.40	0.00%	-	
13F	6210	CYPRESS	49.44	0.00%	-	
13F	6210	CYPRESS	33.21	0.00%	-	
13F	6300	WETLAND FORESTED MIXED	0.05	0.00%	-	
13F	6410	FRESHWATER MARSHES	0.90	0.00%	-	
13F	6410	FRESHWATER MARSHES	0.22	0.00%	-	
		Total	115.56		-	0.00%
13G	4100	UPLAND CONIFEROUS FOREST	11.31	0.00%	-	
13G	4100	UPLAND CONIFEROUS FOREST	0.03	0.00%	-	
13G	4400	TREE PLANTATIONS	46.42	0.00%	-	
13G	4400	TREE PLANTATIONS	0.70	0.00%	-	
13G	6210	CYPRESS	49.56	0.00%	-	
13G	6210	CYPRESS	51.43	0.00%	-	
13G	6300	WETLAND FORESTED MIXED	0.06	0.00%	-	
13G	6410	FRESHWATER MARSHES	0.49	0.00%	-	
13G	6410	FRESHWATER MARSHES	0.00	0.00%	-	
		Total	160.00		-	0.00%

Attachment C - Hydrology Input Calculations
Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Pre-Percent-Impervious

BASIN	FLUCCS	FLUCSDESC	ACRES	Percent Impervious	Area x % Impervious	Basin % Impervious
13H	2600	OTHER OPEN LANDS <RURAL>	33.88	0.00%	-	
13H	2600	OTHER OPEN LANDS <RURAL>	0.27	0.00%	-	
13H	4100	UPLAND CONIFEROUS FOREST	0.24	0.00%	-	
13H	4400	TREE PLANTATIONS	17.13	0.00%	-	
13H	6210	CYPRESS	51.02	0.00%	-	
13H	6210	CYPRESS	2.91	0.00%	-	
13H	6430	WET PRAIRIES	0.23	0.00%	-	
		Total	105.67		-	0.00%
13I	2600	OTHER OPEN LANDS <RURAL>	17.74	0.00%	-	
13I	4400	TREE PLANTATIONS	7.80	0.00%	-	
13I	6210	CYPRESS	33.58	0.00%	-	
13I	6210	CYPRESS	3.78	0.00%	-	
		Total	62.90		-	0.00%

Attachment C - Hydrology Input Calculations
Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Post-CN

BASIN	FLUCCS	FLUCDESC	HYDRGRP	ACRES	Associated CN	Area x CN	Composite CN
1	0	LNP - LIMITS OF CONSTRUCTION		23.13	98	2,267.13	
1	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	A	9.07	54	489.86	
1	2100	CROPLAND AND PASTURELAND	A	35.70	39	1,392.39	
1	2100	CROPLAND AND PASTURELAND	B/D	0.86	80	68.79	
1	2600	OTHER OPEN LANDS <RURAL>	B/D	8.04	80	643.54	
1	2600	OTHER OPEN LANDS <RURAL>	D	0.36	80	28.44	
1	3200	SHRUB AND BRUSHLAND	A	5.94	30	178.22	
1	3200	SHRUB AND BRUSHLAND	B/D	23.45	73	1,711.72	
1	3200	SHRUB AND BRUSHLAND	C	6.42	65	417.30	
1	3200	SHRUB AND BRUSHLAND	D	10.08	73	736.19	
1	4110	PINE FLATWOODS	A	43.26	30	1,297.74	
1	4110	PINE FLATWOODS	B/D	102.60	77	7,900.15	
1	4110	PINE FLATWOODS	C	11.48	70	803.88	
1	4110	PINE FLATWOODS	D	9.12	77	702.23	
1	4340	HARDWOOD CONIFER MIXED	A	116.58	30	3,497.55	
1	4340	HARDWOOD CONIFER MIXED	B/D	3.94	77	303.08	
1	4340	HARDWOOD CONIFER MIXED	C	15.67	70	1,096.74	
1	4400	TREE PLANTATIONS	A	97.56	32	3,122.02	
1	4400	TREE PLANTATIONS	B/D	244.96	79	19,352.05	
1	4400	TREE PLANTATIONS	C	4.68	72	336.65	
1	4400	TREE PLANTATIONS	D	35.42	79	2,797.90	
1	5200	LAKES	A	0.11	100	11.23	
1	6170	MIXED WETLAND HARDWOODS	A	0.89	100	88.59	
1	6170	MIXED WETLAND HARDWOODS	B/D	128.46	100	12,846.46	
1	6170	MIXED WETLAND HARDWOODS	C	1.26	100	125.50	
1	6170	MIXED WETLAND HARDWOODS	D	345.79	100	34,579.33	
1	6210	CYPRESS	A	2.57	100	257.08	
1	6210	CYPRESS	B/D	113.35	100	11,334.94	
1	6210	CYPRESS	D	129.70	100	12,969.58	
1	6300	WETLAND FORESTED MIXED	B/D	0.25	100	25.10	
1	6300	WETLAND FORESTED MIXED	C	5.08	100	508.14	
1	6300	WETLAND FORESTED MIXED	D	15.28	100	1,528.23	
1	6410	FRESHWATER MARSHES	A	2.33	100	233.11	
1	6410	FRESHWATER MARSHES	B/D	3.95	100	394.74	
1	6410	FRESHWATER MARSHES	D	10.79	100	1,079.43	
1	6430	WET PRAIRIES	B/D	2.12	100	211.99	
1	6440	EMERGENT AQUATIC VEGETATION	D	0.35	100	34.80	
1	8100	TRANSPORTATION	A	9.86	98	966.24	
1	8100	TRANSPORTATION	B/D	4.06	98	398.27	
1	8100	TRANSPORTATION	C	1.16	98	114.08	
1	8300	UTILITIES	A	11.18	39	436.09	
1	8300	UTILITIES	B/D	2.15	80	172.32	
1	8300	UTILITIES	C	0.99	74	73.25	
		Total	Post 1	1,600.02		127,532.04	79.7

Attachment C - Hydrology Input Calculations
Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Post-CN

BASIN	FLUCCS	FLUCSDISC	HYDRGRP	ACRES	Associated CN	Area x CN	Composite CN
1B	0	LNP - LIMITS OF CONSTRUCTION		5.41	98	529.77	
1B	2600	OTHER OPEN LANDS <RURAL>	B/D	8.70	80	696.26	
1B	2600	OTHER OPEN LANDS <RURAL>	D	0.34	80	27.45	
1B	4100	UPLAND CONIFEROUS FOREST	B/D	1.53	77	117.76	
1B	4400	TREE PLANTATIONS		0.41	79	32.74	
1B	4400	TREE PLANTATIONS	B/D	47.72	79	3,769.82	
1B	4400	TREE PLANTATIONS	D	2.69	79	212.57	
1B	6210	CYPRESS		0.08	100	7.74	
1B	6210	CYPRESS	B/D	20.57	100	2,057.28	
1B	6210	CYPRESS	D	27.98	100	2,798.49	
1B	6410	FRESHWATER MARSHES		2.13	100	212.58	
1B	6410	FRESHWATER MARSHES	B/D	1.79	100	178.69	
1B	6410	FRESHWATER MARSHES	D	0.53	100	52.51	
1B	6430	WET PRAIRIES	B/D	0.06	100	6.05	
1B	8100	TRANSPORTATION	B/D	4.32	98	423.62	
1B	8300	UTILITIES	B/D	1.52	80	121.29	
1B	8300	UTILITIES	D	0.15	80	11.83	
		Total	Post 1B	125.93		11,256.43	89.4
2	0	LNP - LIMITS OF CONSTRUCTION		2.95	98	289.35	
2	4100	UPLAND CONIFEROUS FOREST	B/D	1.22	77	94.16	
2	4100	UPLAND CONIFEROUS FOREST	D	0.17	77	13.45	
2	4340	HARDWOOD CONIFER MIXED	B/D	2.29	77	176.56	
2	4400	TREE PLANTATIONS		0.38	79	29.63	
2	4400	TREE PLANTATIONS	B/D	87.42	79	6,906.17	
2	4400	TREE PLANTATIONS	D	2.08	79	164.47	
2	6210	CYPRESS	B/D	7.80	100	780.11	
2	6210	CYPRESS	D	6.23	100	622.81	
2	6410	FRESHWATER MARSHES		3.21	100	320.97	
2	6410	FRESHWATER MARSHES	B/D	4.87	100	486.81	
2	6410	FRESHWATER MARSHES	D	1.04	100	103.72	
2	8100	TRANSPORTATION	B/D	6.17	98	604.67	
2	8300	UTILITIES	B/D	5.98	80	478.75	
2	8300	UTILITIES	D	0.10	80	7.69	
		Total	Post 2	131.91		11,079.31	84.0
2A	0	LNP - LIMITS OF CONSTRUCTION		27.17	98	2,662.27	
2A	2600	OTHER OPEN LANDS <RURAL>	B/D	10.70	80	855.63	
2A	2600	OTHER OPEN LANDS <RURAL>	D	0.27	80	21.78	
2A	4400	TREE PLANTATIONS	B/D	67.80	79	5,355.92	
2A	4400	TREE PLANTATIONS	D	0.61	79	48.13	
2A	6210	CYPRESS	B/D	43.99	100	4,398.83	
2A	6210	CYPRESS	D	90.58	100	9,057.55	
2A	6300	WETLAND FORESTED MIXED	B/D	0.01	100	1.40	
2A	6300	WETLAND FORESTED MIXED	D	0.05	100	4.66	
		Total	Post 2A	241.16		22,406.18	92.9

Attachment C - Hydrology Input Calculations
Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Post-CN

BASIN	FLUCCS	FLUCSDISC	HYDRGRP	ACRES	Associated CN	Area x CN	Composite CN
2B	0	LNP - LIMITS OF CONSTRUCTION		6.47	98	634.23	
2B	4400	TREE PLANTATIONS	B/D	27.77	79	2,193.82	
2B	4400	TREE PLANTATIONS	D	0.71	79	56.10	
2B	6210	CYPRESS	B/D	21.66	100	2,166.47	
2B	6210	CYPRESS	D	59.83	100	5,983.23	
2B	6410	FRESHWATER MARSHES	B/D	0.55	100	55.47	
2B	6410	FRESHWATER MARSHES	D	2.48	100	247.51	
		Total	Post 2B	119.48		11,336.82	94.9
3	0	LNP - LIMITS OF CONSTRUCTION		1.44	98	141.00	
3	2600	OTHER OPEN LANDS <RURAL>	B/D	14.35	80	1,147.81	
3	2600	OTHER OPEN LANDS <RURAL>	C	0.95	74	70.25	
3	2600	OTHER OPEN LANDS <RURAL>	D	0.15	80	11.77	
3	3200	SHRUB AND BRUSHLAND	B/D	2.02	73	147.47	
3	3200	SHRUB AND BRUSHLAND	C	10.26	65	667.16	
3	4400	TREE PLANTATIONS	B/D	568.17	79	44,885.16	
3	4400	TREE PLANTATIONS	C	48.96	72	3,525.19	
3	4400	TREE PLANTATIONS	D	49.38	79	3,900.76	
3	6170	MIXED WETLAND HARDWOODS	B/D	3.23	100	323.49	
3	6170	MIXED WETLAND HARDWOODS	D	0.64	100	64.49	
3	6210	CYPRESS	B/D	163.41	100	16,340.79	
3	6210	CYPRESS	C	0.41	100	40.85	
3	6210	CYPRESS	D	188.00	100	18,800.18	
3	6300	WETLAND FORESTED MIXED	B/D	1.66	100	166.02	
3	6300	WETLAND FORESTED MIXED	D	16.84	100	1,684.35	
3	6410	FRESHWATER MARSHES	B/D	4.79	100	478.58	
3	6410	FRESHWATER MARSHES	C	0.25	100	24.55	
3	6410	FRESHWATER MARSHES	D	10.60	100	1,060.27	
3	6430	WET PRAIRIES	B/D	1.50	100	149.80	
		Total	Post 3 & 3A	1,087.00		93,629.93	86.1
4	0	LNP - LIMITS OF CONSTRUCTION		16.48	98	1,615.43	
4	2600	OTHER OPEN LANDS <RURAL>	B/D	19.45	80	1,555.86	
4	2600	OTHER OPEN LANDS <RURAL>	D	1.35	80	107.81	
4	4100	UPLAND CONIFEROUS FOREST	B/D	1.25	77	96.23	
4	4400	TREE PLANTATIONS	B/D	67.11	79	5,301.63	
4	4400	TREE PLANTATIONS	D	1.84	79	145.02	
4	6210	CYPRESS	B/D	63.91	100	6,391.17	
4	6210	CYPRESS	D	150.82	100	15,081.99	
4	6300	WETLAND FORESTED MIXED	B/D	0.01	100	0.86	
4	6300	WETLAND FORESTED MIXED	D	0.01	100	1.28	
4	6410	FRESHWATER MARSHES	B/D	0.08	100	8.16	
4	6430	WET PRAIRIES	B/D	0.12	100	12.48	
		Total	Post 4	322.43		30,317.91	94.0

Attachment C - Hydrology Input Calculations
Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Post-CN

BASIN	FLUCCS	FLUCDESC	HYDRGRP	ACRES	Associated CN	Area x CN	Composite CN
13D	0	LNP - LIMITS OF CONSTRUCTION		12.68	98	1,242.57	
13D	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	B/D	0.18	85	15.41	
13D	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	C	0.24	80	19.36	
13D	2600	OTHER OPEN LANDS <RURAL>	B/D	15.16	80	1,212.45	
13D	2600	OTHER OPEN LANDS <RURAL>	C	49.36	74	3,652.44	
13D	4100	UPLAND CONIFEROUS FOREST	B/D	24.53	77	1,889.17	
13D	4100	UPLAND CONIFEROUS FOREST	C	14.93	70	1,045.25	
13D	4340	HARDWOOD CONIFER MIXED	B/D	7.08	77	544.79	
13D	4340	HARDWOOD CONIFER MIXED	C	4.85	70	339.18	
13D	4400	TREE PLANTATIONS	B/D	38.10	79	3,010.16	
13D	4400	TREE PLANTATIONS	C	23.19	72	1,669.89	
13D	6210	CYPRESS	B/D	19.81	100	1,980.96	
13D	6210	CYPRESS	C	0.42	100	41.59	
13D	6240	CYPRESS-PINE-CABBAGE PALM	B/D	1.83	100	182.73	
13D	6240	CYPRESS-PINE-CABBAGE PALM	C	27.00	100	2,699.88	
13D	6300	WETLAND FORESTED MIXED	B/D	2.26	100	226.39	
13D	6300	WETLAND FORESTED MIXED	C	4.68	100	468.35	
13D	6410	FRESHWATER MARSHES	B/D	1.06	100	105.74	
13D	6410	FRESHWATER MARSHES	C	1.54	100	153.60	
13D	6430	WET PRAIRIES	B/D	1.62	100	162.38	
13D	6430	WET PRAIRIES	C	1.30	100	129.74	
		Total	Post 13D	251.81		20,792.04	82.6
13E	0	LNP - LIMITS OF CONSTRUCTION		3.25	98	318.41	
13E	2600	OTHER OPEN LANDS <RURAL>	C	14.89	74	1,101.74	
13E	4340	HARDWOOD CONIFER MIXED	B/D	0.00	77	0.08	
13E	4340	HARDWOOD CONIFER MIXED	C	1.18	70	82.58	
13E	4400	TREE PLANTATIONS	B/D	0.08	79	6.38	
13E	4400	TREE PLANTATIONS	C	12.01	72	864.85	
13E	6210	CYPRESS	C	3.48	100	348.04	
		Total	Post 13E	34.89		2,722.08	78.0
13G	0	LNP - LIMITS OF CONSTRUCTION		15.72	98	1,540.56	
13G	4100	UPLAND CONIFEROUS FOREST	B/D	10.48	77	807.18	
13G	4100	UPLAND CONIFEROUS FOREST	D	0.03	77	2.55	
13G	4400	TREE PLANTATIONS	B/D	41.38	79	3,269.08	
13G	4400	TREE PLANTATIONS	D	0.67	79	52.75	
13G	6210	CYPRESS	B/D	43.97	100	4,397.26	
13G	6210	CYPRESS	D	47.35	100	4,735.48	
13G	6300	WETLAND FORESTED MIXED	D	0.06	100	5.93	
13G	6410	FRESHWATER MARSHES	B/D	0.33	100	33.00	
13G	6410	FRESHWATER MARSHES	D	0.00	100	0.02	
		Total	Post 13G	160.00		14,843.83	92.8
13H	0	LNP - LIMITS OF CONSTRUCTION		6.18	98	605.30	
13H	2600	OTHER OPEN LANDS <RURAL>	B/D	32.62	80	2,609.82	
13H	2600	OTHER OPEN LANDS <RURAL>	D	0.27	80	21.38	
13H	4100	UPLAND CONIFEROUS FOREST	B/D	0.24	77	18.26	
13H	4400	TREE PLANTATIONS	B/D	14.35	79	1,133.98	
13H	6210	CYPRESS	B/D	49.78	100	4,977.88	
13H	6210	CYPRESS	D	2.01	100	200.58	
13H	6430	WET PRAIRIES	B/D	0.23	100	23.02	
		Total	Post 13H	105.67		9,590.23	90.8

Attachment C - Hydrology Input Calculations
Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Post-CN

BASIN	FLUCCS	FLUCSDESC	HYDRGRP	ACRES	Associated CN	Area x CN	Composite CN
13I	0	LNP - LIMITS OF CONSTRUCTION		4.48	98	438.79	
13I	2600	OTHER OPEN LANDS <RURAL>	B/D	16.58	80	1,326.71	
13I	4400	TREE PLANTATIONS	B/D	7.37	79	582.18	
13I	6210	CYPRESS	B/D	30.69	100	3,069.06	
13I	6210	CYPRESS	D	3.78	100	377.76	
		Total	Post 13I	62.90		5,794.50	92.1

Attachment C - Hydrology Input Calculations
Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Post-Percent-Impervious

BASIN	FLUCCS	FLUCDESC	ACRES	Percent Impervious	Area x % Impervious	Basin % Impervious
1	0	LNP - LIMITS OF CONSTRUCTION	9.52	98.00%	9.33	
		LNP - LIMITS OF CONSTRUCTION - SPOIL PILE	13.61	0.00%	-	
1	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	9.07	25.00%	2.27	
1	2100	CROPLAND AND PASTURELAND	35.70	0.00%	-	
1	2100	CROPLAND AND PASTURELAND	0.86	0.00%	-	
1	2600	OTHER OPEN LANDS <RURAL>	8.04	0.00%	-	
1	2600	OTHER OPEN LANDS <RURAL>	0.36	0.00%	-	
1	3200	SHRUB AND BRUSHLAND	5.94	0.00%	-	
1	3200	SHRUB AND BRUSHLAND	23.45	0.00%	-	
1	3200	SHRUB AND BRUSHLAND	6.42	0.00%	-	
1	3200	SHRUB AND BRUSHLAND	10.08	0.00%	-	
1	4110	PINE FLATWOODS	43.26	0.00%	-	
1	4110	PINE FLATWOODS	102.60	0.00%	-	
1	4110	PINE FLATWOODS	11.48	0.00%	-	
1	4110	PINE FLATWOODS	9.12	0.00%	-	
1	4340	HARDWOOD CONIFER MIXED	116.58	0.00%	-	
1	4340	HARDWOOD CONIFER MIXED	3.94	0.00%	-	
1	4340	HARDWOOD CONIFER MIXED	15.67	0.00%	-	
1	4400	TREE PLANTATIONS	97.56	0.00%	-	
1	4400	TREE PLANTATIONS	244.96	0.00%	-	
1	4400	TREE PLANTATIONS	4.68	0.00%	-	
1	4400	TREE PLANTATIONS	35.42	0.00%	-	
1	5200	LAKES	0.11	100.00%	0.11	
1	6170	MIXED WETLAND HARDWOODS	0.89	0.00%	-	
1	6170	MIXED WETLAND HARDWOODS	128.46	0.00%	-	
1	6170	MIXED WETLAND HARDWOODS	1.26	0.00%	-	
1	6170	MIXED WETLAND HARDWOODS	345.79	0.00%	-	
1	6210	CYPRESS	2.57	0.00%	-	
1	6210	CYPRESS	113.35	0.00%	-	
1	6210	CYPRESS	129.70	0.00%	-	
1	6300	WETLAND FORESTED MIXED	0.25	0.00%	-	
1	6300	WETLAND FORESTED MIXED	5.08	0.00%	-	
1	6300	WETLAND FORESTED MIXED	15.28	0.00%	-	
1	6410	FRESHWATER MARSHES	2.33	0.00%	-	
1	6410	FRESHWATER MARSHES	3.95	0.00%	-	
1	6410	FRESHWATER MARSHES	10.79	0.00%	-	
1	6430	WET PRAIRIES	2.12	0.00%	-	
1	6440	EMERGENT AQUATIC VEGETATION	0.35	0.00%	-	
1	8100	TRANSPORTATION	9.86	98.00%	9.66	
1	8100	TRANSPORTATION	4.06	98.00%	3.98	
1	8100	TRANSPORTATION	1.16	98.00%	1.14	
1	8300	UTILITIES	11.18	0.00%	-	
1	8300	UTILITIES	2.15	0.00%	-	
1	8300	UTILITIES	0.99	0.00%	-	
		Total	1,600.02		26.50	1.66%

Attachment C - Hydrology Input Calculations
Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Post-Percent-Impervious

BASIN	FLUCCS	FLUCSDISC	ACRES	Percent Impervious	Area x % Impervious	Basin % Impervious
1B	0	LNP - LIMITS OF CONSTRUCTION	5.41	98.00%	5.30	
1B	2600	OTHER OPEN LANDS <RURAL>	8.70	0.00%	-	
1B	2600	OTHER OPEN LANDS <RURAL>	0.34	0.00%	-	
1B	4100	UPLAND CONIFEROUS FOREST	1.53	0.00%	-	
1B	4400	TREE PLANTATIONS	0.41	0.00%	-	
1B	4400	TREE PLANTATIONS	47.72	0.00%	-	
1B	4400	TREE PLANTATIONS	2.69	0.00%	-	
1B	6210	CYPRESS	0.08	0.00%	-	
1B	6210	CYPRESS	20.57	0.00%	-	
1B	6210	CYPRESS	27.98	0.00%	-	
1B	6410	FRESHWATER MARSHES	2.13	0.00%	-	
1B	6410	FRESHWATER MARSHES	1.79	0.00%	-	
1B	6410	FRESHWATER MARSHES	0.53	0.00%	-	
1B	6430	WET PRAIRIES	0.06	0.00%	-	
1B	8100	TRANSPORTATION	4.32	98.00%	4.24	
1B	8300	UTILITIES	1.52	0.00%	-	
1B	8300	UTILITIES	0.15	0.00%	-	
		Total	125.93	0.00%	9.53	7.57%
2	0	LNP - LIMITS OF CONSTRUCTION	2.95	0.00%	-	
2	4100	UPLAND CONIFEROUS FOREST	1.22	0.00%	-	
2	4100	UPLAND CONIFEROUS FOREST	0.17	0.00%	-	
2	4340	HARDWOOD CONIFER MIXED	2.29	0.00%	-	
2	4400	TREE PLANTATIONS	0.38	0.00%	-	
2	4400	TREE PLANTATIONS	87.42	0.00%	-	
2	4400	TREE PLANTATIONS	2.08	0.00%	-	
2	6210	CYPRESS	7.80	0.00%	-	
2	6210	CYPRESS	6.23	0.00%	-	
2	6410	FRESHWATER MARSHES	3.21	0.00%	-	
2	6410	FRESHWATER MARSHES	4.87	0.00%	-	
2	6410	FRESHWATER MARSHES	1.04	0.00%	-	
2	8100	TRANSPORTATION	6.17	98.00%	6.05	
2	8300	UTILITIES	5.98	0.00%	-	
2	8300	UTILITIES	0.10	0.00%	-	
		Total	131.91	0.00%	6.05	4.58%
2A	0	LNP - LIMITS OF CONSTRUCTION	27.17	98.00%	26.62	
2A	2600	OTHER OPEN LANDS <RURAL>	10.70	0.00%	-	
2A	2600	OTHER OPEN LANDS <RURAL>	0.27	0.00%	-	
2A	4400	TREE PLANTATIONS	67.80	0.00%	-	
2A	4400	TREE PLANTATIONS	0.61	0.00%	-	
2A	6210	CYPRESS	43.99	0.00%	-	
2A	6210	CYPRESS	90.58	0.00%	-	
2A	6300	WETLAND FORESTED MIXED	0.01	0.00%	-	
2A	6300	WETLAND FORESTED MIXED	0.05	0.00%	-	
		Total	241.16	0.00%	26.62	11.04%

Attachment C - Hydrology Input Calculations
Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Post-Percent-Impervious

BASIN	FLUCCS	FLUCSDISC	ACRES	Percent Impervious	Area x % Impervious	Basin % Impervious
2B	0	LNP - LIMITS OF CONSTRUCTION	6.47	98.00%	6.34	
2B	4400	TREE PLANTATIONS	27.77	0.00%	-	
2B	4400	TREE PLANTATIONS	0.71	0.00%	-	
2B	6210	CYPRESS	21.66	0.00%	-	
2B	6210	CYPRESS	59.83	0.00%	-	
2B	6410	FRESHWATER MARSHES	0.55	0.00%	-	
2B	6410	FRESHWATER MARSHES	2.48	0.00%	-	
		Total	119.48		6.34	5.31%
3	0	LNP - LIMITS OF CONSTRUCTION	1.44	98.00%	1.41	
3	2600	OTHER OPEN LANDS <RURAL>	14.35	0.00%	-	
3	2600	OTHER OPEN LANDS <RURAL>	0.95	0.00%	-	
3	2600	OTHER OPEN LANDS <RURAL>	0.15	0.00%	-	
3	3200	SHRUB AND BRUSHLAND	2.02	0.00%	-	
3	3200	SHRUB AND BRUSHLAND	10.26	0.00%	-	
3	4400	TREE PLANTATIONS	568.17	0.00%	-	
3	4400	TREE PLANTATIONS	48.96	0.00%	-	
3	4400	TREE PLANTATIONS	49.38	0.00%	-	
3	6170	MIXED WETLAND HARDWOODS	3.23	0.00%	-	
3	6170	MIXED WETLAND HARDWOODS	0.64	0.00%	-	
3	6210	CYPRESS	163.41	0.00%	-	
3	6210	CYPRESS	0.41	0.00%	-	
3	6210	CYPRESS	188.00	0.00%	-	
3	6300	WETLAND FORESTED MIXED	1.66	0.00%	-	
3	6300	WETLAND FORESTED MIXED	16.84	0.00%	-	
3	6410	FRESHWATER MARSHES	4.79	0.00%	-	
3	6410	FRESHWATER MARSHES	0.25	0.00%	-	
3	6410	FRESHWATER MARSHES	10.60	0.00%	-	
3	6430	WET PRAIRIES	1.50	0.00%	-	
		Total	1,087.00		1.41	0.13%
4	0	LNP - LIMITS OF CONSTRUCTION	16.48	98.00%	16.15	
4	2600	OTHER OPEN LANDS <RURAL>	19.45	0.00%	-	
4	2600	OTHER OPEN LANDS <RURAL>	1.35	0.00%	-	
4	4100	UPLAND CONIFEROUS FOREST	1.25	0.00%	-	
4	4400	TREE PLANTATIONS	67.11	0.00%	-	
4	4400	TREE PLANTATIONS	1.84	0.00%	-	
4	6210	CYPRESS	63.91	0.00%	-	
4	6210	CYPRESS	150.82	0.00%	-	
4	6300	WETLAND FORESTED MIXED	0.01	0.00%	-	
4	6300	WETLAND FORESTED MIXED	0.01	0.00%	-	
4	6410	FRESHWATER MARSHES	0.08	0.00%	-	
4	6430	WET PRAIRIES	0.12	0.00%	-	
		Total	322.43		16.15	5.01%

Attachment C - Hydrology Input Calculations

Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Post-Percent-Impervious

BASIN	FLUCCS	FLUCDESC	ACRES	Percent Impervious	Area x % Impervious	Basin % Impervious
13D	0	LNP - LIMITS OF CONSTRUCTION	12.68	98.00%	12.43	
13D	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	0.18	25.00%	0.05	
13D	1100	RESIDENTIAL LOW DENSITY < 2 DWELLING UNITS	0.24	25.00%	0.06	
13D	2600	OTHER OPEN LANDS <RURAL>	15.16	0.00%	-	
13D	2600	OTHER OPEN LANDS <RURAL>	49.36	0.00%	-	
13D	4100	UPLAND CONIFEROUS FOREST	24.53	0.00%	-	
13D	4100	UPLAND CONIFEROUS FOREST	14.93	0.00%	-	
13D	4340	HARDWOOD CONIFER MIXED	7.08	0.00%	-	
13D	4340	HARDWOOD CONIFER MIXED	4.85	0.00%	-	
13D	4400	TREE PLANTATIONS	38.10	0.00%	-	
13D	4400	TREE PLANTATIONS	23.19	0.00%	-	
13D	6210	CYPRESS	19.81	0.00%	-	
13D	6210	CYPRESS	0.42	0.00%	-	
13D	6240	CYPRESS-PINE-CABBAGE PALM	1.83	0.00%	-	
13D	6240	CYPRESS-PINE-CABBAGE PALM	27.00	0.00%	-	
13D	6300	WETLAND FORESTED MIXED	2.26	0.00%	-	
13D	6300	WETLAND FORESTED MIXED	4.68	0.00%	-	
13D	6410	FRESHWATER MARSHES	1.06	0.00%	-	
13D	6410	FRESHWATER MARSHES	1.54	0.00%	-	
13D	6430	WET PRAIRIES	1.62	0.00%	-	
13D	6430	WET PRAIRIES	1.30	0.00%	-	
		Total	251.81		12.53	4.98%
13E	0	LNP - LIMITS OF CONSTRUCTION	3.25	98.00%	3.18	
13E	2600	OTHER OPEN LANDS <RURAL>	14.89	0.00%	-	
13E	4340	HARDWOOD CONIFER MIXED	0.00	0.00%	-	
13E	4340	HARDWOOD CONIFER MIXED	1.18	0.00%	-	
13E	4400	TREE PLANTATIONS	0.08	0.00%	-	
13E	4400	TREE PLANTATIONS	12.01	0.00%	-	
13E	6210	CYPRESS	3.48	0.00%	-	
		Total	34.89		3.18	9.13%
13G	0	LNP - LIMITS OF CONSTRUCTION	15.72	98.00%	15.41	
13G	4100	UPLAND CONIFEROUS FOREST	10.48	0.00%	-	
13G	4100	UPLAND CONIFEROUS FOREST	0.03	0.00%	-	
13G	4400	TREE PLANTATIONS	41.38	0.00%	-	
13G	4400	TREE PLANTATIONS	0.67	0.00%	-	
13G	6210	CYPRESS	43.97	0.00%	-	
13G	6210	CYPRESS	47.35	0.00%	-	
13G	6300	WETLAND FORESTED MIXED	0.06	0.00%	-	
13G	6410	FRESHWATER MARSHES	0.33	0.00%	-	
13G	6410	FRESHWATER MARSHES	0.00	0.00%	-	
		Total	160.00		15.41	9.63%
13H	0	LNP - LIMITS OF CONSTRUCTION	6.18	98.00%	6.05	
13H	2600	OTHER OPEN LANDS <RURAL>	32.62	0.00%	-	
13H	2600	OTHER OPEN LANDS <RURAL>	0.27	0.00%	-	
13H	4100	UPLAND CONIFEROUS FOREST	0.24	0.00%	-	
13H	4400	TREE PLANTATIONS	14.35	0.00%	-	
13H	6210	CYPRESS	49.78	0.00%	-	
13H	6210	CYPRESS	2.01	0.00%	-	
13H	6430	WET PRAIRIES	0.23	0.00%	-	
		Total	105.67		6.05	5.73%

Attachment C - Hydrology Input Calculations
Pre-Development Composite Curve Number

File/Tab: Attachment-C.xls/Post-Percent-Impervious

BASIN	FLUCCS	FLUCSDESC	ACRES	Percent Impervious	Area x % Impervious	Basin % Impervious
13I	0	LNP - LIMITS OF CONSTRUCTION	4.48	98.00%	4.39	
13I	2600	OTHER OPEN LANDS <RURAL>	16.58	0.00%	-	
13I	4400	TREE PLANTATIONS	7.37	0.00%	-	
13I	6210	CYPRESS	30.69	0.00%	-	
13I	6210	CYPRESS	3.78	0.00%	-	
		Total	62.90		4.39	6.98%

ATTACHMENT D

Hydraulics Input Calculations

Attachment D - Hydraulics Input Calculations
Storage Node Input from Microstation

File/Tab: Attachment-D.xls/Pre Storage Areas

Basin	1
Elevation	Area (sq.ft.)
20	3862
25	17849
26	24036
27	43194
28	65560
29	121621
30	208920
31	312742
32	430110
33	583140
34	765229
35	957332
36	1254584
37	1683443
41	4876840
45	4876840

Basin	1A
Elevation	Area (sq.ft.)
27	8330
28	17352
29	52072
30	88502
31	120512
32	157917
33	195581
34	268822
35	413374
36	706591
37	1397514
41	4573184
45	4573184

Basin	1B
Elevation	Area (sq.ft.)
35	1000
36	1944
37	134859
38	357047
39	640473
40	1971824
41	3785072
45	3785072

Basin	2
Elevation	Area (sq.ft.)
37	1000
38	136047
39	411512
40	1547623
41	2925433

Basin	2A
Elevation	Area (sq.ft.)
40	261385
41	4265863
42	9900375
43	13732780
45	13732780

Basin	2B
Elevation	Area (sq.ft.)
39	1000
40	1075180
41	2758214
42	4714963
45	4714963

Basin	3
Elevation	Area (sq.ft.)
40	11074
41	59674
42	533529
43	1370667
44	1991819
45	2267080
49	2267080

Basin	3a
Elevation	Area (sq.ft.)
45	55123
46	435775
47	1632681
48	2982489
49	4643463

Basin	4
Elevation	Area (sq.ft.)
40	1484523
41	6758003
42	10031541
45	10031541

Basin	4A
Elevation	Area (sq.ft.)
36	1112
37	175961
38	229540
130	2558988
40	5183086

Basin	4B
Elevation	Area (sq.ft.)
36	13115
37	55944
38	442877
39	1321150
40	2360444
41	3449412
45	3449412

Basin	4C
Elevation	Area (sq.ft.)
33	11650
34	96471
35	386928
37	2427026

Attachment D - Hydraulics Input Calculations
Storage Node Input from Microstation

File/Tab: Attachment-D.xls/Pre Storage Areas

Basin	4D1
Elevation	Area (sq.ft.)
15	9129
16	7072
17	64549
18	273428
19	756885
20	2539817

Basin	4E1
Elevation	Area (sq.ft.)
10	2840
11	5566
12	7181
13	8625
14	62094
15	200658
16	870726
17	1998702

Basin	4E3
Elevation	Area (sq.ft.)
17	1000
18	158106
19	2759966
24	7546725

Basin	4E4
Elevation	Area (sq.ft.)
31	119373
32	208835
33	322154
34	594840
36	594840

Basin	4F
Elevation	Area (sq.ft.)
39	93816
40	690028
41	1938404
42	4168738
45	4168738

Basin	4G
Elevation	Area (sq.ft.)
39	1000
40	107776
41	509879
42	609211

Basin	4H
Elevation	Area (sq.ft.)
37	21030
38	136260
39	450773
40	2548252
42	2905671

Basin	4I
Elevation	Area (sq.ft.)
33	2714
34	121064
35	850881
37	1662371
38	4966993

Basin	4J
Elevation	Area (sq.ft.)
33	11050
34	191455
35	487970
36	1127172
37	1597681

Basin	5
Elevation	Area (sq.ft.)
42	16792
43	83519
44	189215
45	608601
46	1535480

Basin	6
Elevation	Area (sq.ft.)
41	16277
43	233878
44	1202397
45	1519156

Basin	7A
Elevation	Area (sq.ft.)
43	289418
44	626729
46	1840366

Basin	8A
Elevation	Area (sq.ft.)
40	1000
41	333714
42	3437432

Basin	9A
Elevation	Area (sq.ft.)
37	15771
38	88479
39	380035
40	1365309
42	2374058

Basin	11A
Elevation	Area (sq.ft.)
34	1000
35	83315
36	194365
37	363965
38	596584

Attachment D - Hydraulics Input Calculations
Storage Node Input from Microstation

File/Tab: Attachment-D.xls/Pre Storage Areas

Basin	12A
Elevation	Area (sq.ft.)
28	1000
29	14774
30	34790
31	69696
32	118736
33	376023

Basin	13
Elevation	Area (sq.ft.)
14	1000
19	192305
24	6488418

Basin	13A
Elevation	Area (sq.ft.)
28	8494
29	33978
30	101240
31	189776
32	676868
35	3306836

Basin	13C
Elevation	Area (sq.ft.)
16	17623
17	22544
18	28736
19	36643
20	47365
21	59456
22	86667
23	103044
24	129548
25	171913
26	260666
27	457076
28	995456

Basin	13D
Elevation	Area (sq.ft.)
25	3382
26	33170
27	75879
28	392949
29	1639976
30	3216161
31	5099208

Basin	13E
Elevation	Area (sq.ft.)
27	5029
28	42048
29	202324
30	269146
31	590590

Basin	13F
Elevation	Area (sq.ft.)
32	1000
33	119190
34	351049
35	813387
36	1522586
38	4356000

Basin	13G
Elevation	Area (sq.ft.)
39	6783
40	990458
41	3091863
42	4491631

Basin	13H
Elevation	Area (sq.ft.)
34	35270
35	126295
36	338713
37	1063089
38	1941069

Basin	13I
Elevation	Area (sq.ft.)
31	1637
32	44906
33	96482
34	211830
35	533943
36	828624
37	1487000
40	1487000

Attachment D - Hydraulics Input Calculations
Storage Node Input from Microstation

File/Tab: Attachment-D.xls/Channel Information

Cross Section Upstream of 13B

Distance	Elevation	
0	28	
68	27	Overbank
74	26	
79	25	
83	24	
90	23	
108	23	
113	24	
118	25	
126	26	
147	27	Overbank
207	28	

Overbank

Main Channel

Overbank

Cross Section Downstream of 13B

Distance	Elevation	
0	28	
22	27	
246	27	
290	26	
330	25	Overbank
740	25	
767	24	
779	23	
785	22	
788	21	
791	20	
793	19	
795	18	
819	17	
831	17	
838	18	
852	19	
893	20	
903	21	
921	22	
945	23	
1003	24	
1042	24	
1093	23	
1172	23	
1187	24	Overbank
1195	25	
1217	26	
1244	27	
1361	27	
1380	28	

Overbank

Main Channel

Overbank

Attachment D - Hydraulics Input Calculations
Storage Node Input from Microstation

File/Tab: Attachment-D.xls/Channel Information

Cross Section 4D5

Distance	Elevation	
0	35	Overbank
28	34	
86	33	Main Channel
95	32	
144	32	
180	33	
222	34	
294	32	
344	33	Overbank
410	34	
457	34	
483	35	

Cross Section 4D3

Distance	Elevation	
0	32	Overbank
144	31	
185	30	Main Channel
219	29	
229	28	
250	27	
313	28	
362	29	
400	30	Overbank
460	31	
608	31	
826	32	

Cross Section 4D4

Distance	Elevation	
0	33	Overbank
65	32	
108	31	Main Channel
142	30	
145	29	
151	28	
157	28	
175	29	
208	29	Overbank
233	29	
246	30	
268	31	
281	32	
334	33	

Cross Section 4D2

Distance	Elevation	
0	24	Overbank
35	23	
105	24	Main Channel
108	23	
111	22	
118	22	
121	23	
124	24	
126	25	Overbank
166	25	
350	26	
543	27	

Cross Section 4E2

Distance	Elevation	
0	18	Overbank
10	17	
439	17	Main Channel
472	16	
478	15	
482	15	
521	16	
557	17	
650	18	Overbank

Cross Section 4E3

Distance	Elevation	
0	20	Overbank
125	20	
143	19	Main Channel
158	18	
234	18	
242	19	
264	20	Overbank

Attachment D - Hydraulics Input Calculations
Storage Node Input from Microstation

File/Tab: Attachment-D.xls/Post Storage Areas

Basin	2
Elevation	Area (sq.ft.)
37	1000
38	136047
39	393912
40	1516423
41	2883033

Basin	2A
Elevation	Area (sq.ft.)
40	234641
41	2886845
42	5358997
43	5870979
45	5870979

Basin	2B
Elevation	Area (sq.ft.)
39	1000
40	963230
41	2462298
42	3306077
45	3306077

Basin	3
Elevation	Area (sq.ft.)
40	11074
41	59674
42	533529
43	1892776
44	3036037
45	3833407

Basin	4
Elevation	Area (sq.ft.)
40	1484523
41	6442472
42	9607083

Basin	7
Elevation	Area (sq.ft.)
40	222730
41	520209
42	672055

Basin	8
Elevation	Area (sq.ft.)
40	81063
41	481068
42	751593

Basin	9
Elevation	Area (sq.ft.)
34	35270
35	103425
36	202414
37	585039

Basin	10A
Elevation	Area (sq.ft.)
34	8792
35	33113
36	327794
37	986170
40	986170

Basin	10B
Elevation	Area (sq.ft.)
32	7733
33	75355
34	205451
35	399998
36	763318

Basin	13D
Elevation	Area (sq.ft.)
25	3382
26	33170
27	75879
28	392949
29	1639976
30	3216161
31	5099208

Basin	13E
Elevation	Area (sq.ft.)
27	5029
28	42048
29	194477
30	723146
31	1520367.8

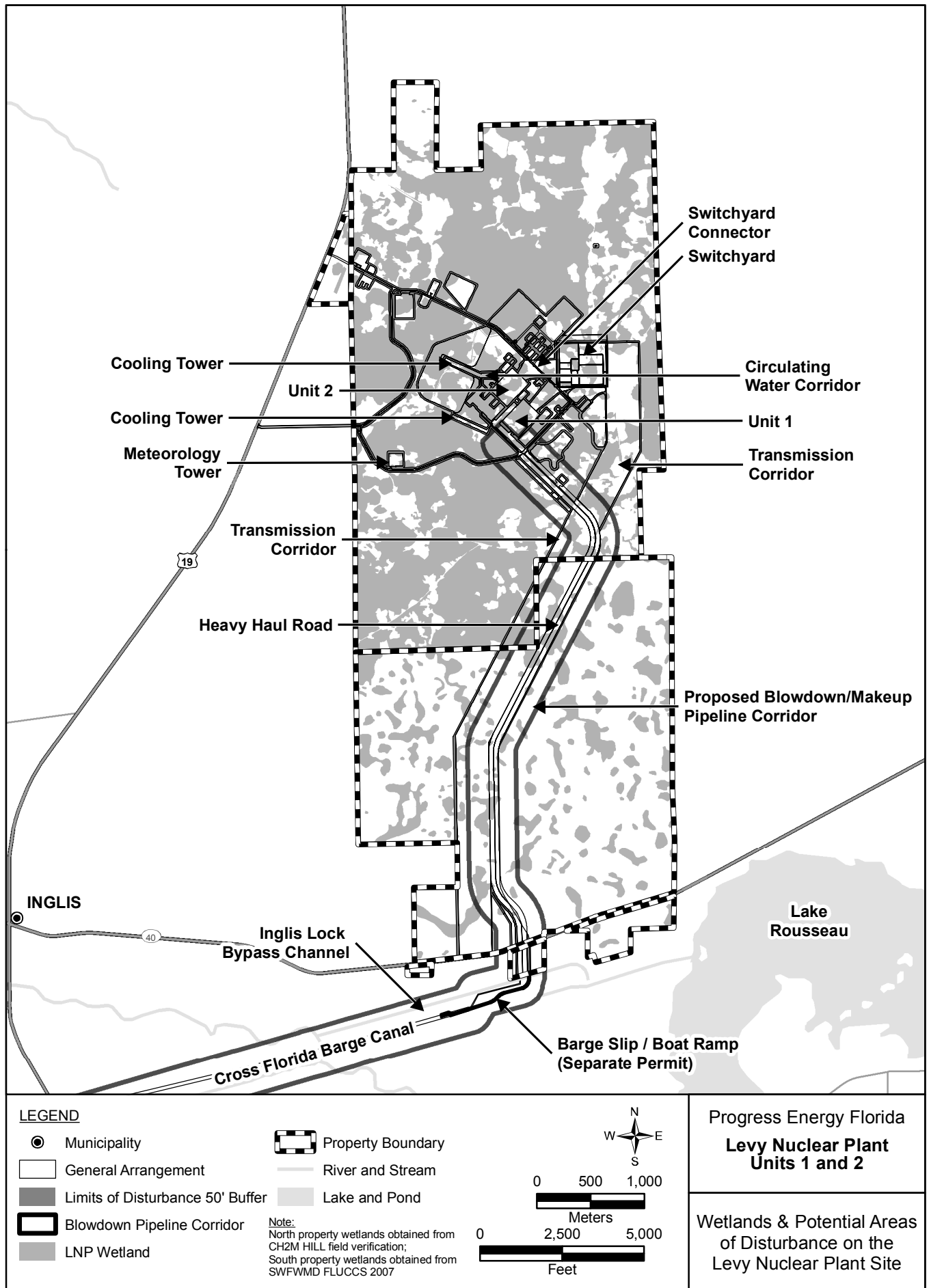
Basin	12
Elevation	Area (sq.ft.)
29	7847
30	74669
31	396113
33	1034966

Basin	13G
Elevation	Area (sq.ft.)
39	6783
40	382010
41	1836539
42	2767749
130	

Basin	13H
Elevation	Area (sq.ft.)
34	1000
35	22870
36	136299
37	478050
38	1220576

ATTACHMENT E

Wetlands and Potential Areas of Disturbance on the Levy Nuclear Plant Site



ATTACHMENT F

Pre-Development and Post-Development Calibrations

Pre-Development																									
SCS Total Storm Runoff						P=		11.3		SWMM Results								OUTPUT from SWMM							
Basin	Area	CN	S	Q(in)	Volume	Reported Total Runoff		"Retention" Volume (dp in Fig V5)	Runoff Volume Equivalent to SCS				Total Precip	Total Runon	Total Evap	Total Infil	Total Runoff	Total Runoff	Peak Runoff						
						Volume															Difference	Error	Subcatchment	in	in
					(ac-ft)	10^6 Gal	(ac-ft)	(ac-ft)	(ac-ft)																
DA1	1649.65	79.9	2.52	8.76	1203.78	221.473	679.72	494.90	1174.62	-29.16	-2.42%	DA1	11.3	0	0	2.126	4.944	221.473	307.198	0.438					
DA2	131.91	83.6	1.96	9.24	101.63	21.33	65.46	39.57	105.04	3.41	3.36%	DA2	11.3	0	0	1.65	5.955	21.33	57.729	0.527					
DA3	667.89	86.5	1.56	9.62	535.50	99.793	306.27	200.37	506.64	-28.85	-5.39%	DA3	11.3	0	0	1.411	5.503	99.793	142.696	0.487					
DA4a	270.98	94.8	0.55	10.67	240.89	46.203	141.80	81.29	223.10	-17.79	-7.39%	DA4a	11.3	0	0	0.529	6.279	46.203	67.845	0.556					
DA4b	143.46	86.6	1.55	9.63	115.18	26.792	82.23	43.04	125.27	10.09	8.76%	DA4b	11.3	0	0	1.32	6.878	26.792	80.243	0.609					
DA5	595.09	84.7	1.81	9.39	465.58	82.937	254.54	178.53	433.07	-32.51	-6.98%	DA5	11.3	0	0	1.609	5.133	82.937	115.691	0.454					
DA6	286.29	85.3	1.72	9.47	225.84	41.718	128.04	85.89	213.92	-11.92	-5.28%	DA6	11.3	0	0	1.543	5.366	41.718	59.313	0.475					
DA7	54.79	85.4	1.71	9.48	43.28	10.055	30.86	16.44	47.30	4.02	9.28%	DA7	11.3	0	0	1.532	6.759	10.055	17.356	0.598					
DA8	32.51	85.5	1.70	9.49	25.72	6.605	20.27	9.75	30.02	4.31	16.75%	DA8	11.3	0	0	1.52	7.482	6.605	13.347	0.662					
DA9	38.5	90.1	1.10	10.08	32.34	7.783	23.89	11.55	35.44	3.09	9.57%	DA9	11.3	0	0	1.023	7.445	7.783	14.357	0.659					
DA10a	44.76	86.4	1.57	9.61	35.84	7.912	24.28	13.43	37.71	1.87	5.22%	DA10a	11.3	0	0	1.422	6.51	7.912	12.913	0.576					
DA11	40.2	86.8	1.52	9.66	32.36	8.484	26.04	12.06	38.10	5.74	17.73%	DA11	11.3	0	0	1.379	7.772	8.484	18.06	0.688					
DA12	38.3	79.1	2.64	8.65	27.61	6.767	20.77	11.49	32.26	4.65	16.85%	DA12	11.3	0	0	2.239	6.507	6.767	12.224	0.576					
DA13a	119.19	78.9	2.67	8.62	85.65	18.286	56.12	35.76	91.88	6.23	7.27%	DA13a	11.3	0	0	2.262	5.65	18.286	28.364	0.5					
DA13b	302.57	80.4	2.44	8.82	222.47	45.837	140.68	90.77	231.45	8.98	4.04%	DA13b	11.3	0	0	1.921	5.579	45.837	186.458	0.494					
DA2a	527.89	92.1	0.86	10.33	454.52	85.759	263.20	158.37	421.57	-32.95	-7.25%	DA2a	11.3	0	0	0.811	5.983	85.759	124.34	0.529					
DA4	392.43	93.3	0.72	10.48	342.78	63.903	196.12	117.73	313.85	-28.92	-8.44%	DA4	11.3	0	0	0.685	5.997	63.903	92.06	0.531					
DA4c	71.32	92.8	0.78	10.42	61.93	13.957	42.84	21.40	64.23	2.31	3.72%	DA4c	11.3	0	0	0.737	7.207	13.957	23.737	0.638					
DA4d-4	86.04	89.1	1.22	9.95	71.37	14.877	45.66	25.81	71.47	0.10	0.14%	DA4d-4	11.3	0	0	1.126	6.368	14.877	23.001	0.564					
DA12A	38.3	86.8	1.52	9.66	30.83	7.376	22.64	11.49	34.13	3.30	10.69%	DA12A	11.3	0	0	1.379	7.093	7.376	13.303	0.628					
DA13	230.34	83.9	1.92	9.28	178.21	35.566	109.16	69.10	178.26	0.05	0.03%	DA13	11.3	0	0	1.481	5.687	35.566	184.614	0.503					
DA13c	94.15	81.8	2.22	9.01	70.68	17.506	53.73	28.25	81.97	11.29	15.98%	DA13c	11.3	0	0	1.632	6.848	17.506	100.18	0.606					
DA13d	251.81	84.3	1.86	9.34	195.91	44.917	137.85	75.54	213.40	17.48	8.92%	DA13d	11.3	0	0	1.653	6.569	44.917	75.957	0.581					
DA13e	34.89	81.5	2.27	8.97	26.08	6.923	21.25	10.47	31.71	5.64	21.62%	DA13e	11.3	0	0	1.966	7.307	6.923	14.62	0.647					
DA1B	217.03	91.0	0.99	10.19	184.37	42.958	131.84	65.11	196.95	12.58	6.82%	DA1B	11.3	0	0	0.906	7.289	42.958	80.476	0.645					
DA13g	160	92.2	0.85	10.34	137.93	32.435	99.55	48.00	147.55	9.62	6.97%	DA13g	11.3	0	0	0.8	7.466	32.435	58.205	0.661					
DA4e1	73.43	82.4	2.14	9.09	55.61	10.591	32.50	22.03	54.53	-1.07	-1.93%	DA4e1	11.3	0	0	1.721	5.312	10.591	42.221	0.47					
DA4e2	91.35	82.1	2.18	9.05	68.88	12.888	39.55	27.41	66.96	-1.92	-2.79%	DA4e2	11.3	0	0	1.806	5.196	12.888	37.869	0.46					
DA4e3	455.84	90.1	1.10	10.08	382.93	75.65	232.18	136.75	368.93	-14.00	-3.66%	DA4e3	11.3	0	0	1.012	6.112	75.65	111.117	0.541					
DA2b	182.28	95.2	0.50	10.72	162.79	38.092	116.91	54.68	171.59	8.81	5.41%	DA2b	11.3	0	0	0.488	7.696	38.092	68.556	0.681					
DA4d-1	107.53	87.0	1.49	9.69	86.79	19.73	60.55	32.26	92.81	6.02	6.94%	DA4d-1	11.3	0	0	1.221	6.757	19.73	84.269	0.598					
DA4d-2	69.77	89.6	1.16	10.02	58.24	11.387	34.95	20.93	55.88	-2.36	-4.06%	DA4d-2	11.3	0	0	1.029	6.01	11.387	29.151	0.532					
DA4d-3	124.27	83.7	1.95	9.26	95.87	22.195	68.12	37.28	105.40	9.52	9.93%	DA4d-3	11.3	0	0	1.528	6.578	22.195	104.002	0.582					
DA13h	105.67	90.1	1.10	10.08	88.77	21.242	65.19	31.70	96.89	8.13	9.15%	DA13h	11.3	0	0	1.023	7.403	21.242	38.833	0.655					
DA4i	175.74	93.8	0.66	10.54	154.41	30.301	93.00	52.72	145.72	-8.69	-5.63%	DA4i	11.3	0	0	0.633	6.35	30.301	45.2	0.562					
DA4f	125.7	87.9	1.38	9.80	102.66	23.577	72.36	37.71	110.07	7.41	7.21%	DA4f	11.3	0	0	1.259	6.908	23.577	40.449	0.611					
DA4h	156.01	94.6	0.57	10.64	138.36	28.641	87.90	46.80	134.70	-3.66	-2.64%	DA4h	11.3	0	0	0.55	6.761	28.641	44.718	0.598					
DA4g	54.07	90.4	1.06	10.12	45.59	9.983	30.64	16.22	46.86	1.27	2.78%	DA4g	11.3	0	0	0.991	6.8	9.983	16.332	0.602					
DA4j	69.45	94.4	0.59	10.62	61.45	12.654	38.84	20.84	59.67	-1.78	-2.90%	DA4j	11.3	0	0	0.57	6.71	12.654	19.657	0.594					
DA13f	115.56	94.4	0.59	10.62	102.25	21.002	64.46	34.67	99.13	-3.13	-3.06%	DA13f	11.3	0	0	0.57	6.693	21.002	32.553	0.592					
DA13i	62.9	91.8	0.89	10.29	53.96	11.148	34.21	18.87	53.08	-0.88	-1.62%	DA13i	11.3	0	0	0.842	6.527	11.148	17.286	0.578					
DA3a	317.6	86.5	1.56	9.62	254.64	58.902	180.78	95.28	276.06	21.41	8.41%	DA3a	11.3	0	0	1.411	6.83	58.902	101.489	0.604					
DA7a	350.17	85.4	1.71	9.48	276.61	51.239	157.26	105.05	262.31	-14.30	-5.17%	DA7a	11.3	0	0	1.532	5.389	51.239	72.963	0.477					
DA8a	407.63	85.5	1.70	9.49	322.44	59.2	181.69	122.29	303.98	-18.46	-5.73%	DA8a	11.3	0	0	1.52	5.348	59.2	83.819	0.473					
DA9a	137.06	90.1	1.10	10.08	115.14	24.927	76.50	41.12	117.62	2.48	2.16%	DA9a	11.3	0	0	1.023	6.698	24.927	40.255	0.593					
DA10b	48.79	87.7	1.40	9.78	39.74	8.496	26.08	14.64	40.71	0.97	2.43%	DA10b	11.3	0	0	1.281	6.413	8.496	13.475	0.568					
DA11a	310	86.8	1.52	9.66	249.55	46.554	142.88	93.00	235.88	-13.67	-5.48%	DA11a	11.3	0	0	1.379	5.531	46.554	66.636	0.489					
4d5	32.39	89.1	1.22	9.95	26.87	6.99	21.45	9.72	31.17	4.30	16.02%	4d5	11.3	0	0	1.126	7.947	6.99	14.759	0.703					
				Total	8091.81				8010.85	-80.95	-1.00%	-----	-----	-----	-----	-----	-----	-----	-----	-----					
Total System	10093.5					1623.54	4982.80	3028.05	8010.85			System	11.3	0	0	1.388	5.924								

Post-Development																									
SCS Total Storm Runoff						P=		11.3		SWMM Results								OUTPUT from SWMM							
Basin	Area	CN	S	Q(in)	Volume	Reported Total Runoff Volume		"Retention" Volume (dp in Fig V5)	Runoff Volume Equivalent to SCS	Difference	Error		Total Precip	Total Runon	Total Evap	Total Infil	Total Runoff	Total Runoff	Peak Runoff	Coeff					
					(ac-ft)	10^6 Gal	(ac-ft)	(ac-ft)	(ac-ft)				in	in	in	in	in	10^6 gal	CFS						
DA1	1600.02	79.7	2.55	8.73	1164.01	211.299	648.50	480.01	1128.50	-35.50	-3.05%	DA1	11.3	0	0	2.135	4.863	211.299	323.954	0.43					
DA2	131.91	84.0	1.90	9.30	102.20	21.424	65.75	39.57	105.33	3.13	3.06%	DA2	11.3	0	0	1.609	5.981	21.424	57.22	0.529					
DA3	1087	86.1	1.61	9.57	866.86	147.942	454.05	326.10	780.15	-86.71	-10.00%	DA3	11.3	0	0	1.453	5.012	147.942	202.082	0.444					
DA4a	270.98	94.8	0.55	10.67	240.89	46.203	141.80	81.29	223.10	-17.79	-7.39%	DA4a	11.3	0	0	0.529	6.279	46.203	67.845	0.556					
DA4b	143.46	86.6	1.55	9.63	115.18	26.792	82.23	43.04	125.27	10.09	8.76%	DA4b	11.3	0	0	1.32	6.878	26.792	80.243	0.609					
DA5	595.09	84.7	1.81	9.39	465.58	82.937	254.54	178.53	433.07	-32.51	-6.98%	DA5	11.3	0	0	1.609	5.133	82.937	115.691	0.454					
DA6	286.29	85.3	1.72	9.47	225.84	41.718	128.04	85.89	213.92	-11.92	-5.28%	DA6	11.3	0	0	1.543	5.366	41.718	59.313	0.475					
DA7	54.79	85.4	1.71	9.48	43.28	10.055	30.86	16.44	47.30	4.02	9.28%	DA7	11.3	0	0	1.532	6.759	10.055	17.356	0.598					
DA8	32.51	85.5	1.70	9.49	25.72	6.605	20.27	9.75	30.02	4.31	16.75%	DA8	11.3	0	0	1.52	7.482	6.605	13.347	0.662					
DA9	38.5	90.1	1.10	10.08	32.34	7.783	23.89	11.55	35.44	3.09	9.57%	DA9	11.3	0	0	1.023	7.445	7.783	14.357	0.659					
DA11	40.2	86.8	1.52	9.66	32.36	7.428	22.80	12.06	34.86	2.50	7.72%	DA11	11.3	0	0	1.379	6.805	7.428	12.691	0.602					
DA12	38.3	79.1	2.64	8.65	27.61	6.431	19.74	11.49	31.23	3.62	13.11%	DA12	11.3	0	0	2.239	6.184	6.431	10.878	0.547					
DA13a	119.19	78.9	2.67	8.62	85.65	18.286	56.12	35.76	91.88	6.23	7.27%	DA13a	11.3	0	0	2.262	5.65	18.286	28.364	0.5					
DA13b	302.57	80.4	2.44	8.82	222.47	45.837	140.68	90.77	231.45	8.98	4.04%	DA13b	11.3	0	0	1.921	5.579	45.837	186.458	0.494					
DA2a	241.16	92.9	0.76	10.43	209.65	43.025	132.05	72.35	204.40	-5.25	-2.50%	DA2a	11.3	0	0	0.647	6.57	43.025	190.734	0.581					
DA4	322.43	94.0	0.64	10.57	283.97	61.096	187.51	96.73	284.24	0.27	0.10%	DA4	11.3	0	0	0.581	6.978	61.096	164.06	0.618					
DA4c	71.32	92.8	0.78	10.42	61.93	13.957	42.84	21.40	64.23	2.31	3.72%	DA4c	11.3	0	0	0.737	7.207	13.957	23.737	0.638					
DA4d-4	86.04	89.1	1.22	9.95	71.37	14.877	45.66	25.81	71.47	0.10	0.14%	DA4d-4	11.3	0	0	1.126	6.368	14.877	23.001	0.564					
DA12A	38.3	86.8	1.52	9.66	30.83	7.376	22.64	11.49	34.13	3.30	10.69%	DA12A	11.3	0	0	1.379	7.093	7.376	13.303	0.628					
DA13	230.34	83.9	1.92	9.28	178.21	35.566	109.16	69.10	178.26	0.05	0.03%	DA13	11.3	0	0	1.481	5.687	35.566	184.614	0.503					
DA13c	94.15	81.8	2.22	9.01	70.68	14.768	45.32	28.25	73.57	2.89	4.09%	DA13c	11.3	0	0	1.632	5.776	14.768	85.036	0.511					
DA13d	251.81	86.2	1.60	9.58	201.08	31.508	96.70	75.54	172.24	-28.84	-14.34%	DA13d	11.3	0	0	1.751	4.608	31.508	99.451	0.408					
DA13e	34.89	78.0	2.82	8.50	24.72	4.25	13.04	10.47	23.51	-1.21	-4.89%	DA13e	11.3	0	0	2.15	4.486	4.25	20.455	0.397					
DA1B	125.93	89.4	1.19	9.99	104.86	25.113	77.07	37.78	114.85	10.00	9.53%	DA1B	11.3	0	0	1.015	7.344	25.113	87.92	0.65					
DA13g	160	92.8	0.78	10.42	138.93	33.117	101.64	48.00	149.64	10.71	7.71%	DA13g	11.3	0	0	0.666	7.623	33.117	132.513	0.675					
DA4e1	73.43	82.4	2.14	9.09	55.61	10.591	32.50	22.03	54.53	-1.07	-1.93%	DA4e1	11.3	0	0	1.721	5.312	10.591	42.221	0.47					
DA4e2	91.35	82.1	2.18	9.05	68.88	12.888	39.55	27.41	66.96	-1.92	-2.79%	DA4e2	11.3	0	0	1.806	5.196	12.888	37.869	0.46					
DA4e3	455.84	90.1	1.10	10.08	382.93	75.65	232.18	136.75	368.93	-14.00	-3.66%	DA4e3	11.3	0	0	1.012	6.112	75.65	111.117	0.541					
DA2b	119.48	94.9	0.54	10.68	106.33	26.339	80.84	35.84	116.68	10.35	9.73%	DA2b	11.3	0	0	0.491	8.119	26.339	74.686	0.718					
DA4d-1	107.53	87.0	1.49	9.69	86.79	19.73	60.55	32.26	92.81	6.02	6.94%	DA4d-1	11.3	0	0	1.221	6.757	19.73	84.269	0.598					
DA4d-2	69.77	89.6	1.16	10.02	58.24	11.387	34.95	20.93	55.88	-2.36	-4.06%	DA4d-2	11.3	0	0	1.029	6.01	11.387	29.151	0.532					
DA4d-3	124.27	83.7	1.95	9.26	95.87	22.195	68.12	37.28	105.40	9.52	9.93%	DA4d-3	11.3	0	0	1.528	6.578	22.195	104.002	0.582					
DA13h	105.67	90.8	1.01	10.17	89.55	21.462	65.87	31.70	97.57	8.02	8.96%	DA13h	11.3	0	0	0.894	7.48	21.462	63.206	0.662					
DA4i	175.74	93.8	0.66	10.54	154.41	30.301	93.00	52.72	145.72	-8.69	-5.63%	DA4i	11.3	0	0	0.633	6.35	30.301	45.2	0.562					
DA4f	125.7	87.9	1.38	9.80	102.66	23.577	72.36	37.71	110.07	7.41	7.21%	DA4f	11.3	0	0	1.259	6.908	23.577	40.449	0.611					
DA4h	156.01	94.6	0.57	10.64	138.36	28.641	87.90	46.80	134.70	-3.66	-2.64%	DA4h	11.3	0	0	0.55	6.761	28.641	44.718	0.598					
DA4g	54.07	90.4	1.06	10.12	45.59	9.983	30.64	16.22	46.86	1.27	2.78%	DA4g	11.3	0	0	0.991	6.8	9.983	16.332	0.602					
DA4j	69.45	94.4	0.59	10.62	61.45	12.654	38.84	20.84	59.67	-1.78	-2.90%	DA4j	11.3	0	0	0.57	6.71	12.654	19.657	0.594					
DA13f	115.56	94.4	0.59	10.62	102.25	21.002	64.46	34.67	99.13	-3.13	-3.06%	DA13f	11.3	0	0	0.57	6.693	21.002	32.553	0.592					
DA13i	62.9	92.1	0.86	10.33	54.16	12.073	37.05	18.87	55.92	1.77	3.26%	DA13i	11.3	0	0	0.754	7.069	12.073	39.893	0.626					
DA7a	350.17	85.4	1.71	9.48	276.61	51.239	157.26	105.05	262.31	-14.30	-5.17%	DA7a	11.3	0	0	1.532	5.389	51.239	72.963	0.477					
DA8a	407.63	85.5	1.70	9.49	322.44	59.2	181.69	122.29	303.98	-18.46	-5.73%	DA8a	11.3	0	0	1.52	5.348	59.2	83.819	0.473					
DA9a	137.06	90.1	1.10	10.08	115.14	24.927	76.50	41.12	117.62	2.48	2.16%	DA9a	11.3	0	0	1.023	6.698	24.927	40.255	0.593					
DA10b	48.79	87.7	1.40	9.78	39.74	8.496	26.08	14.64	40.71	0.97	2.43%	DA10b	11.3	0	0	1.281	6.413	8.496	13.475	0.568					
DA11a	310	86.8	1.52	9.66	249.55	46.554	142.88	93.00	235.88	-13.67	-5.48%	DA11a	11.3	0	0	1.379	5.531	46.554	66.636	0.489					
4d5	32.39	89.1	1.22	9.95	26.87	6.99	21.45	9.72	31.17	4.30	16.02%	4d5	11.3	0	0	1.126	7.947	6.99	14.759	0.703					
BasinA	245.96	98.0	0.20	11.06	226.67	56.85	174.48	73.79	248.27	21.60	9.53%	BasinA	11.3	0	0	0.004	8.512	56.85	106.825	0.753					

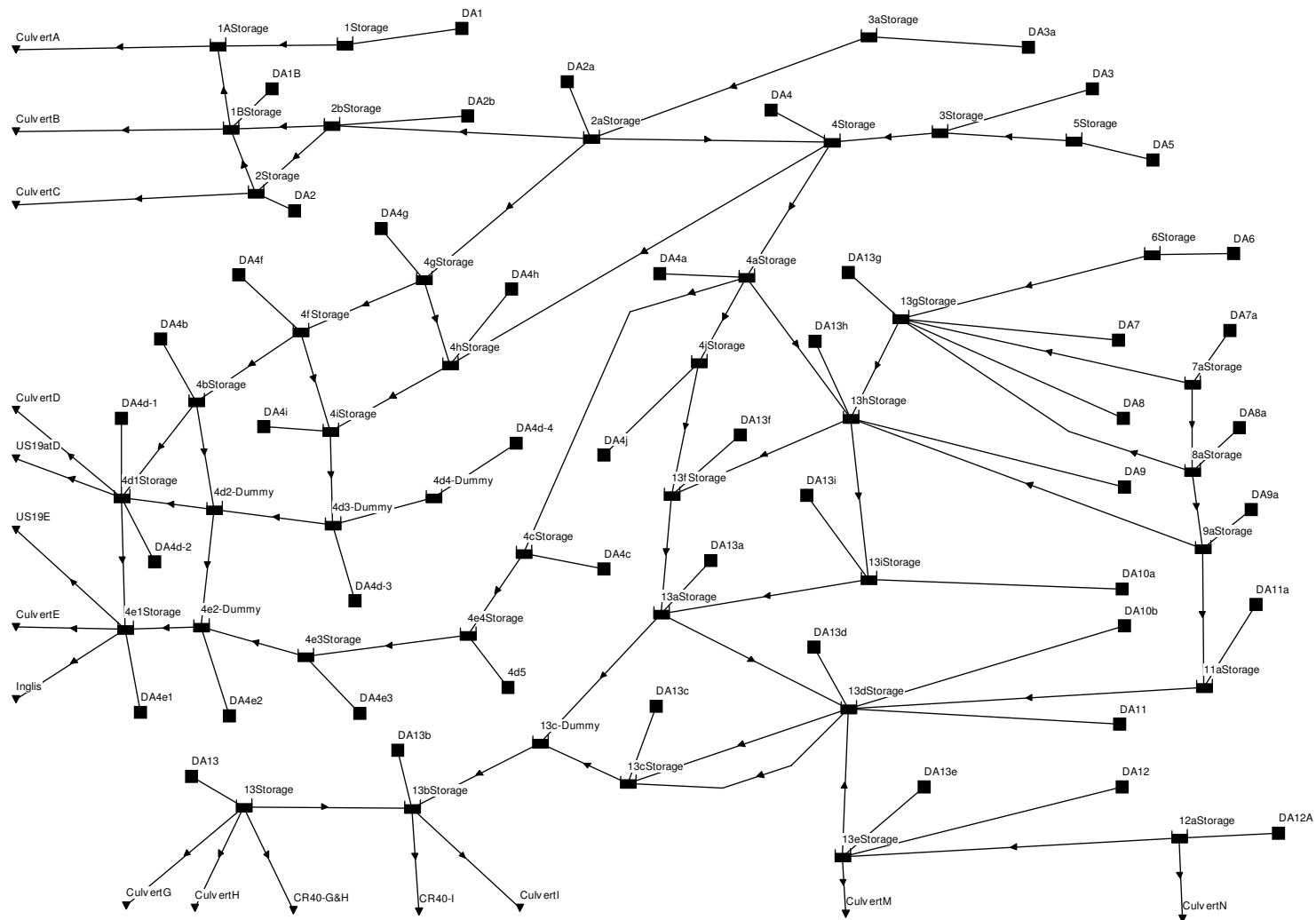
ATTACHMENT G

SWMM Printout for Existing Conditions Model

Attachment G - SWMM Printout for Existing Conditions Model

01/01/2008 00:30:00

RG1
10



Attachment G - SWMM Printout for Existing Conditions Model

EPA STORM WATER MANAGEMENT MODEL - VERSION 5.0 (Build 5.0.017)

NOTE: The summary statistics displayed in this report are
based on results found at every computational time step,
not just on results from each reporting time step.

***** Analysis Options

Flow Units CFS

Process Models:

Rainfall/Runoff YES

Snowmelt NO

Groundwater NO

Flow Routing YES

Water Quality NO

Infiltration Method CURVE_NUMBER

Flow Routing Method DYNWAVE

Starting Date JAN-01-2008 00:00:00

Ending Date JAN-03-2008 00:00:00

Antecedent Dry Days 5.0

Report Time Step 00:30:00

Wet Time Step 01:00:00

Dry Time Step 01:00:00

Routing Time Step 0.25 sec

WARNING 03: negative offset ignored for Link 13-to-H

WARNING 04: minimum elevation drop used for Conduit 13-to-H

WARNING 03: negative offset ignored for Link 13b-to-I

WARNING 03: negative offset ignored for Link Overtop-at-M

WARNING 04: minimum elevation drop used for Conduit Overtop-at-M

WARNING 03: negative offset ignored for Link Overtop-at-I

WARNING 04: minimum elevation drop used for Conduit Overtop-at-I

WARNING 03: negative offset ignored for Link 13-to-G

WARNING 04: minimum elevation drop used for Conduit 13-to-G

WARNING 03: negative offset ignored for Link D-2

WARNING 03: negative offset ignored for Link 4f-to-4i

***** Element Count

Number of rain gages 1

Number of subcatchments ... 48

Number of nodes 58

Number of links 71

Number of pollutants 0

Number of land uses 0

***** Raingage Summary

Name	Data Source	Data Type	Interval hours
RG1	TS1	CUMULATIVE	0.50

***** Subcatchment Summary

Name	Area	Width	%Imperv	%Slope	Rain Gage	Outlet
DA1	1649.65	5200.00	1.04	0.1500	RG1	1Storage
DA2	131.91	600.00	4.66	0.1000	RG1	2Storage
DA3	667.89	2200.00	0.00	0.1500	RG1	3Storage
DA4a	270.98	1600.00	0.00	0.0500	RG1	4aStorage
DA4b	143.46	1000.00	5.76	0.0700	RG1	4bStorage
DA5	595.09	1800.00	0.00	0.1500	RG1	5Storage
DA6	286.29	1200.00	0.00	0.0900	RG1	6Storage
DA7	54.79	300.00	0.00	0.1600	RG1	13gStorage

Attachment G - SWMM Printout for Existing Conditions Model

DA9	38.50	150.00	0.00	0.3900	RG1	13gStorage
DA10a	44.76	300.00	0.00	0.0800	RG1	13hStorage
DA11	40.20	300.00	0.00	0.2000	RG1	13iStorage
DA12	38.30	350.00	0.00	0.0800	RG1	13dStorage
DA13a	119.19	700.00	0.00	0.0900	RG1	13eStorage
DA13b	302.57	700.00	8.13	0.2700	RG1	13aStorage
DA2a	527.89	2400.00	0.00	0.0800	RG1	13bStorage
DA4	392.43	2000.00	0.00	0.0600	RG1	2aStorage
DA4c	71.32	500.00	0.00	0.0800	RG1	4Storage
DA4d-4	86.04	200.00	0.38	0.4800	RG1	4cStorage
DA12A	38.30	200.00	0.00	0.2100	RG1	4d4-Dummy
DA13	230.34	600.00	12.76	0.1300	RG1	12aStorage
DA13c	94.15	250.00	15.54	0.3400	RG1	13Storage
DA13d	251.81	1600.00	0.04	0.1100	RG1	13cStorage
DA13e	34.89	350.00	0.00	0.1200	RG1	13dStorage
DA1B	217.03	2000.00	2.32	0.0500	RG1	13eStorage
DA13g	160.00	1000.00	0.00	0.1300	RG1	1BStorage
DA4e1	73.43	200.00	7.75	0.1400	RG1	13gStorage
DA4e2	91.35	500.00	4.87	0.0400	RG1	4e1Storage
DA4e3	455.84	2000.00	1.07	0.1000	RG1	4e2-Dummy
DA2b	182.28	1800.00	0.00	0.0500	RG1	4e3Storage
DA4d-1	107.53	200.00	10.00	0.6500	RG1	2bStorage
DA4d-2	69.77	100.00	4.37	0.7300	RG1	4d1Storage
DA4d-3	124.27	200.00	11.19	0.8600	RG1	4d1Storage
DA13h	105.67	700.00	0.00	0.1300	RG1	4d3-Dummy
DA4i	175.74	1000.00	0.00	0.0600	RG1	13hStorage
DA4f	125.70	800.00	0.00	0.1100	RG1	4iStorage
DA4h	156.01	1100.00	0.00	0.0500	RG1	4fStorage
DA4g	54.07	300.00	0.00	0.1100	RG1	4hStorage
DA4j	69.45	300.00	0.00	0.1300	RG1	4gStorage
DA13f	115.56	400.00	0.00	0.2000	RG1	4jStorage
DA13i	62.90	300.00	0.00	0.1100	RG1	13fStorage
DA3a	317.60	1400.00	0.00	0.2400	RG1	13iStorage
DA7a	350.17	1400.00	0.00	0.1000	RG1	3aStorage
DA8a	407.63	1400.00	0.07	0.1300	RG1	7aStorage
DA9a	137.06	1000.00	0.00	0.0600	RG1	8aStorage
DA10b	48.79	300.00	0.00	0.0800	RG1	9aStorage
DA11a	310.00	1400.00	0.00	0.0800	RG1	13dStorage
4d5	32.39	150.00	0.38	0.4800	RG1	11aStorage
						4e4Storage

Node Summary

Name	Type	Invert Elev.	Max. Depth	Ponded Area	External Inflow
CulvertA	OUTFALL	29.40	6.00	0.0	
CulvertI	OUTFALL	14.00	8.00	0.0	
CulvertB	OUTFALL	32.90	3.00	0.0	
CulvertD	OUTFALL	14.40	4.00	0.0	
CulvertN	OUTFALL	27.00	6.30	0.0	
CulvertE	OUTFALL	13.90	4.00	0.0	
CulvertC	OUTFALL	36.20	3.00	0.0	
CulvertH	OUTFALL	14.00	2.00	0.0	
CulvertM	OUTFALL	31.00	1.00	0.0	
CR40-I	OUTFALL	19.50	1.00	0.0	
CulvertG	OUTFALL	14.00	2.00	0.0	
CR40-G&H	OUTFALL	18.60	1.00	0.0	
Inglis	OUTFALL	16.80	4.00	0.0	
US19E	OUTFALL	19.80	2.00	0.0	
US19atD	OUTFALL	21.80	1.00	0.0	
1Storage	STORAGE	20.00	21.00	5876840.0	
2Storage	STORAGE	36.00	9.00	2925433.0	
4aStorage	STORAGE	36.00	9.00	5183086.0	
4d1Storage	STORAGE	14.00	11.00	2539817.0	
6Storage	STORAGE	41.00	4.00	1519156.0	
12aStorage	STORAGE	28.00	5.00	376023.0	
13aStorage	STORAGE	28.00	7.00	3306836.0	
13bStorage	STORAGE	7.00	18.00	1000.0	
2aStorage	STORAGE	40.00	5.0013732780.0		
4Storage	STORAGE	40.00	5.0010031541.0		
4bStorage	STORAGE	36.00	5.00	3449412.0	
4cStorage	STORAGE	33.00	7.00	2427026.0	
13dStorage	STORAGE	25.00	7.00	6442464.0	

Attachment G - SWMM Printout for Existing Conditions Model

13eStorage	STORAGE	26.00	6.00	1525906.8
13Storage	STORAGE	14.00	10.00	343358.0
1AStorage	STORAGE	27.00	18.00	4573184.0
1BStorage	STORAGE	33.00	12.00	3785072.0
13gStorage	STORAGE	39.00	3.00	4491631.0
4e1Storage	STORAGE	10.00	10.00	1998702.0
4e3Storage	STORAGE	17.00	7.00	7546725.0
4e2-Dummy	STORAGE	16.00	6.00	1000.0
13cStorage	STORAGE	16.00	14.00	995456.0
2bStorage	STORAGE	39.00	6.00	4714963.0
4d2-Dummy	STORAGE	21.00	9.00	1000.0
4d3-Dummy	STORAGE	27.00	35.00	1000.0
4d4-Dummy	STORAGE	27.00	4.00	1000.0
13hStorage	STORAGE	34.00	6.00	1941069.0
13iStorage	STORAGE	31.00	9.00	1487000.0
13fStorage	STORAGE	32.00	6.00	4356000.0
4jStorage	STORAGE	33.00	7.00	1597681.0
4gStorage	STORAGE	39.00	3.00	609211.0
4fStorage	STORAGE	39.00	3.00	4168738.0
4iStorage	STORAGE	33.00	12.00	4966993.0
4hStorage	STORAGE	37.00	8.00	2905671.0
3aStorage	STORAGE	45.00	4.00	4643463.0
3Storage	STORAGE	40.00	5.00	2267080.0
5Storage	STORAGE	42.00	7.00	1535480.0
7aStorage	STORAGE	43.00	3.00	1840366.0
8aStorage	STORAGE	40.00	2.00	3437432.0
9aStorage	STORAGE	37.00	5.00	2374058.0
11aStorage	STORAGE	34.00	4.00	596584.0
13c-Dummy	STORAGE	20.00	5.00	1000.0
4e4Storage	STORAGE	31.00	5.00	594840.0

Link Summary

Name	From Node	To Node	Type	Length	%Slope	Roughness
CulvertL	13dStorage	13cStorage	CONDUIT	100.0	0.2000	0.0220
6-to-13g	6Storage	13gStorage	CONDUIT	150.0	0.6667	0.0400
2a-to-2b	2aStorage	2bStorage	CONDUIT	200.0	0.1000	0.0400
US19A	1AStorage	CulvertA	CONDUIT	150.0	0.1333	0.0150
US19B	1BStorage	CulvertB	CONDUIT	130.0	0.1538	0.0150
US19D	4d1Storage	CulvertD	CONDUIT	140.0	0.1429	0.0150
US19E	4e1Storage	CulvertE	CONDUIT	140.0	0.1429	0.0150
2a-to-4	2aStorage	4Storage	CONDUIT	200.0	0.1000	0.0400
4-to-4a	4Storage	4aStorage	CONDUIT	400.0	0.0500	0.0400
4b-to-4d	4bStorage	4d2-Dummy	CONDUIT	400.0	0.0500	0.0400
4a-to-4j	4aStorage	4jStorage	CONDUIT	400.0	0.0500	0.0400
12-to-12a	12aStorage	13eStorage	CONDUIT	100.0	0.2000	0.0400
13a-to-13b	13aStorage	13c-Dummy	CONDUIT	3178.0	0.3461	0.0400
13-to-13b	13Storage	13bStorage	CONDUIT	400.0	0.0500	0.0400
13e-to-13d	13eStorage	13dStorage	CONDUIT	200.0	0.1000	0.0400
US19C	2Storage	CulvertC	CONDUIT	130.0	0.1538	0.0150
13-to-H	13Storage	CulvertH	CONDUIT	100.0	0.0010	0.0150
13b-to-I	CulvertI	13bStorage	CONDUIT	100.0	6.5138	0.0150
Overtop-at-M	13eStorage	CulvertM	CONDUIT	400.0	0.0003	0.0200
Overtop-at-I	13bStorage	CR40-I	CONDUIT	100.0	0.0010	0.0150
13-to-G	13Storage	CulvertG	CONDUIT	400.0	0.0003	0.0150
13a-to-13d	13aStorage	13dStorage	CONDUIT	400.0	0.0500	0.0400
Overtop-at-G	13Storage	CR40-G&H	CONDUIT	100.0	0.2000	0.0150
Berm-Overtop	13dStorage	13cStorage	CONDUIT	200.0	0.1000	0.0400
1-to-A	1Storage	1AStorage	CONDUIT	400.0	0.2500	0.0300
2-to-B	2Storage	1BStorage	CONDUIT	400.0	0.0500	0.0400
B-to-A	1BStorage	1AStorage	CONDUIT	400.0	0.0500	0.0400
13g-to-13h	13gStorage	13hStorage	CONDUIT	400.0	0.0500	0.0400
Overtop-at-N	12aStorage	CulvertN	CONDUIT	400.0	0.0500	0.0150
D-1	4d2-Dummy	4d1Storage	CONDUIT	1376.0	0.0727	0.0400
C-3	4e3Storage	4e2-Dummy	CONDUIT	1491.0	0.1341	0.0400
C-2	4e2-Dummy	4e1Storage	CONDUIT	441.0	0.2268	0.0400
13c-to-b	13c-Dummy	13bStorage	CONDUIT	750.0	0.4000	0.0400
2b-to-B	2bStorage	1BStorage	CONDUIT	400.0	0.0500	0.0400
D-2	4d3-Dummy	4d2-Dummy	CONDUIT	1699.0	0.3532	0.0400
D-3	4d4-Dummy	4d3-Dummy	CONDUIT	686.0	0.1458	0.0800
4d-434	4e4Storage	4e3Storage	CONDUIT	400.0	0.2500	0.0400
13h-to13f	13hStorage	13fStorage	CONDUIT	400.0	0.0500	0.0100
13i-to-13a	13iStorage	13aStorage	CONDUIT	400.0	0.0500	0.0400

Attachment G - SWMM Printout for Existing Conditions Model

4j-to-13l	4jStorage	13fStorage	CONDUIT	400.0	0.0500	0.0400
13f-to13a	13fStorage	13aStorage	CONDUIT	400.0	0.0500	0.0400
4g-to-4f	4gStorage	4fStorage	CONDUIT	400.0	0.0500	0.0400
4f-to-4b	4fStorage	4bStorage	CONDUIT	400.0	0.0500	0.0400
4h-to-4i	4hStorage	4iStorage	CONDUIT	400.0	0.0500	0.0400
4i-D3	4iStorage	4d3-Dummy	CONDUIT	400.0	0.0500	0.0400
4a-to-13h	4aStorage	13hStorage	CONDUIT	400.0	0.0500	0.0100
3c-to-13c	13cStorage	13c-Dummy	CONDUIT	750.0	0.4000	0.0400
11a-to-11l	11aStorage	13dStorage	CONDUIT	200.0	0.1000	0.0400
9a-to-10a	9aStorage	11aStorage	CONDUIT	200.0	0.1000	0.0400
7a-to-8a	7aStorage	8aStorage	CONDUIT	200.0	0.1000	0.0400
7a-to7	7aStorage	13gStorage	CONDUIT	150.0	0.1333	0.0400
8a-to-9a	8aStorage	9aStorage	CONDUIT	200.0	0.1000	0.0400
8a-to-8	8aStorage	13gStorage	CONDUIT	150.0	0.1333	0.0400
3a-to-2a	3aStorage	2aStorage	CONDUIT	400.0	0.0500	0.0400
3-to-4	3Storage	4Storage	CONDUIT	150.0	0.1333	0.0400
5-to-3	5Storage	3Storage	CONDUIT	200.0	0.1000	0.0400
9a-to-9	9aStorage	13hStorage	CONDUIT	150.0	0.1333	0.0400
4-to-4h	4Storage	4hStorage	CONDUIT	400.0	0.0500	0.0400
4a-to-4c	4aStorage	4cStorage	CONDUIT	400.0	0.0500	0.0400
2b-to-2	2bStorage	2Storage	CONDUIT	400.0	0.0500	0.0400
4d2-to-4e2	4d2-Dummy	4e2-Dummy	CONDUIT	400.0	0.2500	0.0400
4d1-to-4c1	4d1Storage	4e1Storage	CONDUIT	400.0	0.2500	0.0400
2a-to4g	2aStorage	4gStorage	CONDUIT	400.0	0.0500	0.0400
4g-to-4h	4gStorage	4hStorage	CONDUIT	400.0	0.0500	0.0400
4f-to-4i	4fStorage	4iStorage	CONDUIT	400.0	0.3000	0.0400
4b-to-4d1	4bStorage	4d1Storage	CONDUIT	400.0	0.0500	0.0400
13h-to13i	13hStorage	13iStorage	CONDUIT	400.0	0.0500	0.0400
Overtop	4e1Storage	Inglis	CONDUIT	200.0	0.1000	0.0400
Overtop-at-E	4e1Storage	US19E	CONDUIT	150.0	0.1333	0.0150
Overtop-at-D	4d1Storage	US19atD	CONDUIT	150.0	0.1333	0.0150
4c-4e4	4cStorage	4e4Storage	CONDUIT	400.0	0.2500	0.0400

Cross Section Summary

Conduit	Shape	Full Depth	Full Area	Hyd. Rad.	Max. Width	No. of Barrels	Full Flow
CulvertL	CIRCULAR	2.00	3.14	0.50	2.00	4	5.98
6-to-13g	TRAPEZOIDAL	4.00	1200.00	2.40	500.00	1	6524.20
2a-to-2b	TRAPEZOIDAL	4.00	1600.00	2.67	600.00	1	3614.26
US19A	RECT_CLOSED	6.00	42.00	1.62	7.00	2	209.17
US19B	RECT_CLOSED	3.00	24.00	1.09	8.00	3	98.83
US19D	RECT_CLOSED	4.00	32.00	1.33	8.00	3	145.15
US19E	RECT_CLOSED	4.00	40.00	1.43	10.00	3	189.98
2a-to-4	TRAPEZOIDAL	4.00	2800.00	2.55	1100.00	1	6132.20
4-to-4a	TRAPEZOIDAL	4.00	1760.00	2.10	840.00	1	2393.86
4b-to-4d	TRAPEZOIDAL	4.00	1200.00	2.40	500.00	1	1786.71
4a-to-4j	TRAPEZOIDAL	4.00	3000.00	2.22	1350.00	1	4243.76
12-to-12a	TRAPEZOIDAL	4.00	96.00	1.97	48.00	1	250.88
13a-to-13b	TRAPEZOIDAL	5.00	550.00	2.62	210.00	1	2282.23
13-to-13b	TRAPEZOIDAL	4.00	120.00	2.36	50.00	1	176.83
13e-to-13d	TRAPEZOIDAL	4.00	2000.00	2.86	700.00	1	4730.54
US19C	RECT_CLOSED	3.00	21.00	1.05	7.00	1	84.30
13-to-H	RECT_CLOSED	2.00	8.00	0.67	4.00	1	1.91
13b-to-I	RECT_CLOSED	8.00	80.00	2.22	10.00	1	3444.50
Overtop-at-M	RECT_OPEN	1.00	100.00	0.98	100.00	1	11.59
Overtop-at-I	RECT_OPEN	1.00	500.00	1.00	500.00	1	156.22
13-to-G	RECT_CLOSED	2.00	5.00	0.56	2.50	1	0.53
13a-to-13d	TRAPEZOIDAL	4.00	360.00	2.12	170.00	1	492.77
Overtop-at-G	RECT_OPEN	1.00	500.00	1.00	500.00	1	2209.31
Berm-Overtop	TRAPEZOIDAL	4.00	2000.00	2.22	900.00	1	4000.99
1-to-A	TRAPEZOIDAL	4.00	2800.00	3.11	900.00	1	14777.84
2-to-B	TRAPEZOIDAL	4.00	1200.00	2.40	500.00	1	1786.71
B-to-A	TRAPEZOIDAL	4.00	1200.00	2.40	500.00	1	1786.71
13g-to-13h	TRAPEZOIDAL	2.00	700.00	1.56	450.00	1	780.62
Overtop-at-N	RECT_OPEN	1.00	100.00	0.98	100.00	1	218.61
D-1	4d2	5.00	908.00	1.64	543.00	1	1264.28
C-3	4e3	2.00	206.50	1.70	139.00	1	399.44
C-2	4e2	3.00	708.50	0.98	650.00	1	1234.42
13c-to-b	13b	11.00	4512.50	3.44	1380.00	1	24149.68
2b-to-B	TRAPEZOIDAL	4.00	1080.00	2.30	470.00	1	1562.08
D-2	4D3	5.00	1245.00	2.19	826.00	1	4642.21
D-3	4d4	5.00	709.00	2.23	334.00	1	858.66

Attachment G - SWMM Printout for Existing Conditions Model

4d-434	TRAPEZOIDAL	6.00	3900.00	3.12	1250.00	1	15467.37
13h-to13f	TRAPEZOIDAL	2.00	320.00	1.39	230.00	1	1324.94
13i-to-13a	TRAPEZOIDAL	2.00	290.00	1.18	245.00	1	269.54
4j-to-13l	TRAPEZOIDAL	4.00	2800.00	2.55	1100.00	1	4336.12
13f-to13a	TRAPEZOIDAL	4.00	6800.00	2.06	3300.00	1	9147.07
4g-to-4f	TRAPEZOIDAL	4.00	3200.00	2.29	1400.00	1	4612.50
4f-to-4b	TRAPEZOIDAL	4.00	3480.00	2.08	1670.00	1	4716.23
4h-to-4i	TRAPEZOIDAL	4.00	1200.00	2.40	500.00	1	1786.71
4i-D3	TRAPEZOIDAL	5.00	1750.00	2.92	600.00	1	2967.28
4a-to-13h	TRAPEZOIDAL	2.00	280.00	1.33	210.00	1	1126.87
3c-to-13c	13c	5.00	312.50	2.34	207.00	1	1295.54
11a-to-11	TRAPEZOIDAL	4.00	1200.00	2.40	500.00	1	2526.78
9a-to-10a	TRAPEZOIDAL	4.00	1200.00	2.40	500.00	1	2526.78
7a-to-8a	TRAPEZOIDAL	4.00	1200.00	2.40	500.00	1	2526.78
7a-to7	TRAPEZOIDAL	4.00	720.00	2.77	260.00	1	1925.06
8a-to-9a	TRAPEZOIDAL	4.00	1080.00	2.30	470.00	1	2209.11
8a-to-8	TRAPEZOIDAL	4.00	1600.00	2.67	600.00	1	4173.39
3a-to-2a	TRAPEZOIDAL	4.00	1200.00	2.40	500.00	1	1786.71
3-to-4	TRAPEZOIDAL	4.00	1200.00	2.40	500.00	1	2917.68
5-to-3	TRAPEZOIDAL	4.00	1200.00	2.40	500.00	1	2526.78
9a-to-9	TRAPEZOIDAL	4.00	1200.00	2.40	500.00	1	2917.68
4-to-4h	TRAPEZOIDAL	4.00	2800.00	3.11	900.00	1	4956.63
4a-to-4c	TRAPEZOIDAL	4.00	3000.00	2.22	1350.00	1	4243.76
2b-to-2	TRAPEZOIDAL	4.00	2400.00	3.00	800.00	1	4146.74
4d2-to-4e2	TRIANGULAR	4.00	400.00	2.00	200.00	1	1178.81
4d1-to-4c1	TRAPEZOIDAL	4.00	1200.00	2.40	500.00	1	3995.20
2a-to4g	TRAPEZOIDAL	4.00	6000.00	2.40	2500.00	1	8934.44
4g-to-4h	TRAPEZOIDAL	4.00	2400.00	3.00	800.00	1	4146.74
4f-to-4i	TRAPEZOIDAL	4.00	2400.00	3.00	800.00	1	10157.42
4b-to-4d1	TRAPEZOIDAL	4.00	1200.00	2.40	500.00	1	1786.71
13h-to13i	TRAPEZOIDAL	4.00	1800.00	2.77	650.00	1	2948.40
Overtop	TRAPEZOIDAL	4.00	2000.00	2.22	900.00	1	4000.99
Overtop-at-E	RECT_OPEN	2.00	200.00	1.92	100.00	1	1118.81
Overtop-at-D	RECT_OPEN	1.00	100.00	0.98	100.00	1	357.00
4c-4e4	TRAPEZOIDAL	6.00	3900.00	3.12	1250.00	1	15467.37

Transect Summary

Transect 4D3

Area:

0.0003	0.0013	0.0030	0.0054	0.0084
0.0121	0.0165	0.0216	0.0273	0.0337
0.0407	0.0482	0.0561	0.0645	0.0734
0.0827	0.0926	0.1029	0.1137	0.1249
0.1367	0.1490	0.1620	0.1755	0.1896
0.2042	0.2195	0.2353	0.2517	0.2687
0.2863	0.3048	0.3241	0.3442	0.3652
0.3869	0.4094	0.4328	0.4570	0.4819
0.5207	0.5623	0.6068	0.6543	0.7046
0.7579	0.8140	0.8731	0.9351	1.0000

Hrad:

0.0227	0.0454	0.0680	0.0907	0.1134
0.1361	0.1588	0.1814	0.2041	0.2268
0.2558	0.2840	0.3115	0.3385	0.3651
0.3913	0.4171	0.4427	0.4680	0.4931
0.5137	0.5346	0.5555	0.5767	0.5979
0.6193	0.6407	0.6623	0.6839	0.7056
0.7494	0.7907	0.8296	0.8664	0.9013
0.9345	0.9663	0.9967	1.0258	1.0411
1.0334	1.0266	1.0204	1.0150	1.0103
1.0065	1.0035	1.0014	1.0003	1.0000

Width:

0.0102	0.0203	0.0305	0.0407	0.0508
0.0610	0.0712	0.0814	0.0915	0.1017
0.1088	0.1160	0.1231	0.1303	0.1374
0.1446	0.1517	0.1588	0.1660	0.1731
0.1818	0.1906	0.1993	0.2080	0.2167
0.2254	0.2341	0.2429	0.2516	0.2603
0.2725	0.2847	0.2970	0.3092	0.3214
0.3337	0.3459	0.3581	0.3703	0.3825
0.6056	0.6494	0.6932	0.7370	0.7809
0.8247	0.8685	0.9123	0.9562	1.0000

Attachment G - SWMM Printout for Existing Conditions Model

Transect 4d2

Area:

0.0008	0.0017	0.0026	0.0036	0.0047
0.0058	0.0070	0.0083	0.0096	0.0110
0.0131	0.0163	0.0208	0.0265	0.0335
0.0416	0.0510	0.0616	0.0734	0.0865
0.1001	0.1138	0.1275	0.1413	0.1550
0.1688	0.1826	0.1964	0.2103	0.2241
0.2434	0.2647	0.2881	0.3135	0.3409
0.3703	0.4017	0.4352	0.4707	0.5083
0.5479	0.5896	0.6335	0.6794	0.7276
0.7778	0.8302	0.8846	0.9413	1.0000

Hrad:

0.0581	0.1117	0.1618	0.2091	0.2541
0.2972	0.3387	0.3789	0.4179	0.4560
0.4741	0.4557	0.4287	0.4057	0.3902
0.3820	0.3797	0.3821	0.3881	0.3968
0.4280	0.4622	0.4984	0.5359	0.5744
0.6135	0.6532	0.6932	0.7335	0.7740
0.7936	0.8099	0.8234	0.8348	0.8450
0.8543	0.8633	0.8722	0.8812	0.8904
0.8995	0.9089	0.9187	0.9289	0.9396
0.9508	0.9624	0.9745	0.9870	1.0000

Width:

0.0140	0.0151	0.0162	0.0173	0.0184
0.0195	0.0206	0.0217	0.0228	0.0239
0.0444	0.0648	0.0853	0.1057	0.1262
0.1466	0.1670	0.1875	0.2079	0.2284
0.2287	0.2291	0.2295	0.2298	0.2302
0.2306	0.2309	0.2313	0.2317	0.3057
0.3396	0.3735	0.4074	0.4413	0.4751
0.5090	0.5429	0.5768	0.6107	0.6446
0.6801	0.7157	0.7512	0.7867	0.8223
0.8578	0.8934	0.9289	0.9645	1.0000

Transect 4d4

Area:

0.0010	0.0024	0.0041	0.0061	0.0085
0.0112	0.0142	0.0176	0.0213	0.0254
0.0379	0.0507	0.0636	0.0768	0.0903
0.1039	0.1178	0.1319	0.1462	0.1608
0.1759	0.1917	0.2083	0.2258	0.2440
0.2630	0.2828	0.3034	0.3248	0.3470
0.3699	0.3937	0.4182	0.4436	0.4697
0.4966	0.5243	0.5528	0.5821	0.6121
0.6434	0.6764	0.7110	0.7473	0.7853
0.8249	0.8662	0.9091	0.9537	1.0000

Hrad:

0.0382	0.0693	0.0971	0.1232	0.1483
0.1727	0.1967	0.2203	0.2436	0.1273
0.1547	0.1884	0.2237	0.2593	0.2949
0.3303	0.3653	0.4000	0.4343	0.4682
0.5004	0.5307	0.5593	0.5864	0.6124
0.6373	0.6613	0.6844	0.7069	0.7288
0.7521	0.7747	0.7967	0.8182	0.8392
0.8598	0.8800	0.8998	0.9194	0.9386
0.9426	0.9473	0.9526	0.9583	0.9645
0.9710	0.9778	0.9849	0.9923	1.0000

Width:

0.0251	0.0323	0.0395	0.0467	0.0539
0.0611	0.0683	0.0754	0.0826	0.2635
0.2683	0.2731	0.2778	0.2826	0.2874
0.2922	0.2970	0.3018	0.3066	0.3114
0.3281	0.3449	0.3617	0.3784	0.3952
0.4120	0.4287	0.4455	0.4623	0.4790
0.4958	0.5126	0.5293	0.5461	0.5629
0.5796	0.5964	0.6132	0.6299	0.6467
0.6820	0.7174	0.7527	0.7880	0.8234
0.8587	0.8940	0.9293	0.9647	1.0000

Transect 4D5

Area:

0.0037	0.0080	0.0129	0.0182	0.0242
0.0307	0.0377	0.0453	0.0535	0.0622
0.0715	0.0813	0.0917	0.1026	0.1141

Attachment G - SWMM Printout for Existing Conditions Model

	0.1261	0.1387	0.1521	0.1664	0.1815
	0.1974	0.2143	0.2319	0.2504	0.2698
	0.2900	0.3111	0.3331	0.3559	0.3795
	0.4040	0.4293	0.4555	0.4847	0.5152
	0.5459	0.5768	0.6080	0.6394	0.6711
	0.7029	0.7350	0.7674	0.7999	0.8327
	0.8657	0.8989	0.9324	0.9661	1.0000
Hrad:	0.0311	0.0593	0.0854	0.1099	0.1330
	0.1551	0.1764	0.1970	0.2170	0.2365
	0.2557	0.2745	0.2930	0.3113	0.3294
	0.3473	0.3635	0.3765	0.3897	0.4029
	0.4163	0.4297	0.4431	0.4566	0.4702
	0.4838	0.4975	0.5111	0.5249	0.5386
	0.5524	0.5662	0.5801	0.5901	0.6155
	0.6410	0.6667	0.6924	0.7183	0.7441
	0.7699	0.7957	0.8215	0.8472	0.8729
	0.8985	0.9240	0.9494	0.9747	1.0000
Width:	0.1177	0.1340	0.1503	0.1665	0.1828
	0.1991	0.2154	0.2316	0.2479	0.2642
	0.2805	0.2967	0.3130	0.3293	0.3455
	0.3618	0.3810	0.4061	0.4312	0.4563
	0.4814	0.5065	0.5316	0.5567	0.5818
	0.6069	0.6320	0.6571	0.6822	0.7072
	0.7323	0.7574	0.7825	0.8076	0.8327
	0.9061	0.9128	0.9195	0.9262	0.9329
	0.9396	0.9463	0.9530	0.9598	0.9665
	0.9732	0.9799	0.9866	0.9933	1.0000
Transect 4e2					
Area:	0.0005	0.0011	0.0020	0.0032	0.0046
	0.0061	0.0080	0.0100	0.0123	0.0148
	0.0176	0.0205	0.0237	0.0272	0.0308
	0.0347	0.0388	0.0432	0.0480	0.0532
	0.0587	0.0645	0.0707	0.0773	0.0842
	0.0914	0.0990	0.1069	0.1152	0.1239
	0.1329	0.1422	0.1519	0.1633	0.1752
	0.2806	0.3286	0.3771	0.4262	0.4757
	0.5258	0.5764	0.6275	0.6791	0.7313
	0.7840	0.8372	0.8910	0.9452	1.0000
Hrad:	0.0488	0.0871	0.1219	0.1551	0.1875
	0.2194	0.2509	0.2823	0.3134	0.3445
	0.3755	0.4064	0.4372	0.4680	0.4988
	0.5295	0.5627	0.5983	0.6309	0.6612
	0.6899	0.7173	0.7438	0.7695	0.7946
	0.8194	0.8438	0.8681	0.8922	0.9161
	0.9400	0.9639	0.9877	0.8457	0.7339
	0.6847	0.6667	0.6662	0.6765	0.6939
	0.7160	0.7416	0.7697	0.7997	0.8311
	0.8635	0.8968	0.9307	0.9652	1.0000
Width:	0.0103	0.0145	0.0186	0.0228	0.0269
	0.0311	0.0352	0.0394	0.0435	0.0477
	0.0518	0.0560	0.0602	0.0643	0.0685
	0.0726	0.0775	0.0839	0.0902	0.0966
	0.1030	0.1094	0.1157	0.1221	0.1285
	0.1348	0.1412	0.1476	0.1539	0.1603
	0.1667	0.1730	0.1794	0.8479	0.8574
	0.8669	0.8764	0.8859	0.8954	0.9049
	0.9144	0.9239	0.9334	0.9430	0.9525
	0.9620	0.9715	0.9810	0.9905	1.0000
Transect 4e3					
Area:	0.0148	0.0298	0.0450	0.0603	0.0758
	0.0915	0.1074	0.1235	0.1397	0.1561
	0.1727	0.1895	0.2064	0.2236	0.2409
	0.2584	0.2760	0.2939	0.3119	0.3301
	0.3484	0.3670	0.3857	0.4046	0.4237
	0.4431	0.4627	0.4827	0.5029	0.5235
	0.5444	0.5656	0.5871	0.6089	0.6310
	0.6534	0.6762	0.6992	0.7226	0.7462
	0.7702	0.7945	0.8191	0.8440	0.8692

Attachment G - SWMM Printout for Existing Conditions Model

	0.8948	0.9206	0.9468	0.9732	1.0000
Hrad:	0.0234	0.0464	0.0693	0.0918	0.1141
	0.1362	0.1580	0.1797	0.2011	0.2222
	0.2432	0.2640	0.2846	0.3050	0.3252
	0.3453	0.3652	0.3849	0.4045	0.4239
	0.4432	0.4623	0.4813	0.5001	0.5188
	0.5420	0.5647	0.5870	0.6089	0.6303
	0.6514	0.6721	0.6925	0.7126	0.7324
	0.7519	0.7711	0.7900	0.8087	0.8272
	0.8454	0.8634	0.8811	0.8987	0.9160
	0.9332	0.9502	0.9670	0.9836	1.0000
Width:	0.5534	0.5600	0.5666	0.5732	0.5799
	0.5865	0.5931	0.5997	0.6063	0.6129
	0.6196	0.6262	0.6328	0.6394	0.6460
	0.6527	0.6593	0.6659	0.6725	0.6791
	0.6858	0.6924	0.6990	0.7056	0.7122
	0.7237	0.7353	0.7468	0.7583	0.7698
	0.7813	0.7928	0.8043	0.8158	0.8273
	0.8388	0.8504	0.8619	0.8734	0.8849
	0.8964	0.9079	0.9194	0.9309	0.9424
	0.9540	0.9655	0.9770	0.9885	1.0000
Transect 13c					
Area:	0.0060	0.0123	0.0190	0.0261	0.0336
	0.0415	0.0497	0.0584	0.0674	0.0768
	0.0865	0.0966	0.1069	0.1175	0.1284
	0.1396	0.1511	0.1628	0.1749	0.1872
	0.1999	0.2130	0.2265	0.2404	0.2548
	0.2696	0.2848	0.3004	0.3164	0.3328
	0.3499	0.3678	0.3866	0.4063	0.4268
	0.4482	0.4704	0.4936	0.5176	0.5424
	0.5697	0.6012	0.6367	0.6763	0.7200
	0.7678	0.8197	0.8757	0.9358	1.0000
Hrad:	0.0411	0.0799	0.1166	0.1516	0.1853
	0.2177	0.2490	0.2795	0.3091	0.3380
	0.3696	0.4006	0.4310	0.4609	0.4902
	0.5192	0.5477	0.5758	0.6036	0.6311
	0.6521	0.6730	0.6940	0.7150	0.7360
	0.7570	0.7780	0.7990	0.8200	0.8409
	0.8814	0.9189	0.9535	0.9854	1.0149
	1.0421	1.0672	1.0904	1.1117	1.1314
	1.1422	1.1446	1.1394	1.1281	1.1120
	1.0926	1.0708	1.0477	1.0239	1.0000
Width:	0.0928	0.0986	0.1043	0.1101	0.1159
	0.1217	0.1275	0.1333	0.1391	0.1449
	0.1493	0.1536	0.1580	0.1623	0.1667
	0.1710	0.1754	0.1797	0.1841	0.1884
	0.1947	0.2010	0.2072	0.2135	0.2198
	0.2261	0.2324	0.2386	0.2449	0.2512
	0.2643	0.2773	0.2903	0.3034	0.3164
	0.3295	0.3425	0.3556	0.3686	0.3816
	0.4435	0.5053	0.5671	0.6290	0.6908
	0.7527	0.8145	0.8763	0.9382	1.0000
Transect 13b					
Area:	0.0008	0.0018	0.0033	0.0050	0.0071
	0.0093	0.0118	0.0144	0.0171	0.0202
	0.0237	0.0277	0.0322	0.0371	0.0421
	0.0474	0.0528	0.0583	0.0639	0.0698
	0.0760	0.0823	0.0889	0.0958	0.1030
	0.1105	0.1184	0.1296	0.1434	0.1586
	0.1752	0.1936	0.2144	0.2355	0.2570
	0.2788	0.3138	0.3568	0.4004	0.4446
	0.4895	0.5352	0.5816	0.6288	0.6767
	0.7344	0.8001	0.8663	0.9329	1.0000
Hrad:	0.0521	0.0934	0.1307	0.1661	0.2065
	0.2524	0.2963	0.3385	0.3795	0.3883
	0.4001	0.4163	0.4355	0.4673	0.5170
	0.5658	0.6136	0.6607	0.6988	0.7347

Attachment G - SWMM Printout for Existing Conditions Model

	0.7702	0.8055	0.8374	0.8611	0.8855
	0.9105	0.9361	0.9462	0.9490	0.9503
	0.9509	0.9390	0.9265	0.9247	0.9305
	0.9419	0.9177	0.8948	0.8890	0.8940
	0.9062	0.9227	0.9427	0.9654	0.9900
	0.8982	0.9191	0.9435	0.9707	1.0000
Width:	0.0136	0.0186	0.0235	0.0285	0.0323
	0.0349	0.0374	0.0400	0.0425	0.0490
	0.0558	0.0627	0.0696	0.0747	0.0767
	0.0788	0.0809	0.0830	0.0861	0.0894
	0.0928	0.0961	0.0999	0.1046	0.1094
	0.1142	0.1190	0.1933	0.2150	0.2367
	0.2583	0.3054	0.3109	0.3165	0.3221
	0.3277	0.6331	0.6430	0.6529	0.6628
	0.6728	0.6841	0.6954	0.7067	0.7180
	0.9739	0.9804	0.9869	0.9935	1.0000

WARNING 01: wet weather time step reduced to recording interval for Rain Gage RG1

*****	Volume	Depth
Runoff Quantity Continuity	acre-feet	inches
*****	-----	-----
Total Precipitation	9504.712	11.300
Evaporation Loss	0.000	0.000
Infiltration Loss	1167.594	1.388
Surface Runoff	4982.619	5.924
Final Surface Storage	3358.573	3.993
Continuity Error (%)	-0.043	

*****	Volume	Volume
Flow Routing Continuity	acre-feet	10^6 gal
*****	-----	-----
Dry Weather Inflow	0.000	0.000
Wet Weather Inflow	4951.000	1613.357
Groundwater Inflow	0.000	0.000
RDII Inflow	0.000	0.000
External Inflow	0.000	0.000
External Outflow	4874.903	1588.560
Internal Outflow	0.000	0.000
Storage Losses	0.000	0.000
Initial Stored Volume	0.007	0.002
Final Stored Volume	68.073	22.183
Continuity Error (%)	0.162	

Highest Continuity Errors

Node 4jStorage (1.23%)

Time-Step Critical Elements

None

Highest Flow Instability Indexes

All links are stable.

Routing Time Step Summary

Minimum Time Step : 0.25 sec
Average Time Step : 0.25 sec
Maximum Time Step : 0.25 sec
Percent in Steady State : 0.00
Average Iterations per Step : 2.00

Attachment G - SWMM Printout for Existing Conditions Model

Subcatchment Runoff Summary *****

Subcatchment	Total Precip in	Total Runon in	Total Evap in	Total Infil in	Total Runoff in	Total Runoff 10^6 gal	Peak Runoff CFS	Runoff Coeff
DA1	11.300	0.000	0.000	2.126	4.944	221.473	307.198	0.438
DA2	11.300	0.000	0.000	1.650	5.955	21.330	57.729	0.527
DA3	11.300	0.000	0.000	1.411	5.503	99.793	142.696	0.487
DA4a	11.300	0.000	0.000	0.529	6.279	46.203	67.845	0.556
DA4b	11.300	0.000	0.000	1.320	6.878	26.792	80.243	0.609
DA5	11.300	0.000	0.000	1.609	5.133	82.937	115.691	0.454
DA6	11.300	0.000	0.000	1.543	5.366	41.718	59.313	0.475
DA7	11.300	0.000	0.000	1.532	6.759	10.055	17.356	0.598
DA8	11.300	0.000	0.000	1.520	7.482	6.605	13.347	0.662
DA9	11.300	0.000	0.000	1.023	7.445	7.783	14.357	0.659
DA10a	11.300	0.000	0.000	1.422	6.510	7.912	12.913	0.576
DA11	11.300	0.000	0.000	1.379	7.772	8.484	18.060	0.688
DA12	11.300	0.000	0.000	2.239	6.507	6.767	12.224	0.576
DA13a	11.300	0.000	0.000	2.262	5.650	18.286	28.364	0.500
DA13b	11.300	0.000	0.000	1.921	5.579	45.837	186.458	0.494
DA2a	11.300	0.000	0.000	0.811	5.983	85.759	124.340	0.529
DA4	11.300	0.000	0.000	0.685	5.997	63.903	92.060	0.531
DA4c	11.300	0.000	0.000	0.737	7.207	13.957	23.737	0.638
DA4d-4	11.300	0.000	0.000	1.126	6.368	14.877	23.001	0.564
DA12A	11.300	0.000	0.000	1.379	7.093	7.376	13.303	0.628
DA13	11.300	0.000	0.000	1.481	5.687	35.566	184.614	0.503
DA13c	11.300	0.000	0.000	1.632	6.848	17.506	100.180	0.606
DA13d	11.300	0.000	0.000	1.653	6.569	44.917	75.957	0.581
DA13e	11.300	0.000	0.000	1.966	7.307	6.923	14.620	0.647
DA1B	11.300	0.000	0.000	0.906	7.289	42.958	80.476	0.645
DA13g	11.300	0.000	0.000	0.800	7.466	32.435	58.205	0.661
DA4e1	11.300	0.000	0.000	1.721	5.312	10.591	42.221	0.470
DA4e2	11.300	0.000	0.000	1.806	5.196	12.888	37.869	0.460
DA4e3	11.300	0.000	0.000	1.012	6.112	75.650	111.117	0.541
DA2b	11.300	0.000	0.000	0.488	7.696	38.092	68.556	0.681
DA4d-1	11.300	0.000	0.000	1.221	6.757	19.730	84.269	0.598
DA4d-2	11.300	0.000	0.000	1.029	6.010	11.387	29.151	0.532
DA4d-3	11.300	0.000	0.000	1.528	6.578	22.195	104.002	0.582
DA13h	11.300	0.000	0.000	1.023	7.403	21.242	38.833	0.655
DA4i	11.300	0.000	0.000	0.633	6.350	30.301	45.200	0.562
DA4f	11.300	0.000	0.000	1.259	6.908	23.577	40.449	0.611
DA4h	11.300	0.000	0.000	0.550	6.761	28.641	44.718	0.598
DA4g	11.300	0.000	0.000	0.991	6.800	9.983	16.332	0.602
DA4j	11.300	0.000	0.000	0.570	6.710	12.654	19.657	0.594
DA13f	11.300	0.000	0.000	0.570	6.693	21.002	32.553	0.592
DA13i	11.300	0.000	0.000	0.842	6.527	11.148	17.286	0.578
DA3a	11.300	0.000	0.000	1.411	6.830	58.902	101.489	0.604
DA7a	11.300	0.000	0.000	1.532	5.389	51.239	72.963	0.477
DA8a	11.300	0.000	0.000	1.520	5.348	59.200	83.819	0.473
DA9a	11.300	0.000	0.000	1.023	6.698	24.927	40.255	0.593
DA10b	11.300	0.000	0.000	1.281	6.413	8.496	13.475	0.568
DA11a	11.300	0.000	0.000	1.379	5.531	46.554	66.636	0.489
4d5	11.300	0.000	0.000	1.126	7.947	6.990	14.759	0.703
System	11.300	0.000	0.000	1.388	5.924	1623.540	2423.774	0.524

***** Node Depth Summary *****

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Time of Max Occurrence days hr:min
CulvertA	OUTFALL	2.41	4.00	33.40	0 19:03
CulvertI	OUTFALL	0.94	1.24	15.24	0 18:00
CulvertB	OUTFALL	0.82	1.60	34.50	0 16:03
CulvertD	OUTFALL	1.85	3.11	17.51	0 17:14
CulvertN	OUTFALL	0.00	0.00	27.00	0 00:00
CulvertE	OUTFALL	1.67	2.78	16.68	0 17:50
CulvertC	OUTFALL	0.76	1.86	38.06	0 12:30

Attachment G - SWMM Printout for Existing Conditions Model

CulvertH	OUTFALL	1.92	2.00	16.00	0	02:57
CulvertM	OUTFALL	0.00	0.00	31.00	0	00:00
CR40-I	OUTFALL	0.16	0.36	19.86	0	18:00
CulvertG	OUTFALL	1.92	2.00	16.00	0	02:56
CR40-G&H	OUTFALL	0.00	0.10	18.70	0	12:30
Inglis	OUTFALL	0.05	0.21	17.01	0	17:50
US19E	OUTFALL	0.00	0.00	19.80	0	00:00
US19atD	OUTFALL	0.00	0.00	21.80	0	00:00
1Storage	STORAGE	16.60	17.57	37.57	0	19:03
2Storage	STORAGE	1.35	2.74	38.74	0	12:30
4aStorage	STORAGE	3.05	3.57	39.57	0	18:02
4d1Storage	STORAGE	2.87	4.39	18.39	0	17:14
6Storage	STORAGE	2.83	3.47	44.47	0	19:00
12aStorage	STORAGE	3.95	4.74	32.74	0	15:33
13aStorage	STORAGE	4.27	5.84	33.84	0	17:48
13bStorage	STORAGE	11.20	13.07	20.07	0	18:00
2aStorage	STORAGE	1.69	2.27	42.27	0	18:02
4Storage	STORAGE	1.59	2.26	42.26	0	18:03
4bStorage	STORAGE	3.36	3.89	39.89	0	12:39
4cStorage	STORAGE	2.24	2.81	35.81	0	17:03
13dStorage	STORAGE	3.31	4.20	29.20	0	18:01
13eStorage	STORAGE	3.54	4.28	30.28	0	15:05
13Storage	STORAGE	2.26	4.96	18.96	0	12:30
1AStorage	STORAGE	5.20	7.30	34.30	0	19:03
1BStorage	STORAGE	1.14	2.17	35.17	0	16:03
13gStorage	STORAGE	1.45	1.84	40.84	0	16:11
4e1Storage	STORAGE	6.08	7.66	17.66	0	17:50
4e3Storage	STORAGE	1.80	2.35	19.35	0	17:00
4e2-Dummy	STORAGE	1.86	2.57	18.57	1	11:54
13cStorage	STORAGE	8.20	9.65	25.65	0	18:00
2bStorage	STORAGE	2.43	3.11	42.11	0	16:38
4d2-Dummy	STORAGE	2.61	3.69	24.69	0	18:03
4d3-Dummy	STORAGE	1.67	2.49	29.49	0	17:45
4d4-Dummy	STORAGE	1.98	2.56	29.56	0	17:31
13hStorage	STORAGE	3.16	3.97	37.97	0	18:00
13iStorage	STORAGE	4.81	5.80	36.80	0	16:36
13fStorage	STORAGE	4.40	5.32	37.32	0	17:50
4jStorage	STORAGE	3.45	4.32	37.32	0	17:50
4gStorage	STORAGE	2.52	3.21	42.21	0	18:06
4fStorage	STORAGE	0.49	0.79	39.79	0	14:57
4iStorage	STORAGE	4.02	5.13	38.13	0	18:00
4hStorage	STORAGE	4.18	5.25	42.25	0	18:03
3aStorage	STORAGE	0.61	1.03	46.03	0	16:02
3Storage	STORAGE	1.77	2.38	42.38	0	18:03
5Storage	STORAGE	0.57	0.85	42.85	0	20:00
7aStorage	STORAGE	0.49	0.75	43.75	0	19:01
8aStorage	STORAGE	1.77	2.17	42.17	0	23:13
9aStorage	STORAGE	1.48	1.81	38.81	0	21:51
11aStorage	STORAGE	3.33	4.04	38.04	0	20:54
13c-Dummy	STORAGE	2.45	3.93	23.93	0	18:03
4e4Storage	STORAGE	2.22	2.87	33.87	0	16:32

Node Inflow Summary

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Time of Max Occurrence days hr:min	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal
CulvertA	OUTFALL	0.00	307.08	0 19:03	0.000	219.060
CulvertI	OUTFALL	0.00	311.77	0 18:00	0.000	295.167
CulvertB	OUTFALL	0.00	163.42	0 16:03	0.000	88.861
CulvertD	OUTFALL	0.00	406.00	0 17:14	0.000	278.328
CulvertN	OUTFALL	0.00	13.24	0 15:34	0.000	7.280
CulvertE	OUTFALL	0.00	460.53	0 17:50	0.000	320.876
CulvertC	OUTFALL	0.00	57.54	0 12:30	0.000	21.827
CulvertH	OUTFALL	0.00	68.17	0 12:30	0.000	24.784
CulvertM	OUTFALL	0.00	0.00	0 00:00	0.000	0.000
CR40-I	OUTFALL	0.00	600.45	0 18:00	0.000	304.488
CulvertG	OUTFALL	0.00	25.65	0 12:30	0.000	9.317
CR40-G&H	OUTFALL	0.00	90.11	0 12:30	0.000	1.244
Inglis	OUTFALL	0.00	61.42	0 17:50	0.000	17.210

Attachment G - SWMM Printout for Existing Conditions Model

Node	Type	Inflow (cfs)	Outflow (cfs)	Storage (cfs)	Time (hr:min)	Volume (10^6 gal)	Depth (ft)
US19E	OUTFALL	0.00	0.00	0	00:00	0.000	0.000
US19atD	OUTFALL	0.00	0.00	0	00:00	0.000	0.000
1Storage	STORAGE	307.20	307.20	0	19:00	219.859	219.859
2Storage	STORAGE	57.73	57.73	0	12:30	21.202	21.830
4aStorage	STORAGE	67.84	192.92	0	18:00	45.889	127.612
4d1Storage	STORAGE	113.42	406.00	0	17:14	30.943	278.353
6Storage	STORAGE	59.31	59.31	0	19:00	41.414	41.414
12aStorage	STORAGE	13.30	13.30	0	15:30	7.341	7.341
13aStorage	STORAGE	28.36	550.70	0	17:39	18.175	357.700
13bStorage	STORAGE	186.46	912.22	0	18:00	45.562	599.989
2aStorage	STORAGE	124.34	224.70	0	16:34	85.160	143.570
4Storage	STORAGE	92.06	505.50	0	18:00	63.452	363.414
4bStorage	STORAGE	80.24	80.24	0	12:30	26.659	26.659
4cStorage	STORAGE	23.74	67.24	0	17:00	13.884	42.542
13dStorage	STORAGE	106.98	276.62	0	18:00	61.581	182.894
13eStorage	STORAGE	26.78	26.84	0	15:00	13.634	13.662
13Storage	STORAGE	184.61	184.61	0	12:30	35.357	35.357
1AStorage	STORAGE	0.00	307.08	0	19:03	0.000	219.108
1BStorage	STORAGE	80.48	163.42	0	16:03	42.748	88.869
13gStorage	STORAGE	88.79	146.22	0	16:01	48.863	90.226
4e1Storage	STORAGE	42.22	521.96	0	17:43	10.521	337.998
4e3Storage	STORAGE	111.12	192.18	0	16:59	75.154	124.304
4e2-Dummy	STORAGE	37.87	508.51	0	17:37	12.800	329.193
13cStorage	STORAGE	100.18	300.95	0	18:00	17.430	200.148
2bStorage	STORAGE	68.56	94.11	0	16:23	37.909	46.904
4d2-Dummy	STORAGE	0.00	619.96	0	17:45	0.000	416.861
4d3-Dummy	STORAGE	104.00	619.97	0	17:39	22.085	417.813
4d4-Dummy	STORAGE	23.00	23.00	0	16:30	14.786	14.786
13hStorage	STORAGE	53.19	396.57	0	17:59	28.891	261.010
13iStorage	STORAGE	30.20	30.20	0	16:30	18.947	18.947
13fStorage	STORAGE	32.55	492.32	0	17:42	20.873	322.445
4jStorage	STORAGE	19.66	63.42	0	17:23	12.576	41.333
4gStorage	STORAGE	16.33	322.32	0	18:01	9.927	220.231
4fStorage	STORAGE	40.45	361.63	0	17:42	23.456	242.413
4iStorage	STORAGE	45.20	565.76	0	18:00	30.100	381.676
4hStorage	STORAGE	44.72	424.65	0	18:00	28.467	307.489
3aStorage	STORAGE	101.49	101.49	0	16:00	58.602	58.602
3Storage	STORAGE	142.70	258.35	0	19:00	99.077	181.262
5Storage	STORAGE	115.69	115.69	0	19:00	82.310	82.310
7aStorage	STORAGE	72.96	72.96	0	19:00	50.868	50.868
8aStorage	STORAGE	83.82	156.77	0	19:00	58.767	109.544
9aStorage	STORAGE	40.25	187.16	0	21:49	24.784	134.207
11aStorage	STORAGE	66.64	151.72	0	20:30	46.221	107.829
13c-Dummy	STORAGE	0.00	851.61	0	17:58	0.000	556.351
4e4Storage	STORAGE	14.76	81.18	0	16:25	6.964	49.373

Node Surcharge Summary

No nodes were surcharged.

Node Flooding Summary

Flooding refers to all water that overflows a node, whether it ponds or not.

Node	Hours Flooded	Maximum Rate CFS	Time of Max Occurrence days hr:min	Total Flood Volume 10^6 gal	Maximum Ponded Volume acre-in
4gStorage	20.55	47.08	0 13:14	0.950	35.00
8aStorage	23.64	28.80	0 14:40	4.349	160.17
11aStorage	11.23	2.12	0 16:30	0.172	6.32

Storage Volume Summary

Average	Avg	Maximum	Max	Time of Max	Maximum
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Attachment G - SWMM Printout for Existing Conditions Model

Storage Unit	Volume 1000 ft3	Pcnt Full	Volume 1000 ft3	Pcnt Full	Occurrence days hr:min	Outflow CFS
1Storage	27.540	63	29.811	68	0 19:03	307.08
2Storage	0.029	3	0.105	9	0 12:30	57.54
4aStorage	0.160	13	0.196	16	0 18:02	192.90
4d1Storage	0.036	8	0.069	16	0 17:14	406.00
6Storage	1.867	59	2.391	75	0 19:00	59.31
12aStorage	0.325	73	0.400	90	0 15:33	13.30
13aStorage	3.396	46	5.171	70	0 17:48	550.69
13bStorage	7.802	54	9.574	66	0 18:00	912.22
2aStorage	11.106	14	16.832	21	0 18:02	224.42
4Storage	60.489	13	94.843	20	0 18:03	505.43
4bStorage	2.118	47	2.758	61	0 12:39	72.72
4cStorage	1.021	12	1.390	16	0 17:03	67.24
13dStorage	0.062	25	0.088	36	0 18:01	276.60
13eStorage	0.071	41	0.088	51	0 15:05	26.83
13Storage	0.198	6	0.879	25	0 12:30	183.92
1AStorage	4.904	10	8.220	16	0 19:03	307.08
1BStorage	0.027	1	0.071	3	0 16:03	163.42
13gStorage	0.197	25	0.293	37	0 16:11	146.18
4e1Storage	5.648	40	8.329	59	0 17:50	521.95
4e3Storage	0.103	7	0.163	11	0 17:00	192.17
4e2-Dummy	0.134	12	0.207	18	1 11:54	508.50
13cStorage	39.438	37	51.282	48	0 18:00	300.95
2bStorage	0.085	18	0.124	27	0 16:38	94.03
4d2-Dummy	0.199	10	0.325	17	0 18:03	619.89
4d3-Dummy	0.064	0	0.115	1	0 17:45	619.96
4d4-Dummy	0.079	27	0.122	41	0 17:31	22.96
13hStorage	6.060	32	8.178	44	0 18:00	396.57
13iStorage	0.704	33	0.889	42	0 16:36	30.19
13fStorage	0.342	61	0.442	79	0 17:50	492.31
4jStorage	2.312	28	3.125	38	0 17:50	63.41
4gStorage	36.741	31843	127.173	110216	0 18:06	322.22
4fStorage	0.397	4	0.753	7	0 14:57	361.64
4iStorage	0.764	13	1.080	18	0 18:00	565.76
4hStorage	5.802	32	7.842	43	0 18:03	424.59
3aStorage	0.305	3	0.652	7	0 16:02	101.46
3Storage	0.517	15	0.784	23	0 18:03	258.36
5Storage	0.085	1	0.143	1	0 20:00	115.68
7aStorage	1.040	3	1.887	6	0 19:01	72.95
8aStorage	177.184	354368	581.474	1162948	0 23:13	151.24
9aStorage	0.505	9	0.696	13	0 21:51	187.16
11aStorage	3.827	1627	23.174	9849	0 20:54	151.59
13c-Dummy	0.198	32	0.385	62	0 18:03	851.56
4e4Storage	11.100	23	15.884	33	0 16:32	81.18

 Outfall Loading Summary

Outfall Node	Flow Freq. Pcnt.	Avg. Flow CFS	Max. Flow CFS	Total Volume 10^6 gal
CulvertA	90.04	188.23	307.08	219.060
CulvertI	95.11	240.10	311.77	295.167
CulvertB	98.78	69.60	163.42	88.861
CulvertD	98.60	218.39	406.00	278.328
CulvertN	82.64	6.82	13.24	7.280
CulvertE	94.25	263.40	460.53	320.876
CulvertC	98.59	17.13	57.54	21.827
CulvertH	98.59	19.45	68.17	24.784
CulvertM	0.00	0.00	0.00	0.000
CR40-I	74.05	318.11	600.45	304.488
CulvertG	98.43	7.32	25.65	9.317
CR40-G&H	2.36	40.86	90.11	1.244
Inglis	38.37	34.70	61.42	17.210
US19E	0.00	0.00	0.00	0.000
US19atD	0.00	0.00	0.00	0.000
System	64.65	1424.10	2396.18	1588.442

Attachment G - SWMM Printout for Existing Conditions Model

Link Flow Summary

Link	Type	Maximum Flow CFS	Time of Max Occurrence days hr:min	Maximum Velocity ft/sec	Max/ Full Flow	Max/ Full Depth
CulvertL	CONDUIT	37.84	0 12:05	3.62	1.58	0.77
6-to-13g	CONDUIT	59.31	0 19:00	1.48	0.01	0.09
2a-to-2b	CONDUIT	27.11	0 18:02	0.45	0.01	0.07
US19A	CONDUIT	307.08	0 19:03	5.04	0.73	0.72
US19B	CONDUIT	163.42	0 16:03	3.71	0.55	0.61
US19D	CONDUIT	406.00	0 17:14	4.90	0.93	0.86
US19E	CONDUIT	460.53	0 17:50	4.84	0.81	0.79
2a-to-4	CONDUIT	168.43	0 12:58	0.41	0.03	0.34
4-to-4a	CONDUIT	125.08	0 18:03	1.15	0.05	0.22
4b-to-4d	CONDUIT	0.00	0 00:00	0.00	0.00	0.00
4a-to-4j	CONDUIT	43.89	0 18:02	0.62	0.01	0.09
12-to-12a	CONDUIT	0.06	0 15:33	0.40	0.00	0.04
13a-to-13b	CONDUIT	550.69	0 17:48	2.10	0.24	0.68
13-to-13b	CONDUIT	0.00	0 00:00	0.00	0.00	0.00
13e-to-13d	CONDUIT	26.83	0 15:05	0.51	0.01	0.04
US19C	CONDUIT	57.54	0 12:30	3.91	0.68	0.70
13-to-H	CONDUIT	68.17	0 12:30	8.52	35.64	1.00
13b-to-I	CONDUIT	311.77	0 18:00	6.75	0.09	0.58
Overtop-at-M	CONDUIT	0.00	0 00:00	0.00	0.00	0.00
Overtop-at-I	CONDUIT	600.45	0 18:00	2.58	3.84	0.46
13-to-G	CONDUIT	25.65	0 12:30	5.13	48.46	1.00
13a-to-13d	CONDUIT	0.00	0 00:00	0.00	0.00	0.00
Overtop-at-G	CONDUIT	90.11	0 12:30	1.38	0.04	0.13
Berm-Overtop	CONDUIT	257.26	0 18:01	1.64	0.06	0.21
1-to-A	CONDUIT	307.08	0 19:03	1.48	0.02	0.10
2-to-B	CONDUIT	0.00	0 00:00	0.00	0.00	0.00
B-to-A	CONDUIT	0.00	0 00:00	0.00	0.00	0.00
13g-to-13h	CONDUIT	146.18	0 16:11	1.01	0.19	0.26
Overtop-at-N	CONDUIT	13.24	0 15:34	0.84	0.06	0.16
D-1	CHANNEL	319.92	0 18:04	1.77	0.25	0.56
C-3	CHANNEL	192.17	0 17:00	1.17	0.48	0.84
C-2	CHANNEL	508.50	0 17:41	2.30	0.41	0.85
13c-to-b	CHANNEL	851.56	0 18:02	4.02	0.04	0.32
2b-to-B	CONDUIT	90.24	0 16:38	1.17	0.06	0.18
D-2	CHANNEL	619.96	0 17:45	1.75	0.13	0.62
D-3	CHANNEL	22.96	0 17:03	0.41	0.03	0.41
4d-434	CONDUIT	81.18	0 16:32	1.21	0.01	0.10
13h-to13f	CONDUIT	396.57	0 18:00	3.81	0.30	0.43
13i-to-13a	CONDUIT	30.19	0 16:36	0.84	0.11	0.26
4j-to-13l	CONDUIT	63.41	0 17:36	0.10	0.01	0.35
13f-to13a	CONDUIT	492.31	0 17:50	1.15	0.05	0.23
4g-to-4f	CONDUIT	322.22	0 18:06	1.26	0.07	0.20
4f-to-4b	CONDUIT	0.00	0 00:00	0.00	0.00	0.00
4h-to-4i	CONDUIT	159.03	0 18:03	1.36	0.09	0.21
4i-D3	CONDUIT	565.76	0 18:00	2.17	0.19	0.30
4a-to-13h	CONDUIT	105.11	0 18:03	2.55	0.09	0.24
3c-to-13c	CHANNEL	300.95	0 18:00	3.46	0.23	0.66
11a-to-11	CONDUIT	151.59	0 20:54	1.57	0.06	0.18
9a-to-10a	CONDUIT	86.08	0 21:51	1.26	0.03	0.13
7a-to-8a	CONDUIT	72.95	0 19:01	1.18	0.03	0.12
7a-to7	CONDUIT	0.00	0 00:00	0.00	0.00	0.00
8a-to-9a	CONDUIT	151.24	0 23:13	1.67	0.07	0.20
8a-to-8	CONDUIT	0.00	0 00:00	0.00	0.00	0.00
3a-to-2a	CONDUIT	101.46	0 16:02	1.14	0.06	0.17
3-to-4	CONDUIT	258.36	0 19:00	1.16	0.09	0.36
5-to-3	CONDUIT	115.68	0 19:01	1.21	0.05	0.18
9a-to-9	CONDUIT	101.07	0 21:51	1.43	0.03	0.14
4-to-4h	CONDUIT	380.35	0 18:01	0.26	0.08	0.59
4a-to-4c	CONDUIT	43.89	0 18:02	0.62	0.01	0.09
2b-to-2	CONDUIT	3.79	0 16:38	0.15	0.00	0.02
4d2-to-4e2	CONDUIT	299.96	0 18:03	2.67	0.25	0.53
4d1-to-4c1	CONDUIT	0.00	0 00:00	0.00	0.00	0.00
2a-to4g	CONDUIT	40.69	0 18:01	0.21	0.00	0.08
4g-to-4h	CONDUIT	265.56	0 18:02	0.45	0.06	0.33
4f-to-4i	CONDUIT	361.64	0 17:41	1.52	0.04	0.14
4b-to-4d1	CONDUIT	72.72	0 12:39	1.00	0.04	0.14
13h-to13i	CONDUIT	0.00	0 00:00	0.00	0.00	0.00

Attachment G - SWMM Printout for Existing Conditions Model

Overtop	CONDUIT	61.42	0	17:50	0.98	0.02	0.11
Overtop-at-E	CONDUIT	0.00	0	00:00	0.00	0.00	0.00
Overtop-at-D	CONDUIT	0.00	0	00:00	0.00	0.00	0.00
4c-4e4	CONDUIT	67.24	0	17:03	1.14	0.00	0.09

Flow Classification Summary

Conduit	Adjusted /Actual Length	--- Dry	Fraction of Up Dry	Down Dry	Time in Flow Sub Crit	Sup Crit	Class Up Crit	Down Crit	Avg. Froude Number	Avg. Flow Change
CulvertL	1.00	0.02	0.00	0.00	0.00	0.00	0.00	0.98	0.33	0.0000
6-to-13g	1.00	0.18	0.00	0.00	0.00	0.00	0.00	0.82	0.37	0.0000
2a-to-2b	1.00	0.49	0.01	0.00	0.32	0.00	0.00	0.18	0.07	0.0000
US19A	1.00	0.10	0.00	0.00	0.90	0.00	0.00	0.00	0.40	0.0000
US19B	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.46	0.0000
US19D	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.46	0.0000
US19E	1.00	0.06	0.00	0.00	0.94	0.00	0.00	0.00	0.44	0.0000
2a-to-4	1.00	0.16	0.00	0.00	0.76	0.00	0.00	0.08	0.05	0.0000
4-to-4a	1.00	0.24	0.00	0.00	0.00	0.00	0.00	0.76	0.20	0.0000
4b-to-4d	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0000
4a-to-4j	1.00	0.11	0.00	0.00	0.00	0.00	0.00	0.89	0.15	0.0000
12-to-12a	1.00	0.17	0.00	0.00	0.00	0.00	0.00	0.83	0.17	0.0000
13a-to-13b	1.00	0.11	0.08	0.00	0.81	0.00	0.00	0.00	0.21	0.0000
13-to-13b	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0000
13e-to-13d	1.00	0.16	0.00	0.00	0.00	0.00	0.00	0.84	0.15	0.0000
US19C	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.46	0.0000
13-to-H	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.00	0.0005
13b-to-I	1.00	0.01	0.03	0.00	0.95	0.00	0.00	0.00	0.41	0.0000
Overtop-at-M	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0000
Overtop-at-I	1.00	0.26	0.00	0.00	0.74	0.00	0.00	0.00	0.41	0.0000
13-to-G	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.00	0.0003
13a-to-13d	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0000
Overtop-at-G	1.00	0.98	0.00	0.00	0.02	0.00	0.00	0.00	0.01	0.0000
Berm-Overtop	1.00	0.25	0.00	0.00	0.00	0.00	0.00	0.75	0.26	0.0000
1-to-A	1.00	0.09	0.00	0.00	0.00	0.00	0.00	0.91	0.34	0.0000
2-to-B	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0000
B-to-A	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0000
13g-to-13h	1.00	0.11	0.00	0.00	0.00	0.00	0.00	0.89	0.18	0.0000
Overtop-at-N	1.00	0.17	0.00	0.00	0.00	0.00	0.00	0.83	0.26	0.0000
D-1	1.00	0.03	0.00	0.00	0.00	0.00	0.00	0.97	0.23	0.0000
C-3	1.00	0.01	0.01	0.00	0.98	0.00	0.00	0.00	0.12	0.0000
C-2	1.00	0.01	0.00	0.00	0.50	0.00	0.00	0.49	0.33	0.0000
13c-to-b	1.00	0.11	0.00	0.00	0.74	0.00	0.00	0.14	0.39	0.0000
2b-to-B	1.00	0.10	0.00	0.00	0.00	0.00	0.00	0.90	0.20	0.0000
D-2	1.00	0.01	0.00	0.00	0.98	0.01	0.00	0.00	0.22	0.0000
D-3	1.00	0.01	0.01	0.00	0.98	0.00	0.00	0.00	0.03	0.0000
4d-434	1.00	0.21	0.00	0.00	0.00	0.00	0.00	0.79	0.25	0.0000
13h-to13f	1.00	0.17	0.00	0.00	0.00	0.00	0.00	0.83	0.61	0.0000
13i-to-13a	1.00	0.16	0.00	0.00	0.00	0.00	0.00	0.84	0.17	0.0000
4j-to-13l	1.00	0.13	0.04	0.00	0.83	0.00	0.00	0.00	0.01	0.0000
13f-to13a	1.00	0.19	0.00	0.00	0.00	0.00	0.00	0.81	0.21	0.0000
4g-to-4f	1.00	0.13	0.00	0.00	0.00	0.00	0.00	0.87	0.21	0.0000
4f-to-4b	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0000
4h-to-4i	1.00	0.24	0.00	0.00	0.00	0.00	0.00	0.76	0.21	0.0000
4i-D3	1.00	0.13	0.00	0.00	0.00	0.00	0.00	0.87	0.27	0.0000
4a-to-13h	1.00	0.11	0.00	0.00	0.00	0.00	0.00	0.89	0.55	0.0000
3c-to-13c	1.00	0.11	0.00	0.00	0.89	0.00	0.00	0.00	0.26	0.0000
11a-to-11	1.00	0.14	0.00	0.00	0.00	0.00	0.00	0.86	0.28	0.0000
9a-to-10a	1.00	0.08	0.00	0.00	0.00	0.00	0.00	0.92	0.25	0.0000
7a-to-8a	1.00	0.11	0.00	0.00	0.00	0.00	0.00	0.89	0.24	0.0000
7a-to7	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0000
8a-to-9a	1.00	0.02	0.00	0.00	0.00	0.00	0.00	0.98	0.30	0.0000
8a-to-8	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0000
3a-to-2a	1.00	0.11	0.00	0.00	0.00	0.00	0.00	0.89	0.20	0.0000
3-to-4	1.00	0.14	0.00	0.00	0.76	0.00	0.00	0.10	0.15	0.0000
5-to-3	1.00	0.12	0.00	0.00	0.59	0.00	0.00	0.29	0.24	0.0000
9a-to-9	1.00	0.08	0.00	0.00	0.00	0.00	0.00	0.92	0.29	0.0000
4-to-4h	1.00	0.09	0.00	0.00	0.84	0.00	0.00	0.06	0.03	0.0000
4a-to-4c	1.00	0.11	0.00	0.00	0.00	0.00	0.00	0.89	0.15	0.0000
2b-to-2	1.00	0.76	0.00	0.00	0.00	0.00	0.00	0.24	0.02	0.0000
4d2-to-4e2	1.00	0.21	0.00	0.00	0.00	0.00	0.00	0.79	0.33	0.0000

Attachment G - SWMM Printout for Existing Conditions Model

4d1-to-4c1	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0000
2a-to4g	1.00	0.27	0.23	0.00	0.50	0.00	0.00	0.00	0.03	0.0000
4g-to-4h	1.00	0.13	0.00	0.00	0.77	0.00	0.00	0.10	0.06	0.0000
4f-to-4i	1.00	0.11	0.00	0.00	0.17	0.00	0.00	0.72	0.28	0.0000
4b-to-4d1	1.00	0.04	0.00	0.00	0.00	0.00	0.00	0.96	0.18	0.0000
13h-to13i	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0000
Overtop	1.00	0.62	0.00	0.00	0.38	0.00	0.00	0.00	0.10	0.0000
Overtop-at-E	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0000
Overtop-at-D	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0000
4c-4e4	1.00	0.15	0.00	0.00	0.00	0.00	0.00	0.85	0.26	0.0000

 Conduit Surcharge Summary

Conduit	----- Both Ends	Hours Full Upstream	----- Dnstream	Hours Above Full Normal Flow	Hours Capacity Limited
CulvertL	0.01	0.01	0.01	38.17	0.01
US19A	0.01	0.01	0.01	20.13	0.01
US19B	0.01	0.01	0.01	14.90	0.01
US19D	0.01	0.01	0.01	35.63	0.01
US19E	0.01	0.01	0.01	32.22	0.01
13-to-H	44.89	44.89	44.89	45.18	44.89
Overtop-at-I	0.01	0.01	0.01	24.32	0.01
13-to-G	44.89	44.89	44.89	45.16	44.89

Analysis begun on: Mon Dec 07 12:36:20 2009
 Analysis ended on: Mon Dec 07 12:43:11 2009
 Total elapsed time: 00:06:51

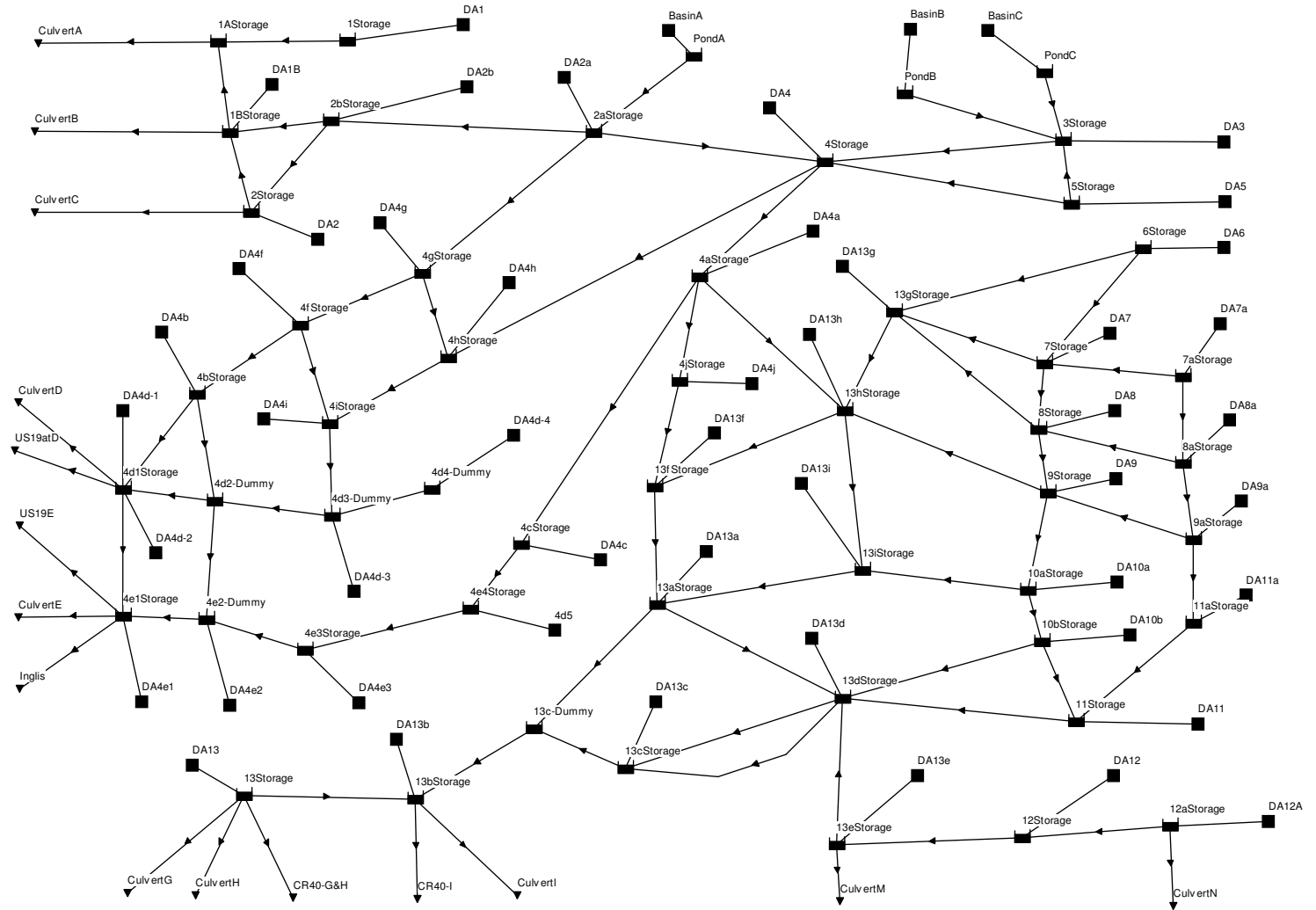
ATTACHMENT H

SWMM Printout for Proposed General Arrangement Model

Attachment H - SWMM Printout for Proposed General Arrangement

01/01/2008 00:30:00

RG1
10



Attachment H - SWMM Printout for Proposed General Arrangement

EPA STORM WATER MANAGEMENT MODEL - VERSION 5.0 (Build 5.0.017)

NOTE: The summary statistics displayed in this report are
based on results found at every computational time step,
not just on results from each reporting time step.

Analysis Options

Flow Units CFS
Process Models:
 Rainfall/Runoff YES
 Snowmelt NO
 Groundwater NO
 Flow Routing YES
 Water Quality NO
Infiltration Method CURVE_NUMBER
Flow Routing Method DYNWAVE
Starting Date JAN-01-2008 00:00:00
Ending Date JAN-03-2008 00:00:00
Antecedent Dry Days 5.0
Report Time Step 00:30:00
Wet Time Step 01:00:00
Dry Time Step 01:00:00
Routing Time Step 0.05 sec

WARNING 03: negative offset ignored for Link 13-to-H
WARNING 04: minimum elevation drop used for Conduit 13-to-H
WARNING 03: negative offset ignored for Link 13b-to-I
WARNING 03: negative offset ignored for Link Overtop-at-M
WARNING 04: minimum elevation drop used for Conduit Overtop-at-M
WARNING 03: negative offset ignored for Link Overtop-at-I
WARNING 04: minimum elevation drop used for Conduit Overtop-at-I
WARNING 03: negative offset ignored for Link 13-to-G
WARNING 04: minimum elevation drop used for Conduit 13-to-G
WARNING 03: negative offset ignored for Link D-2
WARNING 03: negative offset ignored for Link 4f-to-4i

Element Count

Number of rain gages 1
Number of subcatchments ... 50
Number of nodes 67
Number of links 87
Number of pollutants 0
Number of land uses 0

Raingage Summary

Name	Data Source	Data Type	Interval hours
RG1	TS1	CUMULATIVE	0.50

Subcatchment Summary

Name	Area	Width	%Imperv	%Slope	Rain Gage	Outlet
DA1	1600.02	4800.00	1.66	0.1500	RG1	1Storage
DA2	131.91	600.00	4.58	0.1000	RG1	2Storage
DA3	1087.00	3000.00	0.13	0.1500	RG1	3Storage
DA4a	270.98	1600.00	0.00	0.0500	RG1	4aStorage
DA4b	143.46	1000.00	5.76	0.0700	RG1	4bStorage
DA5	595.09	1800.00	0.00	0.1500	RG1	5Storage
DA6	286.29	1200.00	0.00	0.0900	RG1	6Storage
DA7	54.79	300.00	0.00	0.1600	RG1	7Storage
DA8	32.51	300.00	0.07	0.1100	RG1	8Storage
DA9	38.50	150.00	0.00	0.3900	RG1	9Storage
DA11	40.20	200.00	0.00	0.1800	RG1	11Storage
DA12	38.30	300.00	0.00	0.0800	RG1	12Storage

Attachment H - SWMM Printout for Proposed General Arrangement

DA13a	119.19	700.00	0.00	0.0900	RG1	13aStorage
DA13b	302.57	700.00	8.13	0.2700	RG1	13bStorage
DA2a	241.16	1200.00	11.04	0.0500	RG1	2aStorage
DA4	322.43	2000.00	5.01	0.0600	RG1	4Storage
DA4c	71.32	500.00	0.00	0.0800	RG1	4cStorage
DA4d-4	86.04	200.00	0.38	0.4800	RG1	4d4-Dummy
DA12A	38.30	200.00	0.00	0.2100	RG1	12aStorage
DA13	230.34	600.00	12.76	0.1300	RG1	13Storage
DA13c	94.15	150.00	15.54	0.3400	RG1	13cStorage
DA13d	251.81	800.00	4.98	0.0700	RG1	13dStorage
DA13e	34.89	100.00	9.13	0.0700	RG1	13eStorage
DA1B	125.93	1400.00	7.57	0.0300	RG1	1BStorage
DA13g	160.00	800.00	9.63	0.1300	RG1	13gStorage
DA4e1	73.43	200.00	7.75	0.1400	RG1	4e1Storage
DA4e2	91.35	500.00	4.87	0.0400	RG1	4e2-Dummy
DA4e3	455.84	2000.00	1.07	0.1000	RG1	4e3Storage
DA2b	119.48	1400.00	5.31	0.0400	RG1	2bStorage
DA4d-1	107.53	200.00	10.00	0.6500	RG1	4d1Storage
DA4d-2	69.77	100.00	4.37	0.7300	RG1	4d1Storage
DA4d-3	124.27	200.00	11.19	0.8600	RG1	4d3-Dummy
DA13h	105.67	600.00	5.73	0.1300	RG1	13hStorage
DA4i	175.74	1000.00	0.00	0.0600	RG1	4iStorage
DA4f	125.70	800.00	0.00	0.1100	RG1	4fStorage
DA4h	156.01	1100.00	0.00	0.0500	RG1	4hStorage
DA4g	54.07	300.00	0.00	0.1100	RG1	4gStorage
DA4j	69.45	300.00	0.00	0.1300	RG1	4jStorage
DA13f	115.56	400.00	0.00	0.2000	RG1	13fStorage
DA13i	62.90	300.00	6.98	0.1100	RG1	13iStorage
DA7a	350.17	1400.00	0.00	0.1000	RG1	7aStorage
DA8a	407.63	1400.00	0.07	0.1300	RG1	8aStorage
DA9a	137.06	1000.00	0.00	0.0600	RG1	9aStorage
DA10b	48.79	300.00	0.00	0.0800	RG1	10bStorage
DA11a	310.00	1400.00	0.00	0.0800	RG1	11aStorage
4d5	32.39	150.00	0.38	0.4800	RG1	4e4Storage
BasinA	245.96	80.00	98.00	0.0500	RG1	PondA
BasinB	78.08	30.00	98.00	0.0500	RG1	PondB
BasinC	134.70	50.00	98.00	0.0500	RG1	PondC
DA10a	44.75	300.00	0.00	0.0800	RG1	10aStorage

Node Summary

Name	Type	Invert Elev.	Max. Depth	Ponded Area	External Inflow
CulvertA	OUTFALL	29.40	6.00	0.0	
CulvertI	OUTFALL	14.00	8.00	0.0	
CulvertB	OUTFALL	32.90	3.00	0.0	
CulvertD	OUTFALL	14.40	4.00	0.0	
CulvertN	OUTFALL	27.00	6.30	0.0	
CulvertE	OUTFALL	13.90	4.00	0.0	
CulvertC	OUTFALL	36.20	3.00	0.0	
CulvertH	OUTFALL	14.00	2.00	0.0	
CulvertM	OUTFALL	31.00	1.00	0.0	
CR40-I	OUTFALL	19.50	1.00	0.0	
CulvertG	OUTFALL	14.00	2.00	0.0	
CR40-G&H	OUTFALL	18.60	1.00	0.0	
Inglis	OUTFALL	16.80	4.00	0.0	
US19E	OUTFALL	19.80	2.00	0.0	
US19atD	OUTFALL	21.80	1.00	0.0	
1Storage	STORAGE	20.00	21.00	5876840.0	
2Storage	STORAGE	36.00	9.00	2883033.0	
4aStorage	STORAGE	36.00	9.00	5183086.0	
4d1Storage	STORAGE	14.00	11.00	2539817.0	
6Storage	STORAGE	41.00	4.00	1519156.0	
11Storage	STORAGE	30.00	4.00	1656945.0	
12aStorage	STORAGE	28.00	5.00	376023.0	
13aStorage	STORAGE	28.00	7.00	3306836.0	
13bStorage	STORAGE	7.00	27.00	1000.0	
2aStorage	STORAGE	40.00	15.00	5870979.0	
4Storage	STORAGE	40.00	5.00	9607083.0	
4bStorage	STORAGE	36.00	5.00	3449412.0	
4cStorage	STORAGE	33.00	7.00	2427026.0	
13dStorage	STORAGE	25.00	7.00	5099208.0	
13eStorage	STORAGE	26.00	8.00	1520368.0	
12Storage	STORAGE	29.00	4.00	1034966.0	
13Storage	STORAGE	14.00	10.00	343358.0	
1AStorage	STORAGE	27.00	18.00	4573184.0	
1BStorage	STORAGE	33.00	12.00	3785072.0	

Attachment H - SWMM Printout for Proposed General Arrangement

13gStorage	STORAGE	39.00	3.00	4491631.0
4e1Storage	STORAGE	10.00	10.00	1998702.0
4e3Storage	STORAGE	17.00	7.00	7546725.0
4e2-Dummy	STORAGE	16.00	6.00	1000.0
13cStorage	STORAGE	16.00	12.00	995456.0
2bStorage	STORAGE	39.00	6.00	3306077.0
4d2-Dummy	STORAGE	21.00	5.00	1000.0
4d3-Dummy	STORAGE	27.00	6.00	1000.0
4d4-Dummy	STORAGE	27.00	7.00	1000.0
13hStorage	STORAGE	34.00	6.00	1220576.0
13iStorage	STORAGE	31.00	9.00	828624.0
13fStorage	STORAGE	33.00	5.00	528398.0
4jStorage	STORAGE	33.00	5.00	1597681.0
4gStorage	STORAGE	39.00	5.00	609211.0
4fStorage	STORAGE	39.00	3.00	4168738.0
4iStorage	STORAGE	33.00	7.00	4966993.0
4hStorage	STORAGE	37.00	6.00	2905671.0
3Storage	STORAGE	40.00	5.00	3833407.0
5Storage	STORAGE	42.00	4.00	1535480.0
7aStorage	STORAGE	43.00	3.00	1840366.0
8aStorage	STORAGE	40.00	2.00	3437432.0
9aStorage	STORAGE	37.00	5.00	2374058.0
10bStorage	STORAGE	32.00	6.00	763318.0
11aStorage	STORAGE	34.00	4.00	596584.0
13c-Dummy	STORAGE	20.00	5.00	1000.0
7Storage	STORAGE	40.00	2.00	672055.0
8Storage	STORAGE	40.00	2.00	751593.0
9Storage	STORAGE	34.00	4.00	585039.0
4e4Storage	STORAGE	31.00	5.00	594840.0
PondA	STORAGE	42.00	13.00	2787840.0
PondB	STORAGE	42.00	13.00	696960.0
PondC	STORAGE	42.00	13.00	1123848.0
10aStorage	STORAGE	33.00	5.00	986170.0

Link Summary

Name	From Node	To Node	Type	Length	%Slope	Roughness
CulvertL	13dStorage	13cStorage	CONDUIT	100.0	0.2000	0.0220
6-to-13g	6Storage	13gStorage	CONDUIT	150.0	0.3333	0.0150
10-to-13d	10bStorage	13dStorage	CONDUIT	150.0	0.3333	0.0150
11-to-13d	11Storage	13dStorage	CONDUIT	150.0	0.3333	0.0150
12a-to-13e	12Storage	13eStorage	CONDUIT	150.0	0.3333	0.0150
2a-to-2b	2aStorage	2bStorage	CONDUIT	150.0	0.6667	0.0150
US19A	1AStorage	CulvertA	CONDUIT	150.0	0.1333	0.0150
US19D	4d1Storage	CulvertD	CONDUIT	140.0	0.1429	0.0150
US19E	4e1Storage	CulvertE	CONDUIT	140.0	0.1429	0.0150
2a-to-4	2aStorage	4Storage	CONDUIT	150.0	0.6667	0.0150
4-to-4a	4Storage	4aStorage	CONDUIT	400.0	0.0500	0.0400
4b-to-4d	4bStorage	4d2-Dummy	CONDUIT	400.0	0.0500	0.0400
4a-to-4j	4aStorage	4jStorage	CONDUIT	400.0	0.0500	0.0400
12-to-12a	12aStorage	12Storage	CONDUIT	100.0	0.2000	0.0400
13a-to-13b	13aStorage	13c-Dummy	CONDUIT	3178.0	0.3461	0.0400
13-to-13b	13Storage	13bStorage	CONDUIT	400.0	0.0500	0.0400
13e-to-13d	13eStorage	13dStorage	CONDUIT	200.0	0.1000	0.0400
13-to-H	13Storage	CulvertH	CONDUIT	100.0	0.0010	0.0150
13b-to-I	CulvertI	13bStorage	CONDUIT	100.0	6.5138	0.0150
Overtop-at-M	13eStorage	CulvertM	CONDUIT	400.0	0.0003	0.0200
Overtop-at-I	13bStorage	CR40-I	CONDUIT	100.0	0.0010	0.0150
13-to-G	13Storage	CulvertG	CONDUIT	400.0	0.0003	0.0150
13a-to-13d	13aStorage	13dStorage	CONDUIT	400.0	0.0500	0.0400
Overtop-at-G	13Storage	CR40-G&H	CONDUIT	100.0	0.2000	0.0150
Berm-Overtop	13dStorage	13cStorage	CONDUIT	200.0	0.1000	0.0400
1-to-A	1Storage	1AStorage	CONDUIT	400.0	0.2500	0.0300
2-to-B	2Storage	1BStorage	CONDUIT	400.0	0.0500	0.0400
B-to-A	1BStorage	1AStorage	CONDUIT	150.0	0.6667	0.0150
13g-to-13h	13gStorage	13hStorage	CONDUIT	400.0	0.0500	0.0400
Overtop-at-N	12aStorage	CulvertN	CONDUIT	400.0	0.0500	0.0150
D-1	4d2-Dummy	4d1Storage	CONDUIT	1376.0	0.0727	0.0400
C-3	4e3Storage	4e2-Dummy	CONDUIT	1491.0	0.1341	0.0400
C-2	4e2-Dummy	4e1Storage	CONDUIT	441.0	0.2268	0.0400
13c-to-b	13c-Dummy	13bStorage	CONDUIT	750.0	0.4000	0.0400
2b-to-B	2bStorage	1BStorage	CONDUIT	400.0	0.0500	0.0400
D-2	4d3-Dummy	4d2-Dummy	CONDUIT	1699.0	0.3532	0.0400
D-3	4d4-Dummy	4d3-Dummy	CONDUIT	686.0	0.1458	0.0800
4c-d4	4e4Storage	4e3Storage	CONDUIT	400.0	0.2500	0.0400
13h-to13f	13hStorage	13fStorage	CONDUIT	400.0	0.0500	0.0100
13i-to-13a	13iStorage	13aStorage	CONDUIT	400.0	0.0500	0.0400

Attachment H - SWMM Printout for Proposed General Arrangement

4j-to-13l	4jStorage	13fStorage	CONDUIT	400.0	0.0500	0.0400
13f-to13a	13fStorage	13aStorage	CONDUIT	400.0	0.2500	0.0400
4g-to-4f	4gStorage	4fStorage	CONDUIT	400.0	0.0500	0.0400
4f-to-4b	4fStorage	4bStorage	CONDUIT	400.0	0.0500	0.0400
4h-to-4i	4hStorage	4iStorage	CONDUIT	400.0	0.0500	0.0400
4i-D3	4iStorage	4d3-Dummy	CONDUIT	400.0	0.0500	0.0400
4a-to-13h	4aStorage	13hStorage	CONDUIT	400.0	0.0500	0.0100
3c-to-13c	13cStorage	13c-Dummy	CONDUIT	750.0	0.4000	0.0400
11a-to-11l	11aStorage	11Storage	CONDUIT	200.0	0.1000	0.0400
9a-to-11a	9aStorage	11aStorage	CONDUIT	200.0	0.1000	0.0400
7a-to-8a	7aStorage	8aStorage	CONDUIT	200.0	0.1000	0.0400
7a-to7	7aStorage	7Storage	CONDUIT	200.0	0.1000	0.0400
8a-to-9a	8aStorage	9aStorage	CONDUIT	200.0	0.1000	0.0400
8a-to-8	8aStorage	8Storage	CONDUIT	200.0	0.1000	0.0400
3-to-4	3Storage	4Storage	CONDUIT	150.0	0.6667	0.0150
5-to-3	5Storage	3Storage	CONDUIT	200.0	0.1000	0.0400
9a-to-9	9aStorage	9Storage	CONDUIT	200.0	0.1000	0.0400
10b-to-11	10bStorage	11Storage	CONDUIT	200.0	0.1000	0.0400
4-to-4h	4Storage	4hStorage	CONDUIT	400.0	0.0500	0.0400
4a-to-4c	4aStorage	4cStorage	CONDUIT	400.0	0.0500	0.0400
2b-to-2	2bStorage	2Storage	CONDUIT	400.0	0.0500	0.0400
4d2-to-4e2	4d2-Dummy	4e2-Dummy	CONDUIT	400.0	0.2500	0.0400
4d1-to-4c1	4d1Storage	4e1Storage	CONDUIT	400.0	0.2500	0.0400
4g-to-4h	4gStorage	4hStorage	CONDUIT	400.0	0.0500	0.0400
4f-to-4i	4fStorage	4iStorage	CONDUIT	400.0	0.3000	0.0400
4b-to-4d1	4bStorage	4d1Storage	CONDUIT	400.0	0.0500	0.0400
13h-to13i	13hStorage	13iStorage	CONDUIT	400.0	0.0500	0.0400
Overtop	4e1Storage	Inglis	CONDUIT	200.0	0.1000	0.0400
Overtop-at-E	4e1Storage	US19E	CONDUIT	150.0	0.1333	0.0150
Overtop-at-D	4d1Storage	US19atD	CONDUIT	150.0	0.1333	0.0150
7-to-13h	7Storage	13gStorage	CONDUIT	150.0	0.3333	0.0150
8-to-13h	8Storage	13gStorage	CONDUIT	150.0	0.3333	0.0150
9-to13h	9Storage	13hStorage	CONDUIT	150.0	0.0667	0.0150
9-to10b	9Storage	10aStorage	CONDUIT	200.0	0.1000	0.0400
5-to-4	5Storage	4Storage	CONDUIT	150.0	0.6667	0.0150
8-to-9	8Storage	9Storage	CONDUIT	200.0	0.1000	0.0400
7-to-8	7Storage	8Storage	CONDUIT	200.0	0.1000	0.0400
4c-to-4e4	4cStorage	4e4Storage	CONDUIT	400.0	0.2500	0.0400
PondA-Discharge	PondA	2aStorage	CONDUIT	100.0	0.5000	0.0150
PondB-Discharge	PondB	3Storage	CONDUIT	100.0	0.5000	0.0150
PondC-Discharge	PondC	3Storage	CONDUIT	100.0	0.5000	0.0150
6-to7	6Storage	7Storage	CONDUIT	200.0	0.1000	0.0400
10a-to-b	10aStorage	10bStorage	CONDUIT	200.0	0.1000	0.0400
10a-to-13i	10aStorage	13iStorage	CONDUIT	150.0	0.6667	0.0150
US19B	1BStorage	CulvertB	CONDUIT	130.0	0.1538	0.0150
US19C	2Storage	CulvertC	CONDUIT	130.0	0.1538	0.0150
AccessRdOvertop	2aStorage	4gStorage	CONDUIT	400.0	0.2500	0.0150

Cross Section Summary

Conduit	Shape	Full Depth	Full Area	Hyd. Rad.	Max. Width	No. of Barrels	Full Flow
CulvertL	CIRCULAR	2.00	3.14	0.50	2.00	4	5.98
6-to-13g	CIRCULAR	2.00	3.14	0.50	2.00	3	11.32
10-to-13d	CIRCULAR	3.00	7.07	0.75	3.00	3	33.37
11-to-13d	CIRCULAR	3.00	7.07	0.75	3.00	6	33.37
12a-to-13e	CIRCULAR	2.00	3.14	0.50	2.00	6	11.32
2a-to-2b	CIRCULAR	2.50	4.91	0.63	2.50	3	29.03
US19A	RECT_CLOSED	6.00	42.00	1.62	7.00	3	209.17
US19D	RECT_CLOSED	4.00	32.00	1.33	8.00	3	145.15
US19E	RECT_CLOSED	4.00	40.00	1.43	10.00	3	189.98
2a-to-4	CIRCULAR	2.00	3.14	0.50	2.00	5	16.01
4-to-4a	TRAPEZOIDAL	4.00	1760.00	2.10	840.00	1	2393.86
4b-to-4d	TRAPEZOIDAL	4.00	1200.00	2.40	500.00	1	1786.71
4a-to-4j	TRAPEZOIDAL	4.00	1200.00	2.40	500.00	1	1786.71
12-to-12a	TRAPEZOIDAL	4.00	96.00	1.97	48.00	1	250.88
13a-to-13b	TRAPEZOIDAL	5.00	550.00	2.62	210.00	1	2282.23
13-to-13b	TRAPEZOIDAL	4.00	120.00	2.36	50.00	1	176.83
13e-to-13d	TRAPEZOIDAL	4.00	2000.00	2.86	700.00	1	4730.54
13-to-H	RECT_CLOSED	2.00	8.00	0.67	4.00	1	1.91
13b-to-I	RECT_CLOSED	8.00	80.00	2.22	10.00	1	3444.50
Overtop-at-M	RECT_OPEN	1.00	100.00	0.98	100.00	1	11.59
Overtop-at-I	RECT_OPEN	1.00	500.00	1.00	500.00	1	156.22
13-to-G	RECT_CLOSED	2.00	5.00	0.56	2.50	1	0.53
13a-to-13d	TRAPEZOIDAL	4.00	360.00	2.12	170.00	1	492.77
Overtop-at-G	RECT_OPEN	1.00	500.00	1.00	500.00	1	2209.31
Berm-Overtop	TRAPEZOIDAL	4.00	2000.00	2.22	900.00	1	4000.99

Attachment H - SWMM Printout for Proposed General Arrangement

1-to-A	TRAPEZOIDAL	4.00	2800.00	3.11	900.00	1	14777.84
2-to-B	TRAPEZOIDAL	4.00	1200.00	2.40	500.00	1	1786.71
B-to-A	CIRCULAR	4.00	12.57	1.00	4.00	3	101.65
13g-to-13h	TRAPEZOIDAL	2.00	700.00	1.56	450.00	1	780.62
Overtop-at-N	RECT_OPEN	1.00	100.00	0.98	100.00	1	218.61
D-1	4d2	5.00	908.00	1.64	543.00	1	1264.28
C-3	4e3	2.00	206.50	1.70	139.00	1	399.44
C-2	4e2	3.00	708.50	0.98	650.00	1	1234.42
13c-to-b	13b	11.00	4512.50	3.44	1380.00	1	24149.68
2b-to-B	TRAPEZOIDAL	4.00	1080.00	2.30	470.00	1	1562.08
D-2	4D3	5.00	1245.00	2.19	826.00	1	4642.21
D-3	4d4	5.00	709.00	2.23	334.00	1	858.66
4c-d4	TRAPEZOIDAL	6.00	3900.00	3.12	1250.00	1	15467.37
13h-to13f	TRAPEZOIDAL	2.00	320.00	1.39	230.00	1	1324.94
13i-to-13a	TRAPEZOIDAL	2.00	290.00	1.18	245.00	1	269.54
4j-to-13l	TRAPEZOIDAL	2.00	1000.00	1.43	700.00	1	1053.67
13f-to13a	TRAPEZOIDAL	4.00	6800.00	2.06	3300.00	1	20453.49
4g-to-4f	TRAPEZOIDAL	4.00	3200.00	2.29	1400.00	1	4612.50
4f-to-4b	TRAPEZOIDAL	4.00	3480.00	2.08	1670.00	1	4716.23
4h-to-4i	TRAPEZOIDAL	4.00	1200.00	2.40	500.00	1	1786.71
4i-D3	TRAPEZOIDAL	5.00	1750.00	2.92	600.00	1	2967.28
4a-to-13h	TRAPEZOIDAL	2.00	280.00	1.33	210.00	1	1126.87
3c-to-13c	13c	5.00	312.50	2.34	207.00	1	1295.54
11a-to-11	TRAPEZOIDAL	4.00	1200.00	2.40	500.00	1	2526.78
9a-to-11a	TRAPEZOIDAL	4.00	1200.00	2.40	500.00	1	2526.78
7a-to-8a	TRAPEZOIDAL	4.00	1200.00	2.40	500.00	1	2526.78
7a-to7	TRAPEZOIDAL	4.00	720.00	2.77	260.00	1	1667.15
8a-to-9a	TRAPEZOIDAL	4.00	1080.00	2.30	470.00	1	2209.11
8a-to-8	TRAPEZOIDAL	4.00	1600.00	2.67	600.00	1	3614.26
3-to-4	CIRCULAR	4.00	12.57	1.00	4.00	6	101.65
5-to-3	TRAPEZOIDAL	4.00	1200.00	2.40	500.00	1	2526.78
9a-to-9	TRAPEZOIDAL	4.00	1200.00	2.40	500.00	1	2526.78
10b-to-11	TRAPEZOIDAL	4.00	2800.00	3.11	900.00	1	7009.73
4-to-4h	TRAPEZOIDAL	4.00	6000.00	2.40	2500.00	1	8934.44
4a-to-4c	TRAPEZOIDAL	4.00	3000.00	2.22	1350.00	1	4243.76
2b-to-2	TRAPEZOIDAL	4.00	2400.00	3.00	800.00	1	4146.74
4d2-to-4e2	TRIANGULAR	4.00	400.00	2.00	200.00	1	1178.81
4d1-to-4c1	TRAPEZOIDAL	4.00	1200.00	2.40	500.00	1	3995.20
4g-to-4h	TRAPEZOIDAL	4.00	2400.00	3.00	800.00	1	4146.74
4f-to-4i	TRAPEZOIDAL	4.00	2400.00	3.00	800.00	1	10157.42
4b-to-4d1	TRAPEZOIDAL	4.00	1200.00	2.40	500.00	1	1786.71
13h-to13i	TRAPEZOIDAL	2.00	700.00	1.56	450.00	1	780.62
Overtop	TRAPEZOIDAL	4.00	2000.00	2.22	900.00	1	4000.99
Overtop-at-E	RECT_OPEN	2.00	200.00	1.92	100.00	1	1118.81
Overtop-at-D	RECT_OPEN	1.00	100.00	0.98	100.00	1	357.00
7-to-13h	CIRCULAR	2.00	3.14	0.50	2.00	4	11.32
8-to-13h	CIRCULAR	2.00	3.14	0.50	2.00	6	11.32
9-to13h	CIRCULAR	2.00	3.14	0.50	2.00	6	5.06
9-to10b	TRAPEZOIDAL	4.00	2800.00	3.11	900.00	1	7009.73
5-to-4	CIRCULAR	2.50	4.91	0.63	2.50	4	29.03
8-to-9	TRAPEZOIDAL	4.00	920.00	2.14	430.00	1	1794.34
7-to-8	TRAPEZOIDAL	4.00	1000.00	2.22	450.00	1	2000.32
4c-to-4e4	TRAPEZOIDAL	6.00	3900.00	3.12	1250.00	1	15467.37
PondA-Discharge	TRAPEZOIDAL	4.00	316.00	3.42	91.00	1	5028.42
PondB-Discharge	TRAPEZOIDAL	4.00	208.00	3.19	64.00	1	3154.42
PondC-Discharge	TRAPEZOIDAL	4.00	208.00	3.19	64.00	1	3154.42
6-to7	TRAPEZOIDAL	4.00	1000.00	2.22	450.00	1	2000.32
10a-to-b	TRAPEZOIDAL	4.00	1600.00	2.67	600.00	1	3614.26
10a-to-13i	CIRCULAR	3.00	7.07	0.75	3.00	6	47.20
US19B	RECT_CLOSED	3.00	24.00	1.09	8.00	3	98.83
US19C	RECT_CLOSED	3.00	21.00	1.05	7.00	1	84.30
AccessRdOvertop	TRAPEZOIDAL	4.00	6000.00	2.40	2500.00	1	53274.80

Transect Summary

Transect 4D3
Area:

0.0003	0.0013	0.0030	0.0054	0.0084
0.0121	0.0165	0.0216	0.0273	0.0337
0.0407	0.0482	0.0561	0.0645	0.0734
0.0827	0.0926	0.1029	0.1137	0.1249
0.1367	0.1490	0.1620	0.1755	0.1896
0.2042	0.2195	0.2353	0.2517	0.2687
0.2863	0.3048	0.3241	0.3442	0.3652
0.3869	0.4094	0.4328	0.4570	0.4819
0.5207	0.5623	0.6068	0.6543	0.7046

Attachment H - SWMM Printout for Proposed General Arrangement

Hrad:	0.7579	0.8140	0.8731	0.9351	1.0000
	0.0227	0.0454	0.0680	0.0907	0.1134
	0.1361	0.1588	0.1814	0.2041	0.2268
	0.2558	0.2840	0.3115	0.3385	0.3651
	0.3913	0.4171	0.4427	0.4680	0.4931
	0.5137	0.5346	0.5555	0.5767	0.5979
	0.6193	0.6407	0.6623	0.6839	0.7056
	0.7494	0.7907	0.8296	0.8664	0.9013
	0.9345	0.9663	0.9967	1.0258	1.0411
	1.0334	1.0266	1.0204	1.0150	1.0103
	1.0065	1.0035	1.0014	1.0003	1.0000

Width:	0.0102	0.0203	0.0305	0.0407	0.0508
	0.0610	0.0712	0.0814	0.0915	0.1017
	0.1088	0.1160	0.1231	0.1303	0.1374
	0.1446	0.1517	0.1588	0.1660	0.1731
	0.1818	0.1906	0.1993	0.2080	0.2167
	0.2254	0.2341	0.2429	0.2516	0.2603
	0.2725	0.2847	0.2970	0.3092	0.3214
	0.3337	0.3459	0.3581	0.3703	0.5617
	0.6056	0.6494	0.6932	0.7370	0.7809
	0.8247	0.8685	0.9123	0.9562	1.0000

Transect 4d2

Area:	0.0008	0.0017	0.0026	0.0036	0.0047
	0.0058	0.0070	0.0083	0.0096	0.0110
	0.0131	0.0163	0.0208	0.0265	0.0335
	0.0416	0.0510	0.0616	0.0734	0.0865
	0.1001	0.1138	0.1275	0.1413	0.1550
	0.1688	0.1826	0.1964	0.2103	0.2241
	0.2434	0.2647	0.2881	0.3135	0.3409
	0.3703	0.4017	0.4352	0.4707	0.5083
	0.5479	0.5896	0.6335	0.6794	0.7276
	0.7778	0.8302	0.8846	0.9413	1.0000

Hrad:	0.0581	0.1117	0.1618	0.2091	0.2541
	0.2972	0.3387	0.3789	0.4179	0.4560
	0.4741	0.4557	0.4287	0.4057	0.3902
	0.3820	0.3797	0.3821	0.3881	0.3968
	0.4280	0.4622	0.4984	0.5359	0.5744
	0.6135	0.6532	0.6932	0.7335	0.7740
	0.7936	0.8099	0.8234	0.8348	0.8450
	0.8543	0.8633	0.8722	0.8812	0.8904
	0.8995	0.9089	0.9187	0.9289	0.9396
	0.9508	0.9624	0.9745	0.9870	1.0000

Width:	0.0140	0.0151	0.0162	0.0173	0.0184
	0.0195	0.0206	0.0217	0.0228	0.0239
	0.0444	0.0648	0.0853	0.1057	0.1262
	0.1466	0.1670	0.1875	0.2079	0.2284
	0.2287	0.2291	0.2295	0.2298	0.2302
	0.2306	0.2309	0.2313	0.2317	0.3057
	0.3396	0.3735	0.4074	0.4413	0.4751
	0.5090	0.5429	0.5768	0.6107	0.6446
	0.6801	0.7157	0.7512	0.7867	0.8223
	0.8578	0.8934	0.9289	0.9645	1.0000

Transect 4d4

Area:	0.0010	0.0024	0.0041	0.0061	0.0085
	0.0112	0.0142	0.0176	0.0213	0.0254
	0.0379	0.0507	0.0636	0.0768	0.0903
	0.1039	0.1178	0.1319	0.1462	0.1608
	0.1759	0.1917	0.2083	0.2258	0.2440
	0.2630	0.2828	0.3034	0.3248	0.3470
	0.3699	0.3937	0.4182	0.4436	0.4697
	0.4966	0.5243	0.5528	0.5821	0.6121
	0.6434	0.6764	0.7110	0.7473	0.7853
	0.8249	0.8662	0.9091	0.9537	1.0000

Hrad:	0.0382	0.0693	0.0971	0.1232	0.1483
	0.1727	0.1967	0.2203	0.2436	0.1273
	0.1547	0.1884	0.2237	0.2593	0.2949
	0.3303	0.3653	0.4000	0.4343	0.4682
	0.5004	0.5307	0.5593	0.5864	0.6124
	0.6373	0.6613	0.6844	0.7069	0.7288
	0.7521	0.7747	0.7967	0.8182	0.8392
	0.8598	0.8800	0.8998	0.9194	0.9386

Attachment H - SWMM Printout for Proposed General Arrangement

Width:	0.9426	0.9473	0.9526	0.9583	0.9645
	0.9710	0.9778	0.9849	0.9923	1.0000
	0.0251	0.0323	0.0395	0.0467	0.0539
	0.0611	0.0683	0.0754	0.0826	0.2635
	0.2683	0.2731	0.2778	0.2826	0.2874
	0.2922	0.2970	0.3018	0.3066	0.3114
	0.3281	0.3449	0.3617	0.3784	0.3952
	0.4120	0.4287	0.4455	0.4623	0.4790
	0.4958	0.5126	0.5293	0.5461	0.5629
	0.5796	0.5964	0.6132	0.6299	0.6467
	0.6820	0.7174	0.7527	0.7880	0.8234
	0.8587	0.8940	0.9293	0.9647	1.0000

Transect 4D5

Area:	0.0037	0.0080	0.0129	0.0182	0.0242
	0.0307	0.0377	0.0453	0.0535	0.0622
	0.0715	0.0813	0.0917	0.1026	0.1141
	0.1261	0.1387	0.1521	0.1664	0.1815
	0.1974	0.2143	0.2319	0.2504	0.2698
	0.2900	0.3111	0.3331	0.3559	0.3795
	0.4040	0.4293	0.4555	0.4847	0.5152
	0.5459	0.5768	0.6080	0.6394	0.6711
	0.7029	0.7350	0.7674	0.7999	0.8327
	0.8657	0.8989	0.9324	0.9661	1.0000

Hrad:	0.0311	0.0593	0.0854	0.1099	0.1330
	0.1551	0.1764	0.1970	0.2170	0.2365
	0.2557	0.2745	0.2930	0.3113	0.3294
	0.3473	0.3635	0.3765	0.3897	0.4029
	0.4163	0.4297	0.4431	0.4566	0.4702
	0.4838	0.4975	0.5111	0.5249	0.5386
	0.5524	0.5662	0.5801	0.5901	0.6155
	0.6410	0.6667	0.6924	0.7183	0.7441
	0.7699	0.7957	0.8215	0.8472	0.8729
	0.8985	0.9240	0.9494	0.9747	1.0000

Width:	0.1177	0.1340	0.1503	0.1665	0.1828
	0.1991	0.2154	0.2316	0.2479	0.2642
	0.2805	0.2967	0.3130	0.3293	0.3455
	0.3618	0.3810	0.4061	0.4312	0.4563
	0.4814	0.5065	0.5316	0.5567	0.5818
	0.6069	0.6320	0.6571	0.6822	0.7072
	0.7323	0.7574	0.7825	0.8076	0.8327
	0.9061	0.9128	0.9195	0.9262	0.9329
	0.9396	0.9463	0.9530	0.9598	0.9665
	0.9732	0.9799	0.9866	0.9933	1.0000

Transect 4e2

Area:	0.0005	0.0011	0.0020	0.0032	0.0046
	0.0061	0.0080	0.0100	0.0123	0.0148
	0.0176	0.0205	0.0237	0.0272	0.0308
	0.0347	0.0388	0.0432	0.0480	0.0532
	0.0587	0.0645	0.0707	0.0773	0.0842
	0.0914	0.0990	0.1069	0.1152	0.1239
	0.1329	0.1422	0.1519	0.1863	0.2332
	0.2806	0.3286	0.3771	0.4262	0.4757
	0.5258	0.5764	0.6275	0.6791	0.7313
	0.7840	0.8372	0.8910	0.9452	1.0000

Hrad:	0.0488	0.0871	0.1219	0.1551	0.1875
	0.2194	0.2509	0.2823	0.3134	0.3445
	0.3755	0.4064	0.4372	0.4680	0.4988
	0.5295	0.5627	0.5983	0.6309	0.6612
	0.6899	0.7173	0.7438	0.7695	0.7946
	0.8194	0.8438	0.8681	0.8922	0.9161
	0.9400	0.9639	0.9877	0.8457	0.7339
	0.6847	0.6667	0.6662	0.6765	0.6939
	0.7160	0.7416	0.7697	0.7997	0.8311
	0.8635	0.8968	0.9307	0.9652	1.0000

Width:	0.0103	0.0145	0.0186	0.0228	0.0269
	0.0311	0.0352	0.0394	0.0435	0.0477
	0.0518	0.0560	0.0602	0.0643	0.0685
	0.0726	0.0775	0.0839	0.0902	0.0966
	0.1030	0.1094	0.1157	0.1221	0.1285
	0.1348	0.1412	0.1476	0.1539	0.1603
	0.1667	0.1730	0.1794	0.8479	0.8574

Attachment H - SWMM Printout for Proposed General Arrangement

0.8669	0.8764	0.8859	0.8954	0.9049
0.9144	0.9239	0.9334	0.9430	0.9525
0.9620	0.9715	0.9810	0.9905	1.0000

Transect 4e3

Area:

0.0148	0.0298	0.0450	0.0603	0.0758
0.0915	0.1074	0.1235	0.1397	0.1561
0.1727	0.1895	0.2064	0.2236	0.2409
0.2584	0.2760	0.2939	0.3119	0.3301
0.3484	0.3670	0.3857	0.4046	0.4237
0.4431	0.4627	0.4827	0.5029	0.5235
0.5444	0.5656	0.5871	0.6089	0.6310
0.6534	0.6762	0.6992	0.7226	0.7462
0.7702	0.7945	0.8191	0.8440	0.8692
0.8948	0.9206	0.9468	0.9732	1.0000

Hrad:

0.0234	0.0464	0.0693	0.0918	0.1141
0.1362	0.1580	0.1797	0.2011	0.2222
0.2432	0.2640	0.2846	0.3050	0.3252
0.3453	0.3652	0.3849	0.4045	0.4239
0.4432	0.4623	0.4813	0.5001	0.5188
0.5420	0.5647	0.5870	0.6089	0.6303
0.6514	0.6721	0.6925	0.7126	0.7324
0.7519	0.7711	0.7900	0.8087	0.8272
0.8454	0.8634	0.8811	0.8987	0.9160
0.9332	0.9502	0.9670	0.9836	1.0000

Width:

0.5534	0.5600	0.5666	0.5732	0.5799
0.5865	0.5931	0.5997	0.6063	0.6129
0.6196	0.6262	0.6328	0.6394	0.6460
0.6527	0.6593	0.6659	0.6725	0.6791
0.6858	0.6924	0.6990	0.7056	0.7122
0.7237	0.7353	0.7468	0.7583	0.7698
0.7813	0.7928	0.8043	0.8158	0.8273
0.8388	0.8504	0.8619	0.8734	0.8849
0.8964	0.9079	0.9194	0.9309	0.9424
0.9540	0.9655	0.9770	0.9885	1.0000

Transect 13c

Area:

0.0060	0.0123	0.0190	0.0261	0.0336
0.0415	0.0497	0.0584	0.0674	0.0768
0.0865	0.0966	0.1069	0.1175	0.1284
0.1396	0.1511	0.1628	0.1749	0.1872
0.1999	0.2130	0.2265	0.2404	0.2548
0.2696	0.2848	0.3004	0.3164	0.3328
0.3499	0.3678	0.3866	0.4063	0.4268
0.4482	0.4704	0.4936	0.5176	0.5424
0.5697	0.6012	0.6367	0.6763	0.7200
0.7678	0.8197	0.8757	0.9358	1.0000

Hrad:

0.0411	0.0799	0.1166	0.1516	0.1853
0.2177	0.2490	0.2795	0.3091	0.3380
0.3696	0.4006	0.4310	0.4609	0.4902
0.5192	0.5477	0.5758	0.6036	0.6311
0.6521	0.6730	0.6940	0.7150	0.7360
0.7570	0.7780	0.7990	0.8200	0.8409
0.8814	0.9189	0.9535	0.9854	1.0149
1.0421	1.0672	1.0904	1.1117	1.1314
1.1422	1.1446	1.1394	1.1281	1.1120
1.0926	1.0708	1.0477	1.0239	1.0000

Width:

0.0928	0.0986	0.1043	0.1101	0.1159
0.1217	0.1275	0.1333	0.1391	0.1449
0.1493	0.1536	0.1580	0.1623	0.1667
0.1710	0.1754	0.1797	0.1841	0.1884
0.1947	0.2010	0.2072	0.2135	0.2198
0.2261	0.2324	0.2386	0.2449	0.2512
0.2643	0.2773	0.2903	0.3034	0.3164
0.3295	0.3425	0.3556	0.3686	0.3816
0.4435	0.5053	0.5671	0.6290	0.6908
0.7527	0.8145	0.8763	0.9382	1.0000

Transect 13b

Area:

0.0008	0.0018	0.0033	0.0050	0.0071
0.0093	0.0118	0.0144	0.0171	0.0202
0.0237	0.0277	0.0322	0.0371	0.0421
0.0474	0.0528	0.0583	0.0639	0.0698

Attachment H - SWMM Printout for Proposed General Arrangement

	0.0760	0.0823	0.0889	0.0958	0.1030
	0.1105	0.1184	0.1296	0.1434	0.1586
	0.1752	0.1936	0.2144	0.2355	0.2570
	0.2788	0.3138	0.3568	0.4004	0.4446
	0.4895	0.5352	0.5816	0.6288	0.6767
	0.7344	0.8001	0.8663	0.9329	1.0000
Hrad:					
	0.0521	0.0934	0.1307	0.1661	0.2065
	0.2524	0.2963	0.3385	0.3795	0.3883
	0.4001	0.4163	0.4355	0.4673	0.5170
	0.5658	0.6136	0.6607	0.6988	0.7347
	0.7702	0.8055	0.8374	0.8611	0.8855
	0.9105	0.9361	0.9462	0.9490	0.9503
	0.9509	0.9390	0.9265	0.9247	0.9305
	0.9419	0.9177	0.8948	0.8890	0.8940
	0.9062	0.9227	0.9427	0.9654	0.9900
	0.8982	0.9191	0.9435	0.9707	1.0000
Width:					
	0.0136	0.0186	0.0235	0.0285	0.0323
	0.0349	0.0374	0.0400	0.0425	0.0490
	0.0558	0.0627	0.0696	0.0747	0.0767
	0.0788	0.0809	0.0830	0.0861	0.0894
	0.0928	0.0961	0.0999	0.1046	0.1094
	0.1142	0.1190	0.1933	0.2150	0.2367
	0.2583	0.3054	0.3109	0.3165	0.3221
	0.3277	0.6331	0.6430	0.6529	0.6628
	0.6728	0.6841	0.6954	0.7067	0.7180
	0.9739	0.9804	0.9869	0.9935	1.0000

WARNING 01: wet weather time step reduced to recording interval for Rain Gage RG1

*****	Volume	Depth
Runoff Quantity Continuity	acre-feet	inches
*****	-----	-----
Total Precipitation	9504.694	11.300
Evaporation Loss	0.000	0.000
Infiltration Loss	1136.958	1.352
Surface Runoff	4963.254	5.901
Final Surface Storage	3409.433	4.053
Continuity Error (%)	-0.052	

*****	Volume	Volume
Flow Routing Continuity	acre-feet	10^6 gal
*****	-----	-----
Dry Weather Inflow	0.000	0.000
Wet Weather Inflow	4931.906	1607.135
Groundwater Inflow	0.000	0.000
RDII Inflow	0.000	0.000
External Inflow	0.000	0.000
External Outflow	4789.556	1560.748
Internal Outflow	0.000	0.000
Storage Losses	0.000	0.000
Initial Stored Volume	1.266	0.413
Final Stored Volume	135.917	44.291
Continuity Error (%)	0.156	

Highest Continuity Errors

Node 4jStorage (1.04%)

Time-Step Critical Elements

None

Highest Flow Instability Indexes

Link 3-to-4 (2)

Routing Time Step Summary

Minimum Time Step : 0.05 sec

Attachment H - SWMM Printout for Proposed General Arrangement

Average Time Step : 0.05 sec
 Maximum Time Step : 0.05 sec
 Percent in Steady State : 0.00
 Average Iterations per Step : 2.00

 Subcatchment Runoff Summary

Subcatchment	Total Precip in	Total Runon in	Total Evap in	Total Infil in	Total Runoff in	Total Runoff 10^6 gal	Peak Runoff CFS	Runoff Coeff
DA1	11.300	0.000	0.000	2.135	4.863	211.299	323.954	0.430
DA2	11.300	0.000	0.000	1.609	5.981	21.424	57.220	0.529
DA3	11.300	0.000	0.000	1.453	5.012	147.942	202.082	0.444
DA4a	11.300	0.000	0.000	0.529	6.279	46.203	67.845	0.556
DA4b	11.300	0.000	0.000	1.320	6.878	26.792	80.243	0.609
DA5	11.300	0.000	0.000	1.609	5.133	82.937	115.691	0.454
DA6	11.300	0.000	0.000	1.543	5.366	41.718	59.313	0.475
DA7	11.300	0.000	0.000	1.532	6.759	10.055	17.356	0.598
DA8	11.300	0.000	0.000	1.520	7.482	6.605	13.347	0.662
DA9	11.300	0.000	0.000	1.023	7.445	7.783	14.357	0.659
DA11	11.300	0.000	0.000	1.379	6.805	7.428	12.691	0.602
DA12	11.300	0.000	0.000	2.239	6.184	6.431	10.878	0.547
DA13a	11.300	0.000	0.000	2.262	5.650	18.286	28.364	0.500
DA13b	11.300	0.000	0.000	1.921	5.579	45.837	186.458	0.494
DA2a	11.300	0.000	0.000	0.647	6.570	43.025	190.734	0.581
DA4	11.300	0.000	0.000	0.581	6.978	61.096	164.060	0.618
DA4c	11.300	0.000	0.000	0.737	7.207	13.957	23.737	0.638
DA4d-4	11.300	0.000	0.000	1.126	6.368	14.877	23.001	0.564
DA12A	11.300	0.000	0.000	1.379	7.093	7.376	13.303	0.628
DA13	11.300	0.000	0.000	1.481	5.687	35.566	184.614	0.503
DA13c	11.300	0.000	0.000	1.632	5.776	14.768	85.036	0.511
DA13d	11.300	0.000	0.000	1.751	4.608	31.508	99.451	0.408
DA13e	11.300	0.000	0.000	2.150	4.486	4.250	20.455	0.397
DA1B	11.300	0.000	0.000	1.015	7.344	25.113	87.920	0.650
DA13g	11.300	0.000	0.000	0.666	7.623	33.117	132.513	0.675
DA4e1	11.300	0.000	0.000	1.721	5.312	10.591	42.221	0.470
DA4e2	11.300	0.000	0.000	1.806	5.196	12.888	37.869	0.460
DA4e3	11.300	0.000	0.000	1.012	6.112	75.650	111.117	0.541
DA2b	11.300	0.000	0.000	0.491	8.119	26.339	74.686	0.718
DA4d-1	11.300	0.000	0.000	1.221	6.757	19.730	84.269	0.598
DA4d-2	11.300	0.000	0.000	1.029	6.010	11.387	29.151	0.532
DA4d-3	11.300	0.000	0.000	1.528	6.578	22.195	104.002	0.582
DA13h	11.300	0.000	0.000	0.894	7.480	21.462	63.206	0.662
DA4i	11.300	0.000	0.000	0.633	6.350	30.301	45.200	0.562
DA4f	11.300	0.000	0.000	1.259	6.908	23.577	40.449	0.611
DA4h	11.300	0.000	0.000	0.550	6.761	28.641	44.718	0.598
DA4g	11.300	0.000	0.000	0.991	6.800	9.983	16.332	0.602
DA4j	11.300	0.000	0.000	0.570	6.710	12.654	19.657	0.594
DA13f	11.300	0.000	0.000	0.570	6.693	21.002	32.553	0.592
DA13i	11.300	0.000	0.000	0.754	7.069	12.073	39.893	0.626
DA7a	11.300	0.000	0.000	1.532	5.389	51.239	72.963	0.477
DA8a	11.300	0.000	0.000	1.520	5.348	59.200	83.819	0.473
DA9a	11.300	0.000	0.000	1.023	6.698	24.927	40.255	0.593
DA10b	11.300	0.000	0.000	1.281	6.413	8.496	13.475	0.568
DA11a	11.300	0.000	0.000	1.379	5.531	46.554	66.636	0.489
4d5	11.300	0.000	0.000	1.126	7.947	6.990	14.759	0.703
BasinA	11.300	0.000	0.000	0.004	8.512	56.850	106.825	0.753
BasinB	11.300	0.000	0.000	0.004	8.911	18.893	38.586	0.789
BasinC	11.300	0.000	0.000	0.004	8.832	32.302	64.840	0.782
DA10a	11.300	0.000	0.000	1.422	6.511	7.911	12.913	0.576
System	11.300	0.000	0.000	1.352	5.901	1617.230	2988.994	0.522

 Node Depth Summary

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Time of Max Occurrence days hr:min
CulvertA	OUTFALL	1.74	2.99	32.39	0 12:37
CulvertI	OUTFALL	0.95	1.24	15.24	0 19:00

Attachment H - SWMM Printout for Proposed General Arrangement

CulvertB	OUTFALL	0.82	1.67	34.57	0	12:35
CulvertD	OUTFALL	1.85	3.15	17.55	0	19:05
CulvertN	OUTFALL	0.00	0.00	27.00	0	00:00
CulvertE	OUTFALL	1.67	2.81	16.71	0	19:17
CulvertC	OUTFALL	0.76	1.89	38.09	0	12:30
CulvertH	OUTFALL	1.92	2.00	16.00	0	02:57
CulvertM	OUTFALL	0.00	0.00	31.00	0	00:00
CR40-I	OUTFALL	0.15	0.33	19.83	0	19:01
CulvertG	OUTFALL	1.92	2.00	16.00	0	02:56
CR40-G&H	OUTFALL	0.00	0.10	18.70	0	12:30
Inglis	OUTFALL	0.06	0.23	17.03	0	19:17
US19E	OUTFALL	0.00	0.00	19.80	0	00:00
US19atD	OUTFALL	0.00	0.00	21.80	0	00:00
1Storage	STORAGE	16.69	17.58	37.58	0	12:37
2Storage	STORAGE	1.35	2.78	38.78	0	12:30
4aStorage	STORAGE	3.15	3.61	39.61	0	19:02
4d1Storage	STORAGE	2.87	4.43	18.43	0	19:05
6Storage	STORAGE	2.79	3.77	44.77	0	19:01
11Storage	STORAGE	2.27	3.36	33.36	0	20:42
12aStorage	STORAGE	3.95	4.74	32.74	0	15:33
13aStorage	STORAGE	4.47	5.70	33.70	0	18:34
13bStorage	STORAGE	11.22	13.05	20.05	0	19:00
2aStorage	STORAGE	4.55	6.16	46.16	0	12:40
4Storage	STORAGE	1.81	2.30	42.30	0	19:06
4bStorage	STORAGE	3.36	3.89	39.89	0	12:39
4cStorage	STORAGE	2.28	2.84	35.84	0	18:42
13dStorage	STORAGE	3.41	4.22	29.22	0	20:08
13eStorage	STORAGE	4.04	4.27	30.27	0	12:40
12Storage	STORAGE	1.62	2.11	31.11	0	16:03
13Storage	STORAGE	2.26	4.96	18.96	0	12:30
1AStorage	STORAGE	4.48	6.15	33.15	0	12:37
1BStorage	STORAGE	1.14	2.25	35.25	0	12:35
13gStorage	STORAGE	1.51	1.89	40.89	0	12:36
4e1Storage	STORAGE	6.09	7.70	17.70	0	19:17
4e3Storage	STORAGE	1.82	2.37	19.37	0	18:24
4e2-Dummy	STORAGE	1.87	2.57	18.57	1	11:19
13cStorage	STORAGE	8.34	9.71	25.71	0	12:52
2bStorage	STORAGE	2.71	3.15	42.15	0	13:59
4d2-Dummy	STORAGE	2.64	3.73	24.73	0	19:20
4d3-Dummy	STORAGE	1.68	2.53	29.53	0	19:02
4d4-Dummy	STORAGE	1.98	2.59	29.59	0	19:01
13hStorage	STORAGE	3.47	3.82	37.82	0	18:13
13iStorage	STORAGE	5.64	6.29	37.29	0	19:04
13fStorage	STORAGE	3.56	4.01	37.01	0	18:25
4jStorage	STORAGE	3.40	4.02	37.02	0	18:26
4gStorage	STORAGE	2.56	3.24	42.24	0	19:01
4fStorage	STORAGE	0.50	0.80	39.80	0	17:39
4iStorage	STORAGE	4.04	5.16	38.16	0	19:00
4hStorage	STORAGE	4.49	5.27	42.27	0	19:05
3Storage	STORAGE	3.55	5.13	45.13	0	21:28
5Storage	STORAGE	1.67	3.13	45.13	0	21:29
7aStorage	STORAGE	0.49	0.75	43.75	0	19:01
8aStorage	STORAGE	1.77	2.17	42.17	0	23:13
9aStorage	STORAGE	1.50	1.84	38.84	0	21:51
10bStorage	STORAGE	2.78	4.14	36.14	0	19:09
11aStorage	STORAGE	3.34	4.06	38.06	0	21:01
13c-Dummy	STORAGE	2.47	3.80	23.80	0	19:11
7Storage	STORAGE	1.02	1.55	41.55	0	18:02
8Storage	STORAGE	0.67	1.27	41.27	0	16:49
9Storage	STORAGE	2.96	3.50	37.50	0	19:19
4e4Storage	STORAGE	2.25	2.90	33.90	0	18:34
PondA	STORAGE	5.94	7.89	49.89	0	18:26
PondB	STORAGE	6.01	7.80	49.80	0	16:09
PondC	STORAGE	6.07	7.90	49.90	0	16:18
10aStorage	STORAGE	3.78	4.46	37.46	0	19:16

Node Inflow Summary

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Time of Max Occurrence days hr:min	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal
CulvertA	OUTFALL	0.00	312.10	0 12:37	0.000	208.964
CulvertI	OUTFALL	0.00	310.31	0 19:00	0.000	297.253
CulvertB	OUTFALL	0.00	173.40	0 12:35	0.000	86.247

Attachment H - SWMM Printout for Proposed General Arrangement

CulvertD	OUTFALL	0.00	412.34	0	19:05	0.000	277.792
CulvertN	OUTFALL	0.00	13.24	0	15:34	0.000	7.280
CulvertE	OUTFALL	0.00	467.66	0	19:17	0.000	322.613
CulvertC	OUTFALL	0.00	58.95	0	12:30	0.000	21.979
CulvertH	OUTFALL	0.00	68.17	0	12:30	0.000	24.784
CulvertM	OUTFALL	0.00	0.00	0	00:00	0.000	0.000
CR40-I	OUTFALL	0.00	540.69	0	19:01	0.000	284.537
CulvertG	OUTFALL	0.00	25.65	0	12:30	0.000	9.317
CR40-G&H	OUTFALL	0.00	90.11	0	12:30	0.000	1.244
Inglis	OUTFALL	0.00	69.63	0	19:17	0.000	18.622
US19E	OUTFALL	0.00	0.00	0	00:00	0.000	0.000
US19atD	OUTFALL	0.00	0.00	0	00:00	0.000	0.000
1Storage	STORAGE	323.95	323.95	0	12:30	209.747	209.747
2Storage	STORAGE	57.22	59.06	0	12:30	21.296	21.982
4aStorage	STORAGE	67.84	203.36	0	19:00	45.889	131.715
4d1Storage	STORAGE	113.42	412.34	0	19:05	30.943	277.817
6Storage	STORAGE	59.31	59.31	0	19:00	41.414	41.414
11Storage	STORAGE	12.69	170.53	0	20:40	7.389	120.480
12aStorage	STORAGE	13.30	13.30	0	15:30	7.341	7.341
13aStorage	STORAGE	28.36	488.89	0	18:24	18.175	330.247
13bStorage	STORAGE	186.46	851.00	0	19:00	45.562	582.116
2aStorage	STORAGE	190.73	190.73	0	12:30	42.779	85.094
4Storage	STORAGE	164.06	510.59	0	21:28	60.757	361.249
4bStorage	STORAGE	80.24	80.24	0	12:30	26.659	26.659
4cStorage	STORAGE	23.74	73.82	0	18:35	13.884	46.433
13dStorage	STORAGE	99.45	286.69	0	20:11	31.268	195.238
13eStorage	STORAGE	20.45	27.37	0	12:30	4.221	10.642
12Storage	STORAGE	10.88	10.94	0	16:00	6.398	6.426
13Storage	STORAGE	184.61	184.61	0	12:30	35.357	35.357
1AStorage	STORAGE	0.00	312.15	0	12:37	0.000	209.007
1BStorage	STORAGE	87.92	173.40	0	12:34	24.999	86.256
13gStorage	STORAGE	132.51	179.77	0	12:30	32.969	90.305
4e1Storage	STORAGE	42.22	537.42	0	19:10	10.521	341.204
4e3Storage	STORAGE	111.12	197.12	0	18:18	75.154	128.180
4e2-Dummy	STORAGE	37.87	524.12	0	19:07	12.800	332.358
13cStorage	STORAGE	85.04	315.60	0	12:49	14.687	209.737
2bStorage	STORAGE	74.69	130.15	0	12:26	26.232	62.118
4d2-Dummy	STORAGE	0.00	640.39	0	19:02	0.000	415.555
4d3-Dummy	STORAGE	104.00	640.46	0	18:59	22.085	416.493
4d4-Dummy	STORAGE	23.00	23.00	0	16:30	14.786	14.786
13hStorage	STORAGE	63.21	290.78	0	18:13	21.365	190.004
13iStorage	STORAGE	39.89	98.38	0	19:00	12.010	77.347
13fStorage	STORAGE	32.55	362.53	0	18:17	20.873	236.233
4jStorage	STORAGE	19.66	50.35	0	18:40	12.576	32.726
4gStorage	STORAGE	16.33	339.70	0	18:54	9.927	219.501
4fStorage	STORAGE	40.45	378.20	0	18:53	23.456	241.743
4iStorage	STORAGE	45.20	587.29	0	18:55	30.100	380.362
4hStorage	STORAGE	44.72	424.29	0	17:15	28.467	302.147
3Storage	STORAGE	202.08	398.55	0	15:52	146.780	233.714
5Storage	STORAGE	115.69	115.69	0	19:00	82.310	82.310
7aStorage	STORAGE	72.96	72.96	0	19:00	50.868	50.868
8aStorage	STORAGE	83.82	156.77	0	19:00	58.767	109.543
9aStorage	STORAGE	40.25	187.16	0	21:49	24.784	134.207
10bStorage	STORAGE	13.48	62.46	0	19:08	8.446	32.933
11aStorage	STORAGE	66.64	159.17	0	20:30	46.221	113.224
13c-Dummy	STORAGE	0.00	791.26	0	19:02	0.000	538.542
7Storage	STORAGE	17.36	61.36	0	18:00	10.004	37.258
8Storage	STORAGE	13.35	40.10	0	17:00	6.579	18.081
9Storage	STORAGE	14.36	117.97	0	20:09	7.748	82.193
4e4Storage	STORAGE	14.76	86.62	0	18:25	6.964	53.257
PondA	STORAGE	106.82	106.82	0	14:30	56.599	56.847
PondB	STORAGE	38.59	38.59	0	14:30	18.820	18.882
PondC	STORAGE	64.84	64.84	0	14:30	32.174	32.274
10aStorage	STORAGE	12.91	130.24	0	20:01	7.867	89.906

Node Surcharge Summary

No nodes were surcharged.

Node Flooding Summary

Flooding refers to all water that overflows a node, whether it ponds or not.

Total Maximum

Attachment H - SWMM Printout for Proposed General Arrangement

Node	Hours Flooded	Maximum Rate CFS	Time of Max Occurrence days hr:min	Flood Volume 10^6 gal	Ponded Volume acre-in
3Storage	12.31	40.64	0 15:52	3.795	139.09
8aStorage	23.64	28.80	0 14:40	4.349	160.17
11aStorage	13.55	3.00	0 16:00	0.270	9.96

Storage Volume Summary

Storage Unit	Average Volume 1000 ft3	Avg Pcnt Full	Maximum Volume 1000 ft3	Max Pcnt Full	Time of Max Occurrence days hr:min	Maximum Outflow CFS
1Storage	27.764	63	29.828	68	0 12:37	312.15
2Storage	0.029	3	0.108	10	0 12:30	58.95
4aStorage	0.166	13	0.201	16	0 19:02	203.34
4d1Storage	0.036	8	0.070	16	0 19:05	412.34
6Storage	1.945	61	2.826	89	0 19:01	59.30
11Storage	0.107	40	0.188	71	0 20:42	170.85
12aStorage	0.325	73	0.400	90	0 15:33	13.30
13aStorage	3.455	46	4.936	66	0 18:34	488.73
13bStorage	7.826	33	9.547	41	0 19:00	851.00
2aStorage	69.694	11	111.195	17	0 12:40	164.98
4Storage	66.230	14	98.089	21	0 19:06	508.38
4bStorage	2.118	47	2.758	61	0 12:39	72.72
4cStorage	1.047	12	1.422	16	0 18:42	73.81
13dStorage	0.868	26	1.204	36	0 20:08	286.44
13eStorage	0.080	26	0.088	28	0 12:40	24.89
12Storage	0.429	20	0.601	28	0 16:03	10.94
13Storage	0.198	6	0.879	25	0 12:30	183.92
1AStorage	3.509	7	5.842	12	0 12:37	312.10
1BStorage	0.025	1	0.077	4	0 12:35	173.40
13gStorage	0.206	26	0.312	40	0 12:36	169.26
4e1Storage	5.665	40	8.409	59	0 19:17	537.29
4e3Storage	0.105	7	0.165	11	0 18:24	197.09
4e2-Dummy	0.135	12	0.206	18	1 11:19	524.08
13cStorage	40.429	51	51.960	66	0 12:52	315.09
2bStorage	0.097	21	0.127	27	0 13:59	104.51
4d2-Dummy	0.201	34	0.331	56	0 19:20	639.66
4d3-Dummy	0.064	10	0.118	18	0 19:02	640.39
4d4-Dummy	0.079	9	0.124	14	0 19:01	22.94
13hStorage	0.181	34	0.214	41	0 18:13	290.78
13iStorage	0.883	41	1.046	49	0 19:04	98.37
13fStorage	0.207	53	0.252	64	0 18:25	362.38
4jStorage	2.136	51	2.702	65	0 18:26	50.40
4gStorage	0.096	30	0.134	42	0 19:01	339.66
4fStorage	0.392	4	0.767	7	0 17:39	378.23
4iStorage	0.770	38	1.094	54	0 19:00	587.27
4hStorage	6.271	61	7.895	77	0 19:05	422.80
3Storage	89.896	2598	508.391	14691	0 21:28	379.00
5Storage	0.801	25	1.962	61	0 21:29	144.62
7aStorage	1.040	3	1.887	6	0 19:01	72.95
8aStorage	177.184	354369	581.474	1162948	0 23:13	151.24
9aStorage	0.520	10	0.720	14	0 21:51	187.16
10bStorage	1.143	26	2.073	48	0 19:09	62.46
11aStorage	7.047	2995	36.381	15462	0 21:01	159.02
13c-Dummy	0.193	31	0.361	58	0 19:11	791.06
7Storage	3.725	33	6.656	60	0 18:02	61.36
8Storage	0.619	15	1.630	40	0 16:49	40.10
9Storage	4.980	60	6.371	77	0 19:19	117.98
4e4Storage	11.344	24	16.146	34	0 18:34	86.59
PondA	1419.126	25	2064.395	37	0 18:26	96.84
PondB	358.225	26	504.266	36	0 16:09	37.04
PondC	588.749	26	835.671	37	0 16:18	62.19
10aStorage	0.236	62	0.301	80	0 19:16	130.25

Outfall Loading Summary

Outfall Node	Flow Freq. Pcnt.	Avg. Flow CFS	Max. Flow CFS	Total Volume 10^6 gal
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Attachment H - SWMM Printout for Proposed General Arrangement

CulvertA	92.09	175.55	312.10	208.964
CulvertI	95.11	241.80	310.31	297.253
CulvertB	98.75	67.57	173.40	86.247
CulvertD	98.59	217.98	412.34	277.792
CulvertN	82.63	6.82	13.24	7.280
CulvertE	94.25	264.82	467.66	322.613
CulvertC	98.59	17.25	58.95	21.979
CulvertH	98.59	19.45	68.17	24.784
CulvertM	0.00	0.00	0.00	0.000
CR40-I	74.21	296.64	540.69	284.537
CulvertG	98.43	7.32	25.65	9.317
CR40-G&H	2.36	40.87	90.11	1.244
Inglis	37.92	38.00	69.63	18.622
US19E	0.00	0.00	0.00	0.000
US19atD	0.00	0.00	0.00	0.000
System	64.77	1394.07	2295.54	1560.633

Link Flow Summary

Link	Type	Maximum Flow CFS	Time of Max Occurrence days hr:min	Maximum Velocity ft/sec	Max/ Full Flow	Max/ Full Depth
CulvertL	CONDUIT	37.85	0 12:01	3.62	1.58	0.77
6-to-13g	CONDUIT	34.26	0 12:35	4.30	1.01	0.79
10-to-13d	CONDUIT	62.46	0 19:09	4.69	0.62	0.60
11-to-13d	CONDUIT	170.85	0 20:39	5.21	0.85	0.72
12a-to-13e	CONDUIT	10.94	0 16:03	2.68	0.16	0.27
2a-to-2b	CONDUIT	63.13	1 07:45	5.08	0.72	0.79
US19A	CONDUIT	312.10	0 12:37	4.54	0.50	0.55
US19D	CONDUIT	412.34	0 19:05	4.92	0.95	0.87
US19E	CONDUIT	467.66	0 19:17	4.86	0.82	0.80
2a-to-4	CONDUIT	60.22	0 12:10	4.54	0.75	0.95
4-to-4a	CONDUIT	136.01	0 19:06	1.18	0.06	0.22
4b-to-4d	CONDUIT	0.00	0 00:00	0.00	0.00	0.00
4a-to-4j	CONDUIT	31.07	0 19:02	0.70	0.02	0.09
12-to-12a	CONDUIT	0.06	0 15:34	0.40	0.00	0.04
13a-to-13b	CONDUIT	488.73	0 18:34	2.01	0.21	0.65
13-to-13b	CONDUIT	0.00	0 00:00	0.00	0.00	0.00
13e-to-13d	CONDUIT	24.89	0 12:40	0.49	0.01	0.04
13-to-H	CONDUIT	68.17	0 12:30	8.52	35.64	1.00
13b-to-I	CONDUIT	310.31	0 19:00	6.72	0.09	0.58
Overtop-at-M	CONDUIT	0.00	0 00:00	0.00	0.00	0.00
Overtop-at-I	CONDUIT	540.69	0 19:01	2.46	3.46	0.44
13-to-G	CONDUIT	25.65	0 12:30	5.13	48.46	1.00
13a-to-13d	CONDUIT	0.00	0 00:00	0.00	0.00	0.00
Overtop-at-G	CONDUIT	90.11	0 12:30	1.38	0.04	0.13
Berm-Overtop	CONDUIT	267.00	0 20:08	1.66	0.07	0.22
1-to-A	CONDUIT	312.15	0 12:37	1.49	0.02	0.10
2-to-B	CONDUIT	0.00	0 00:00	0.00	0.00	0.00
B-to-A	CONDUIT	0.00	0 00:00	0.00	0.00	0.00
13g-to-13h	CONDUIT	169.26	0 12:36	1.07	0.22	0.28
Overtop-at-N	CONDUIT	13.24	0 15:34	0.84	0.06	0.16
D-1	CHANNEL	328.77	0 19:20	1.79	0.26	0.57
C-3	CHANNEL	197.09	0 18:24	1.20	0.49	0.84
C-2	CHANNEL	524.08	0 19:11	2.32	0.42	0.86
13c-to-b	CHANNEL	791.06	0 19:10	3.89	0.03	0.31
2b-to-B	CONDUIT	97.81	0 13:59	1.21	0.06	0.19
D-2	CHANNEL	640.39	0 19:02	1.77	0.14	0.63
D-3	CHANNEL	22.94	0 17:01	0.28	0.03	0.41
4c-d4	CONDUIT	86.59	0 18:34	1.23	0.01	0.10
13h-to13f	CONDUIT	280.19	0 18:14	3.40	0.21	0.36
13i-to-13a	CONDUIT	98.37	0 19:04	1.28	0.36	0.43
4j-to-13l	CONDUIT	50.40	0 18:43	0.11	0.05	0.56
13f-to13a	CONDUIT	362.38	0 18:25	1.27	0.02	0.18
4g-to-4f	CONDUIT	339.66	0 19:01	1.29	0.07	0.20
4f-to-4b	CONDUIT	0.00	0 00:00	0.00	0.00	0.00
4h-to-4i	CONDUIT	164.34	0 19:05	1.38	0.09	0.21
4i-D3	CONDUIT	587.27	0 19:00	2.20	0.20	0.30
4a-to-13h	CONDUIT	121.08	0 19:02	2.68	0.11	0.26
3c-to-13c	CHANNEL	315.09	0 12:52	3.53	0.24	0.65
11a-to-11	CONDUIT	159.02	0 21:01	1.60	0.06	0.18
9a-to-11a	CONDUIT	93.58	0 21:51	1.30	0.04	0.14
7a-to-8a	CONDUIT	72.95	0 19:01	1.18	0.03	0.12

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7a-to7	CONDUIT	0.00	0	00:00	0.00	0.00	0.00
8a-to-9a	CONDUIT	151.24	0	23:13	1.67	0.07	0.20
8a-to-8	CONDUIT	0.00	0	00:00	0.00	0.00	0.00
3-to-4	CONDUIT	379.00	0	21:28	6.34	0.62	0.74
5-to-3	CONDUIT	127.48	1	04:10	0.23	0.05	0.81
9a-to-9	CONDUIT	93.58	0	21:51	1.30	0.04	0.14
10b-to-11	CONDUIT	0.00	0	00:00	0.00	0.00	0.00
4-to-4h	CONDUIT	379.73	0	17:15	0.37	0.04	0.35
4a-to-4c	CONDUIT	51.19	0	19:02	0.66	0.01	0.09
2b-to-2	CONDUIT	6.70	0	13:59	0.20	0.00	0.02
4d2-to-4e2	CONDUIT	310.89	0	19:20	2.69	0.26	0.54
4d1-to-4c1	CONDUIT	0.00	0	00:00	0.00	0.00	0.00
4g-to-4h	CONDUIT	275.57	0	17:14	0.46	0.07	0.34
4f-to-4i	CONDUIT	378.23	0	18:53	1.54	0.04	0.14
4b-to-4d1	CONDUIT	72.72	0	12:39	1.00	0.04	0.14
13h-to13i	CONDUIT	0.00	0	00:00	0.00	0.00	0.00
Overtop	CONDUIT	69.63	0	19:17	1.03	0.02	0.12
Overtop-at-E	CONDUIT	0.00	0	00:00	0.00	0.00	0.00
Overtop-at-D	CONDUIT	0.00	0	00:00	0.00	0.00	0.00
7-to-13h	CONDUIT	33.80	0	18:03	3.56	0.75	0.71
8-to-13h	CONDUIT	37.34	0	17:02	2.90	0.55	0.65
9-to13h	CONDUIT	10.59	0	18:14	1.81	0.35	0.36
9-to10b	CONDUIT	117.98	0	20:13	0.43	0.02	0.15
5-to-4	CONDUIT	84.17	0	15:23	5.08	0.72	0.79
8-to-9	CONDUIT	2.76	0	16:49	0.44	0.00	0.04
7-to-8	CONDUIT	27.56	0	18:02	0.75	0.01	0.13
4c-to-4e4	CONDUIT	73.81	0	18:42	1.17	0.00	0.10
PondA-Discharge	CONDUIT	96.84	0	18:26	3.67	0.02	0.10
PondB-Discharge	CONDUIT	37.04	0	16:09	3.06	0.01	0.07
PondC-Discharge	CONDUIT	62.19	0	16:18	3.74	0.02	0.10
6-to7	CONDUIT	44.52	0	19:01	1.13	0.02	0.13
10a-to-b	CONDUIT	49.32	0	19:16	0.79	0.01	0.07
10a-to-13i	CONDUIT	81.04	0	20:37	1.91	0.29	1.00
US19B	CONDUIT	173.40	0	12:35	3.79	0.58	0.64
US19C	CONDUIT	58.95	0	12:30	3.94	0.70	0.71
AccessRdOvertop	CONDUIT	93.14	0	12:41	1.36	0.00	0.03

Flow Classification Summary

Conduit	Adjusted /Actual Length	--- Dry	Fraction of Up Dry	Down Dry	Time in Sub Crit	Flow Sup Crit	Class Up Crit	Down Crit	Avg. Froude Number	Avg. Flow Change
CulvertL	1.00	0.02	0.00	0.00	0.00	0.00	0.00	0.98	0.35	0.0000
6-to-13g	1.00	0.14	0.00	0.00	0.00	0.00	0.00	0.86	0.32	0.0000
10-to-13d	1.00	0.18	0.00	0.00	0.00	0.00	0.00	0.82	0.57	0.0001
11-to-13d	1.00	0.13	0.00	0.00	0.00	0.00	0.00	0.87	0.58	0.0000
12a-to-13e	1.00	0.03	0.16	0.00	0.02	0.00	0.00	0.79	0.55	0.0002
2a-to-2b	1.00	0.25	0.00	0.00	0.00	0.00	0.00	0.75	0.46	0.0000
US19A	1.00	0.08	0.00	0.00	0.92	0.00	0.00	0.00	0.42	0.0000
US19D	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.46	0.0000
US19E	1.00	0.06	0.00	0.00	0.94	0.00	0.00	0.00	0.44	0.0000
2a-to-4	1.00	0.04	0.01	0.00	0.95	0.00	0.00	0.00	0.26	0.0003
4-to-4a	1.00	0.07	0.00	0.00	0.00	0.00	0.00	0.93	0.22	0.0000
4b-to-4d	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0000
4a-to-4j	1.00	0.08	0.00	0.00	0.00	0.00	0.00	0.92	0.16	0.0000
12-to-12a	1.00	0.17	0.00	0.00	0.00	0.00	0.00	0.83	0.17	0.0000
13a-to-13b	1.00	0.09	0.03	0.00	0.89	0.00	0.00	0.00	0.23	0.0000
13-to-13b	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0000
13e-to-13d	1.00	0.03	0.00	0.00	0.00	0.00	0.00	0.97	0.16	0.0000
13-to-H	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.00	0.0001
13b-to-I	1.00	0.01	0.03	0.00	0.95	0.00	0.00	0.00	0.41	0.0000
Overtop-at-M	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0000
Overtop-at-I	1.00	0.26	0.00	0.00	0.74	0.00	0.00	0.00	0.40	0.0000
13-to-G	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.00	0.0001
13a-to-13d	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0000
Overtop-at-G	1.00	0.98	0.00	0.00	0.02	0.00	0.00	0.00	0.01	0.0000
Berm-Overtop	1.00	0.25	0.00	0.00	0.00	0.00	0.00	0.75	0.27	0.0000
1-to-A	1.00	0.07	0.00	0.00	0.00	0.00	0.00	0.93	0.35	0.0000
2-to-B	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0000
B-to-A	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0000
13g-to-13h	1.00	0.03	0.00	0.00	0.00	0.00	0.00	0.97	0.20	0.0000
Overtop-at-N	1.00	0.17	0.00	0.00	0.00	0.00	0.00	0.83	0.26	0.0000
D-1	1.00	0.03	0.00	0.00	0.00	0.00	0.00	0.97	0.23	0.0000
C-3	1.00	0.01	0.01	0.00	0.98	0.00	0.00	0.00	0.12	0.0000
C-2	1.00	0.01	0.00	0.00	0.49	0.00	0.00	0.50	0.33	0.0000

Attachment H - SWMM Printout for Proposed General Arrangement

13c-to-b	1.00	0.09	0.00	0.00	0.74	0.00	0.00	0.17	0.40	0.0000
2b-to-B	1.00	0.02	0.00	0.00	0.00	0.00	0.00	0.98	0.22	0.0000
D-2	1.00	0.01	0.00	0.00	0.00	0.98	0.01	0.00	0.23	0.0000
D-3	1.00	0.01	0.01	0.00	0.98	0.00	0.00	0.00	0.03	0.0000
4c-d4	1.00	0.20	0.00	0.00	0.00	0.00	0.00	0.80	0.25	0.0000
13h-to13f	1.00	0.03	0.00	0.00	0.00	0.00	0.00	0.97	0.65	0.0000
13i-to-13a	1.00	0.10	0.00	0.00	0.00	0.00	0.00	0.90	0.23	0.0000
4j-to-13l	1.00	0.04	0.05	0.00	0.90	0.00	0.01	0.00	0.01	0.0000
13f-to13a	1.00	0.09	0.00	0.00	0.00	0.00	0.00	0.91	0.28	0.0000
4g-to-4f	1.00	0.12	0.00	0.00	0.00	0.00	0.00	0.88	0.22	0.0000
4f-to-4b	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0000
4h-to-4i	1.00	0.12	0.00	0.00	0.00	0.00	0.00	0.88	0.23	0.0000
4i-D3	1.00	0.13	0.00	0.00	0.00	0.00	0.00	0.87	0.28	0.0000
4a-to-13h	1.00	0.08	0.00	0.00	0.00	0.00	0.00	0.92	0.57	0.0000
3c-to-13c	1.00	0.09	0.00	0.00	0.91	0.00	0.00	0.00	0.27	0.0000
11a-to-11	1.00	0.14	0.00	0.00	0.00	0.00	0.00	0.86	0.28	0.0000
9a-to-11a	1.00	0.08	0.00	0.00	0.00	0.00	0.00	0.92	0.26	0.0000
7a-to-8a	1.00	0.11	0.00	0.00	0.00	0.00	0.00	0.89	0.24	0.0000
7a-to7	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0000
8a-to-9a	1.00	0.02	0.00	0.00	0.00	0.00	0.00	0.98	0.30	0.0000
8a-to-8	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0000
3-to-4	1.00	0.03	0.00	0.00	0.56	0.00	0.00	0.42	0.58	0.0002
5-to-3	1.00	0.12	0.00	0.00	0.81	0.00	0.00	0.07	0.02	0.0000
9a-to-9	1.00	0.08	0.00	0.00	0.00	0.00	0.00	0.92	0.26	0.0000
10b-to-11	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0000
4-to-4h	1.00	0.07	0.00	0.00	0.91	0.00	0.00	0.02	0.05	0.0000
4a-to-4c	1.00	0.08	0.00	0.00	0.00	0.00	0.00	0.92	0.16	0.0000
2b-to-2	1.00	0.59	0.00	0.00	0.00	0.00	0.00	0.41	0.03	0.0000
4d2-to-4e2	1.00	0.19	0.00	0.00	0.00	0.00	0.00	0.81	0.34	0.0000
4d1-to-4c1	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0000
4g-to-4h	1.00	0.09	0.03	0.00	0.88	0.00	0.00	0.00	0.05	0.0000
4f-to-4i	1.00	0.11	0.00	0.00	0.16	0.00	0.00	0.73	0.29	0.0000
4b-to-4d1	1.00	0.04	0.00	0.00	0.00	0.00	0.00	0.96	0.18	0.0000
13h-to13i	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0000
Overtop	1.00	0.62	0.00	0.00	0.38	0.00	0.00	0.00	0.10	0.0000
Overtop-at-E	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0000
Overtop-at-D	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0000
7-to-13h	1.00	0.02	0.01	0.00	0.97	0.00	0.00	0.00	0.42	0.0000
8-to-13h	1.00	0.01	0.00	0.00	0.98	0.00	0.00	0.00	0.24	0.0000
9-to13h	1.00	0.02	0.00	0.00	0.48	0.00	0.50	0.00	0.36	0.0000
9-to10b	1.00	0.17	0.00	0.00	0.75	0.00	0.00	0.08	0.09	0.0000
5-to-4	1.00	0.07	0.05	0.00	0.40	0.00	0.00	0.48	0.39	0.0000
8-to-9	1.00	0.72	0.00	0.00	0.00	0.00	0.00	0.28	0.05	0.0000
7-to-8	1.00	0.33	0.00	0.00	0.30	0.00	0.00	0.36	0.14	0.0000
4c-to-4e4	1.00	0.14	0.00	0.00	0.00	0.00	0.00	0.86	0.26	0.0000
PondA-Discharge	1.00	0.35	0.00	0.00	0.00	0.00	0.00	0.65	0.65	0.0000
PondB-Discharge	1.00	0.31	0.00	0.00	0.00	0.00	0.00	0.69	0.65	0.0000
PondC-Discharge	1.00	0.31	0.00	0.00	0.00	0.00	0.00	0.69	0.68	0.0000
6-to7	1.00	0.26	0.00	0.00	0.00	0.00	0.00	0.74	0.22	0.0000
10a-to-b	1.00	0.26	0.00	0.00	0.00	0.00	0.00	0.74	0.16	0.0000
10a-to-13i	1.00	0.02	0.02	0.00	0.96	0.00	0.00	0.00	0.00	0.0000
US19B	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.47	0.0000
US19C	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.46	0.0000
AccessRdOvertop	1.00	0.67	0.00	0.00	0.00	0.00	0.00	0.33	0.20	0.0000

Conduit Surcharge Summary

Conduit	----- Both Ends	Hours Full Upstream	----- Dnstream	Hours Above Full Normal Flow	Hours Capacity Limited
CulvertL	0.01	0.01	0.01	39.24	0.01
6-to-13g	0.01	0.01	0.01	35.89	0.01
10-to-13d	0.01	0.01	0.01	18.16	0.01
11-to-13d	0.01	0.01	0.01	35.79	0.01
2a-to-2b	0.01	0.01	0.01	27.08	0.01
US19A	0.01	0.01	0.01	18.78	0.01
US19D	0.01	0.01	0.01	35.69	0.01
US19E	0.01	0.01	0.01	32.11	0.01
2a-to-4	0.01	0.01	0.01	37.10	0.01
13-to-H	44.89	44.89	44.89	45.19	44.89
Overtop-at-I	0.01	0.01	0.01	24.24	0.01
13-to-G	44.89	44.89	44.89	45.17	44.89
3-to-4	0.01	0.01	0.01	35.58	0.01
7-to-13h	0.01	0.01	0.01	35.37	0.01
8-to-13h	0.01	0.01	0.01	20.08	0.01

Attachment H - SWMM Printout for Proposed General Arrangement

9-to13h	0.01	0.01	0.01	23.59	0.01
5-to-4	0.01	0.01	0.01	23.05	0.01
10a-to-13i	43.06	43.06	43.06	33.46	0.01
US19B	0.01	0.01	0.01	14.66	0.01

Analysis begun on: Mon Dec 07 13:35:07 2009

Analysis ended on: Mon Dec 07 14:01:43 2009

Total elapsed time: 00:26:36

ATTACHMENT I

Floodplain Contour Mapping

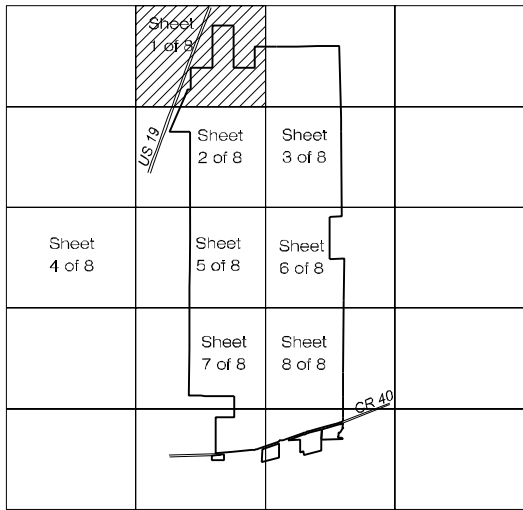


Graphic Scale: 1"=300'

Legend

— LNP Property Boundary

Drawing Location



Progress Energy Florida

**Levy Nuclear Plant
Units 1 and 2
Detailed Floodplain Analysis
for the
Site**

Sources

LNP Site: Sargent & Lundy, 2007

Attachment I

Sheet 1 of 8

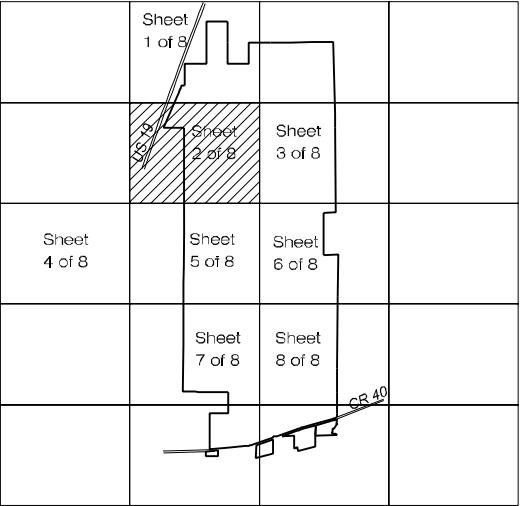


Graphic Scale: 1"=300'

Legend

—— LNP Property Boundary

Drawing Location



Progress Energy Florida

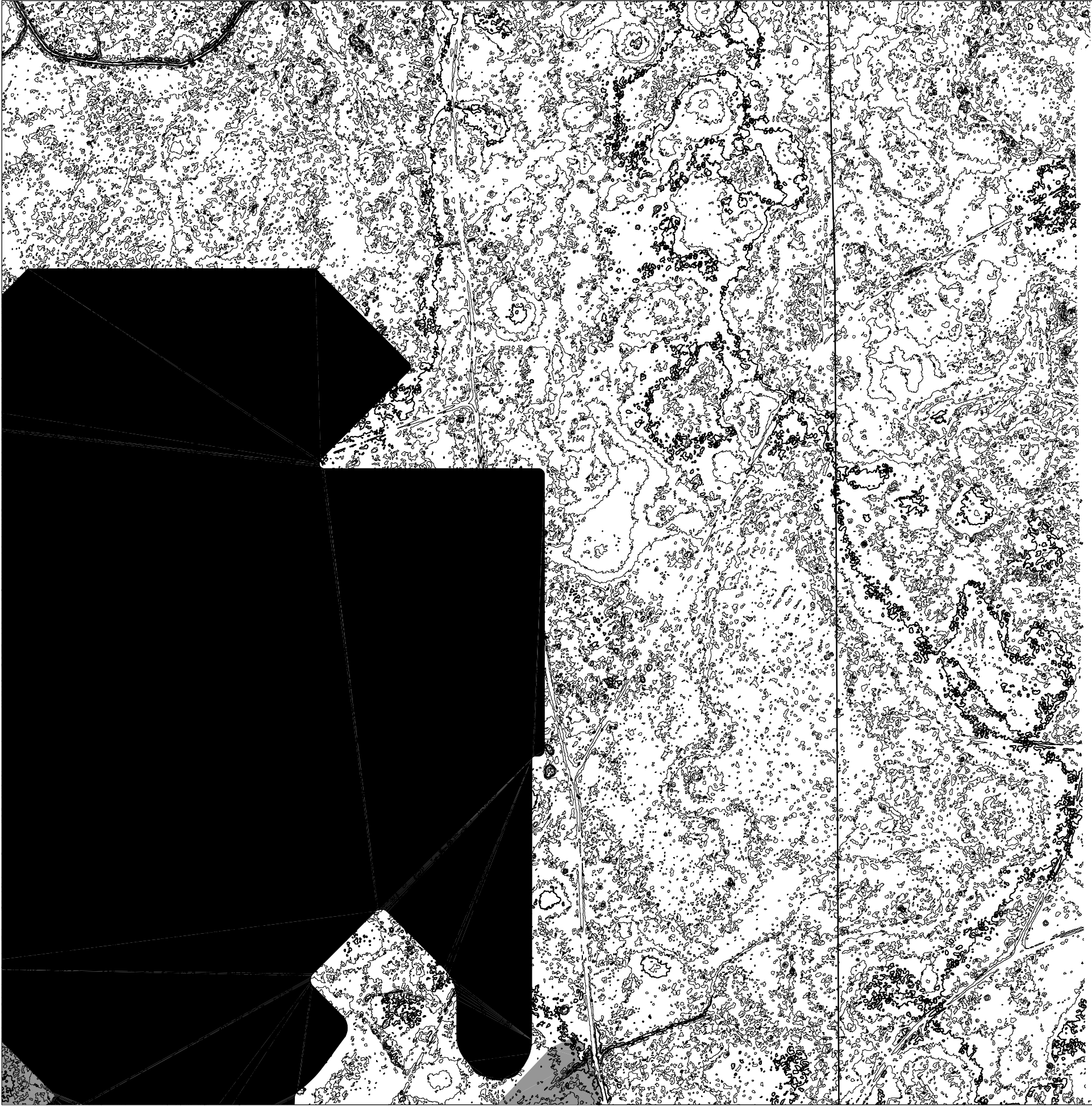
**Levy Nuclear Plant
Units 1 and 2
Detailed Floodplain Analysis
for the
Site**

Sources

LNP Site: Sargent & Lundy, 2007

Attachment I

Sheet 2 of 8

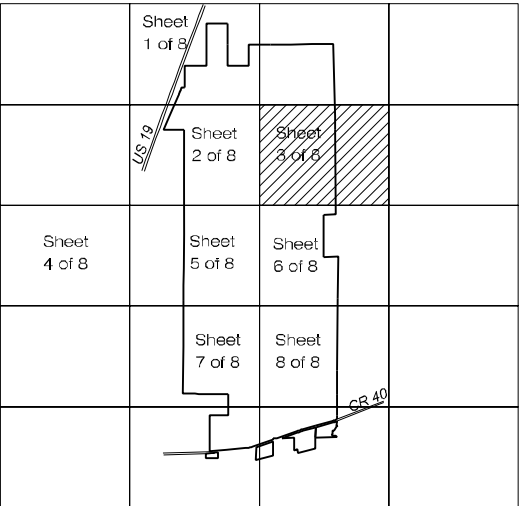


Graphic Scale: 1"=300'

Legend

—— LNP Property Boundary

Drawing Location



Progress Energy Florida

**Levy Nuclear Plant
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Sources

LNP Site: Sargent & Lundy, 2007

Attachment I

Sheet 3 of 8

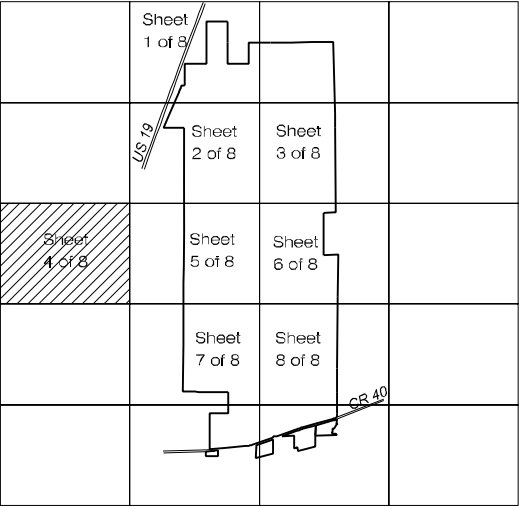


Graphic Scale: 1"=300'

Legend

—— LNP Property Boundary

Drawing Location



Progress Energy Florida

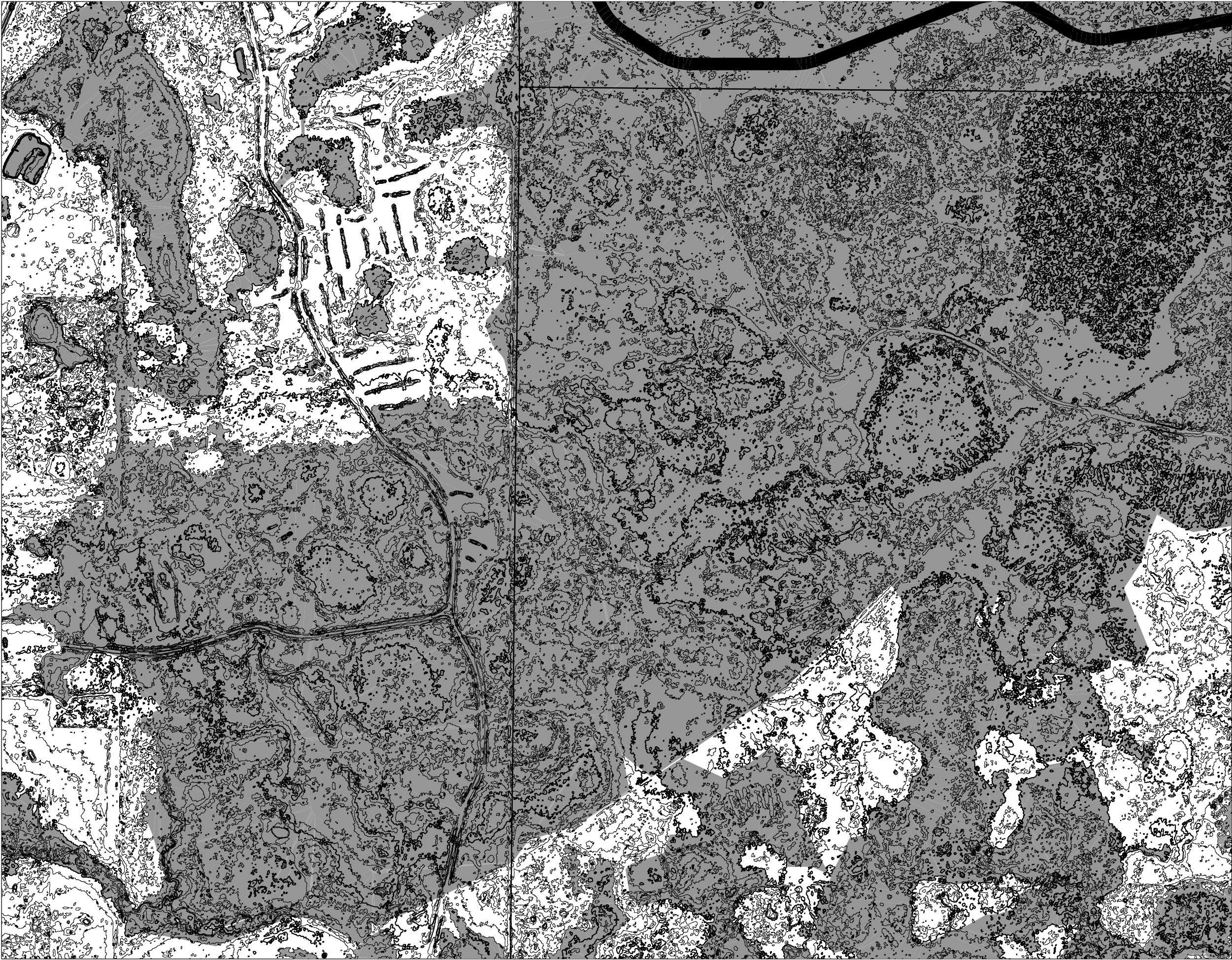
**Levy Nuclear Plant
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Site**

Sources

LNP Site: Sargent & Lundy, 2007

Attachment I

Sheet 4 of 8

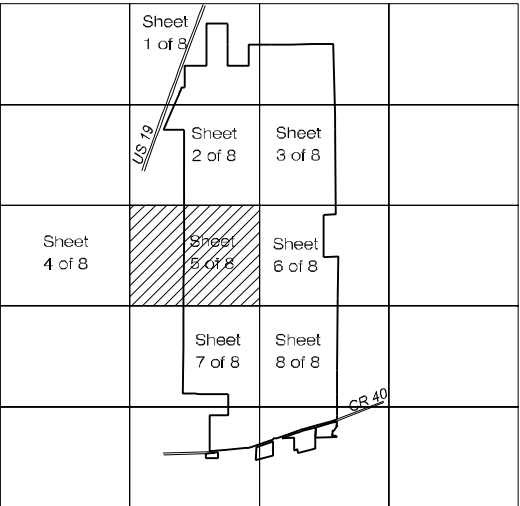


Graphic Scale: 1"=300'

Legend

—— LNP Property Boundary

Drawing Location



Progress Energy Florida

**Levy Nuclear Plant
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Sources

LNP Site: Sargent & Lundy, 2007

Attachment I

Sheet 5 of 8

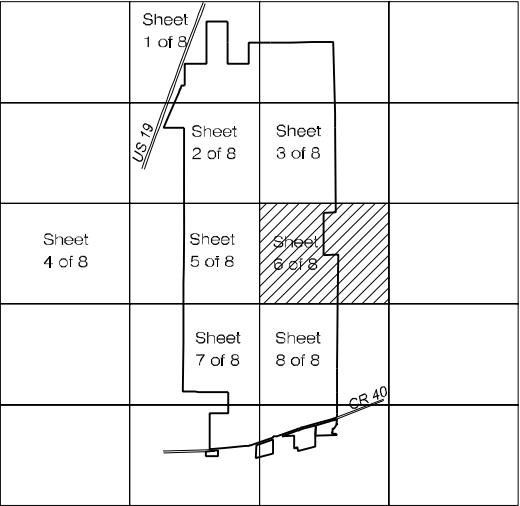


Graphic Scale: 1"=300'

Legend

—— LNP Property Boundary

Drawing Location



Progress Energy Florida

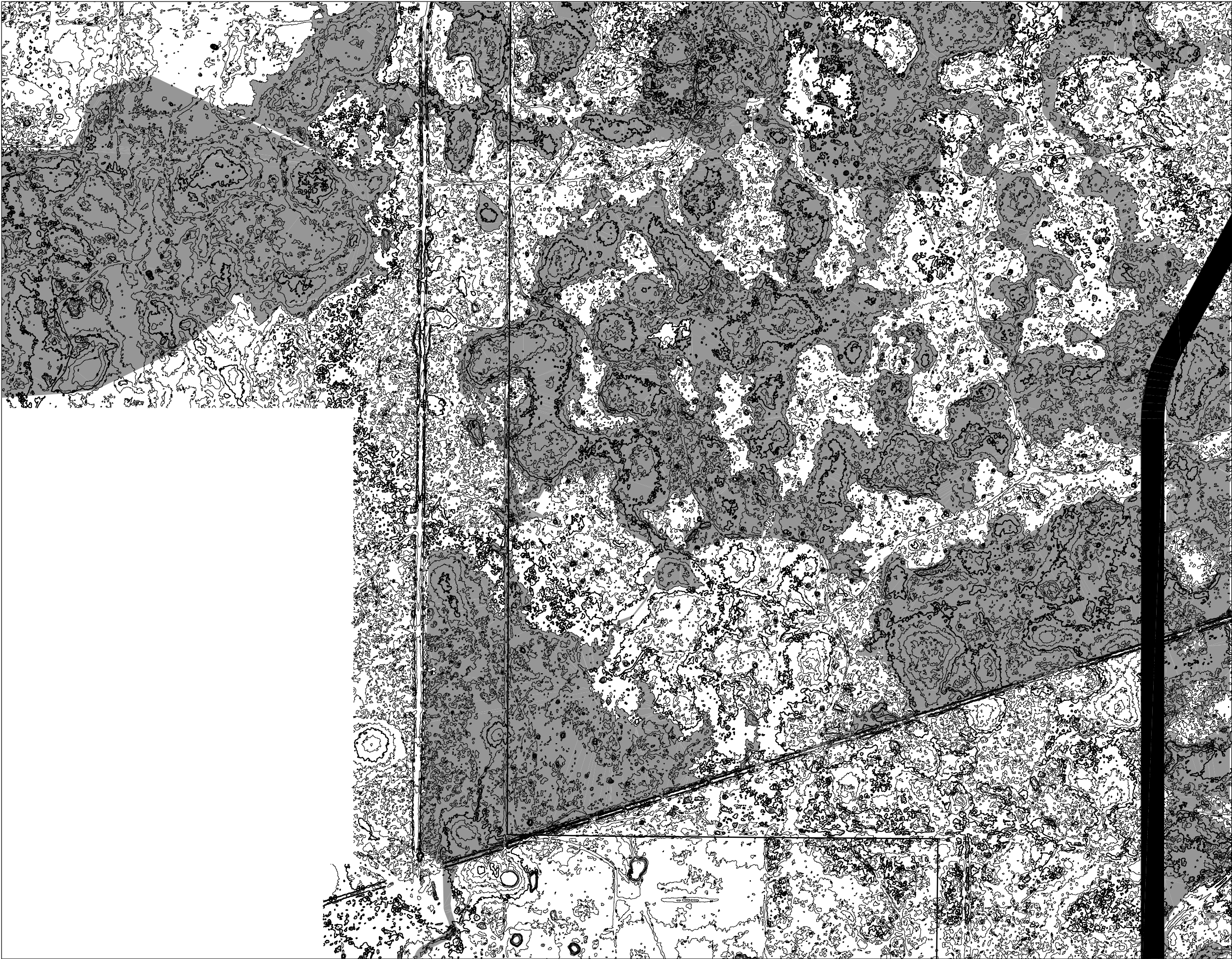
**Levy Nuclear Plant
Units 1 and 2
Detailed Floodplain Analysis
for the
Site**

Sources

LNP Site: Sargent & Lundy, 2007

Attachment I

Sheet 6 of 8

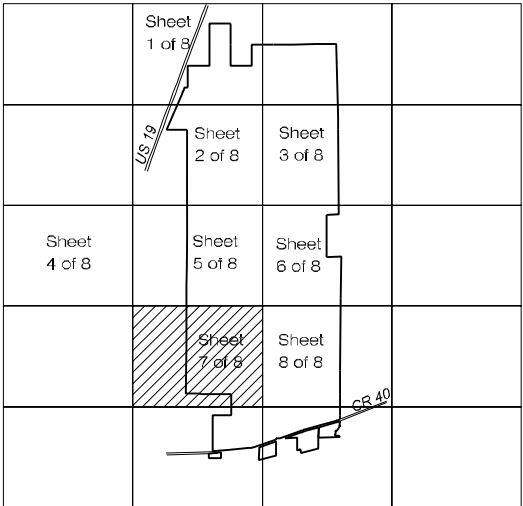


Graphic Scale: 1"=300'

Legend

— LNP Property Boundary

Drawing Location



Progress Energy Florida

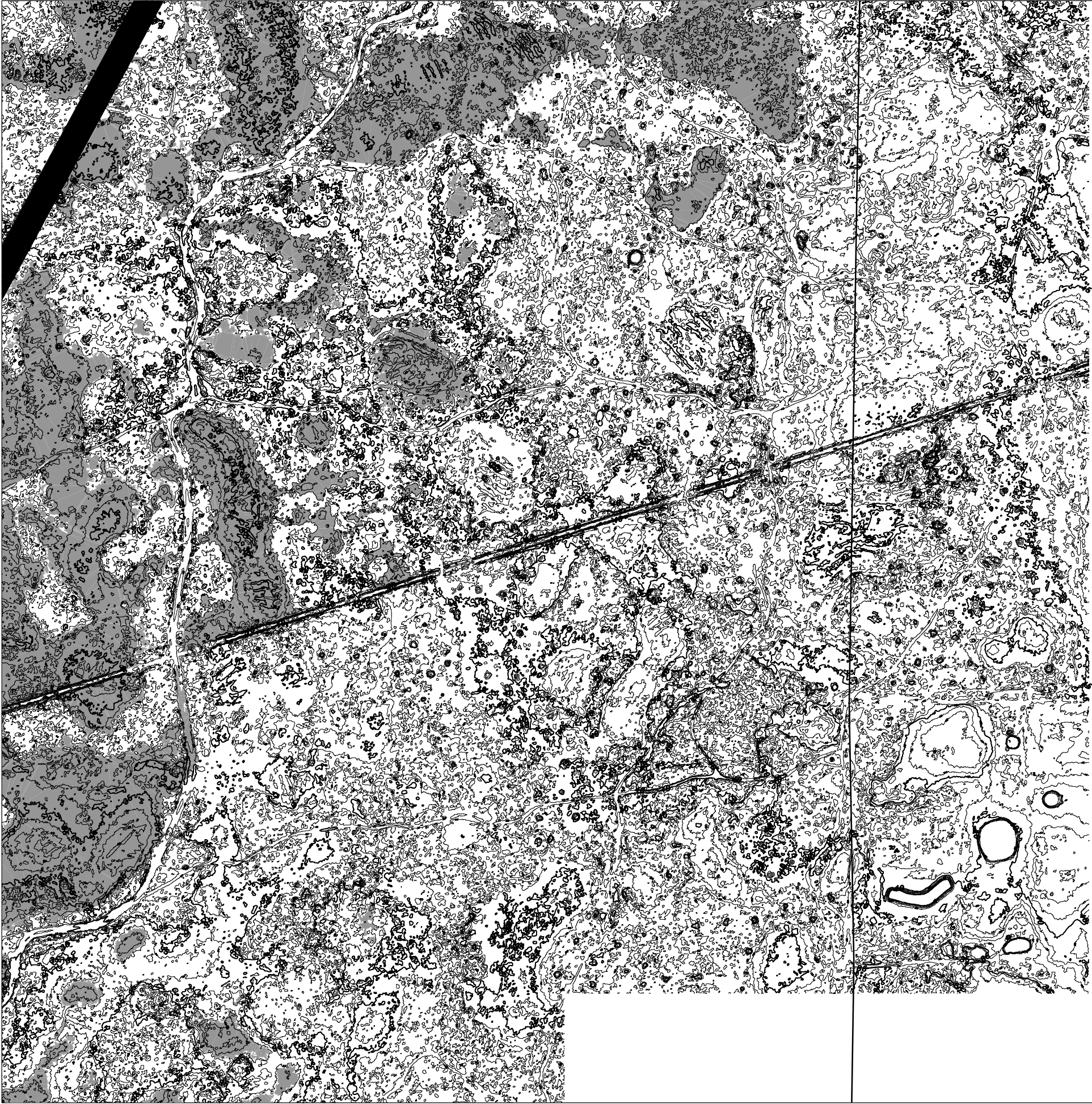
**Levy Nuclear Plant
Units 1 and 2
Detailed Floodplain Analysis
for the
Site**

Sources

LNP Site: Sargent & Lundy, 2007

Attachment I

Sheet 7 of 8

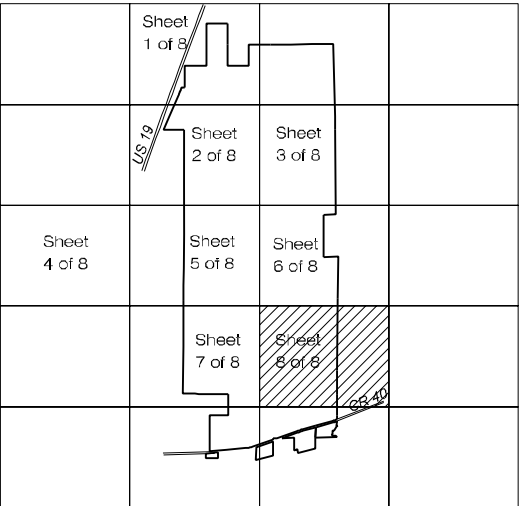


Graphic Scale: 1"=300'

Legend

—— LNP Property Boundary

Drawing Location



Progress Energy Florida

**Levy Nuclear Plant
Units 1 and 2
Detailed Floodplain Analysis
for the
Site**

Sources

LNP Site: Sargent & Lundy, 2007

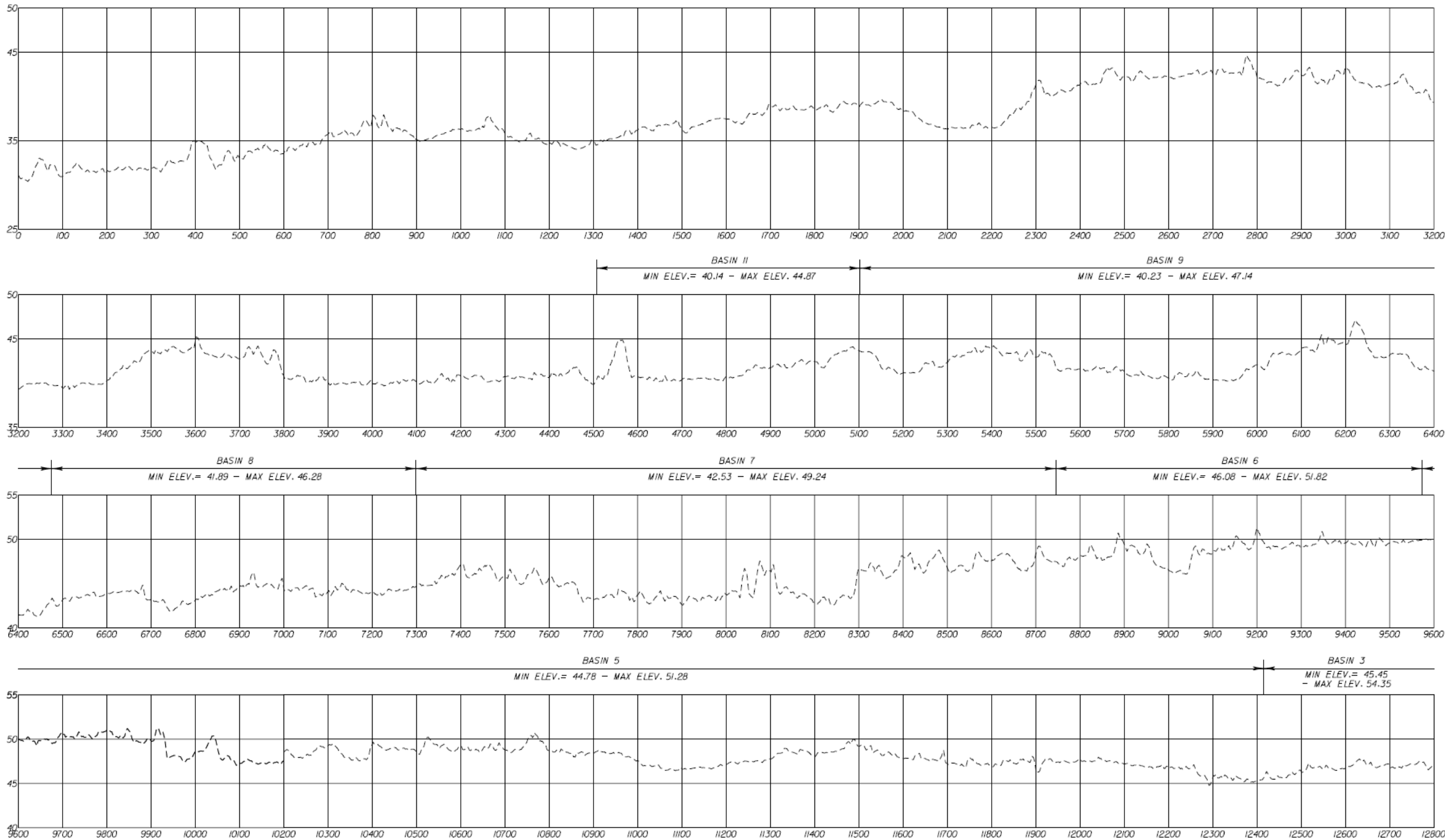
Attachment I

Sheet 8 of 8

ATTACHMENT J

Ground Profile along East Property Line

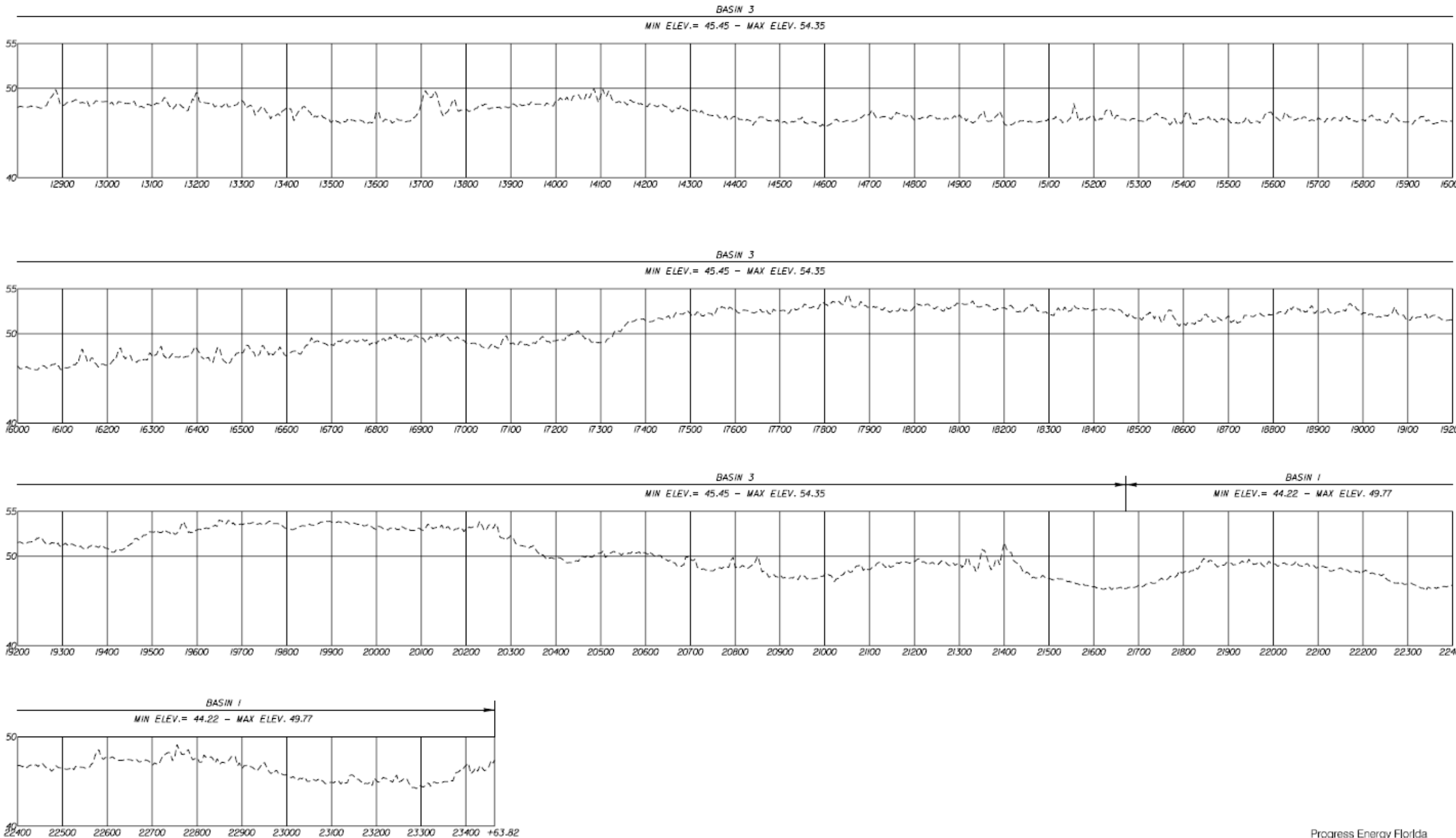
Attachment J – Ground Profile Along East Property Line



Ground Elevation Profile Approximately 50-feet Inside East Property Line
Sheet 1 of 2

Progress Energy Florida
Levy Nuclear Plant
Units 1 and 2
Detailed Floodplain Analysis for the Site

Attachment J – Ground Profile Along East Property Line



Ground Elevation Profile Approximately 50-feet Inside East Property Line
Sheet 2 of 2

Progress Energy Florida
Levy Nuclear Plant
Units 1 and 2
Detailed Floodplain Analysis for the Site