WOOLPERT

Final Revised Report

2015 Church Creek Watershed ICPR Model Addition/Revision

City of Charleston

September 1, 2015

Bees Ferry Road Widening Project
West Ashley Traffic Circle
Faison Bees Ferry Apartments
Verdier Pointe Apartments
Blue Water Gas Station
McAlisters Funeral Home
Shadow Pointe Apartments

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Introduction

The Church Creek Watershed in Charleston, South Carolina is an approximately 8.5 square mile watershed that drains to Church Creek and ultimately the Ashley River. Historically, the watershed has had numerous flooding issues and multiple initiatives have been explored and implemented to help reduce the existing flooding and prevent additional flooding from new development. These initiatives have included projects such as a new drainage canal to re-route stormwater, culvert upgrades, and establishing a Special Stormwater Management Area ordinance.

In 2001, the City of Charleston (City) contracted with Woolpert to use Interconnected Pond Routing (ICPR) to create a stormwater model of the Church Creek Watershed. This model represented the existing conditions and provided a base model in which future developments could be added and analyzed to verify that the Special Stormwater Management Area ordinance was effective. Over the past 14 years, Woolpert has updated the model numerous times to incorporate both new development and capital improvement projects.

The previous model revision (FEMA LOMR Submittal Final Report – Revision 3 dated December 5, 2011) added several new developments, a culvert upgrade, and a new diversion channel. This update was submitted to the Federal Emergency Management Agency (FEMA) as a Letter of Map Revision (LOMR). The LOMR was a modification of the effective Flood Insurance Rate Map (FIRM) and officially adjusted the base flood elevations (BFE) of several areas within Church Creek. For this report, the FEMA LOMR Submittal Final Report was used as the "base model."

This report details the most recent update to the model. Numerous projects were considered for inclusion in the update based on their current status, but ultimately seven (7) development projects were incorporated at this time. All of the developments included were either already constructed or under construction. The seven (7) developments added to the model are listed below:

- Bees Ferry Road Widening Project,
- West Ashley Traffic Circle,
- Faison Bees Ferry Apartments,
- Verdier Pointe Apartments,
- Blue Water Gas Station,
- McAlisters Funeral Home, and
- Bees Ferry Apartments (Shadow Pointe Apartments).

The locations of these projects are indicated on the ICPR Link/Node Connectivity Map and the ICPR Sub-Basin Map in Section 3. The Bees Ferry Road Widening Project and West Ashley Traffic Circle were previously evaluated by Woolpert, but were not included in the FEMA LOMR Submittal Final Report because they had not been constructed at the time of the submittal.

Data Collection

Woolpert and the City worked together to compile the necessary data for each development. Most of the data was obtained from the engineering firms that designed the developments. Plans for McAlister's Funeral Home were unavailable and survey data was collected for critical elevations. In addition, the Shadow Pointe Apartments had conflicting information in the plans and drainage report. Survey data was collected on June 22, 2015 to verify critical elevations for this project as well. As-built drawings were obtained when possible and field visits to all locations were conducted for general observation. Although actual site specific design data should always supersede other available data, Woolpert was forced to use the best available information and to approximate model inputs when needed.

Bees Ferry Road Widening Project

The plans for the Bees Ferry Road Widening were developed and sealed by SeamonWhiteside & Associates (SWA), but Woolpert obtained the plans from the Charleston County RoadWise Program. At the time of this report, construction was almost complete so as-built drawings were not yet available. Design plans and the drainage report were used to add this project to the model. Woolpert and the City met with the Charleston County Construction Project Manager and she indicated that the drainage infrastructure and associated invert elevations closely matched the designed plans.

West Ashley Traffic Circle

The original West Ashley Traffic Circle plan and drainage report was designed by SWA; however the northern portion of the circle was redesigned by Davis and Floyd (D&F). The north western quadrant of the traffic circle was edited from a traditional circle layout to a square shape for that quadrant only based upon a request from the property owner. The drainage report completed by SWA for the entire traffic circle was not revised by D&F. Woolpert obtained the design plans from the Construction Project Manager for the Charleston County RoadWise Program. Woolpert already had the West Ashley Traffic Circle Stormwater Master Plan dated April 2008 that was reviewed in 2010. At the time of this report, construction on the traffic circle had begun and was projected to be complete in September of 2015. As-built drawings will not be available until after completion, so the drainage report and design plans were used to add this project to the model.

Faison Bees Ferry Apartments

The Faison Apartments are located on Proximity Drive which is a new entrance into the Grand Oaks Subdivision on Bees Ferry Road. The apartment complex was designed by HLA, Inc. HLA, Inc. provided Woolpert with the appropriate design plans, drainage report, and as-built drawings. The as-built drawings and drainage report were used to add the project to the model.

Verdier Pointe Apartments

The Verdier Pointe Apartments were also designed and sealed by HLA Inc. The apartment complex is located on Verdier Drive directly off of Bees Ferry Road. HLA Inc. provided design plans, as-built drawings, and the drainage report. The as-built drawings and drainage report were used to update the model.

Blue Water Gas Station

The Blue Water Gas Station is located at the intersection of Grand Oaks Boulevard and Bees Ferry Road. It was designed by Earthsource Engineering (EE). EE provided Woolpert with the design plans and drainage report. At the time of this model update, construction has just begun so as-built drawings were not available, and the project was added using information from the design plans and drainage report. This site does not have a traditional pond. Instead, underground detention was designed.

It is also important to note that the stormwater detention system was designed to control the stormwater runoff for the entire parcel; however, the Blue Water Gas Station only occupies the eastern half. The western section of the parcel is to remain undeveloped. When the western section is developed, the City must confirm that the proposed development matches the assumptions in the existing drainage report and ICPR model.

McAlister's Funeral Home

McAlister's Funeral Home is located at the intersection of Bees Ferry Road and Shadow Pointe Drive and was designed by Trico Engineering. Trico Engineering has since been acquired by Stantec. Neither Stantec nor the City were able to locate construction plans, as-built drawings, or a drainage report for this site. The unavailability of this design information required Woolpert to approximate various model input parameters to include this development in the model update.

Woolpert used aerial imagery in GIS, a soil report from the Natural Resources Conservation Service (NRCS), and topographic data from 2001. Woolpert then used the United States Department of Agriculture's (USDA) Technical Release 55 (TR55) to approximate the hydrological components needed for this location. A field visit on June 22, 2015 that included survey on the critical elevations of the stormwater system was also conducted to estimate various hydraulic parameters.

Bees Ferry Apartments (Shadow Pointe Apartments)

The Shadow Pointe Apartments are located on Shadow Pointe Drive. They were designed by Lowcountry Land Development Consultants (Lowcountry). Lowcountry provided Woolpert with the construction plans, AutoCAD drawings, and several HydroCAD models. Unfortunately, there were many discrepancies in the data between these three (3) sources. The most apparent discrepancies were between the pond areas and the invert elevations of the outfall structures. In addition, Type B soils were used to calculate the curve numbers (CN). The NRCS soil map indicates that type "C" and "D" soils are more appropriate in this area.

Woolpert used TR55 to recalculate the curve numbers and time of concentrations based on the NRCS soil map and AutoCAD drawings. The pond areas indicated in the AutoCAD drawings were used for the updated model. The stormwater outfall structures were surveyed by Woolpert on June 22, 2015 to determine the actual invert elevations. Pipe sizes and lengths were verified by field visits and GIS imagery.

Model Integration

Woolpert used the ICPR model approved by the Federal Emergency Management Agency (FEMA) on May 9, 2012 (report dated December 5, 2011) as the base model for this update. This was the last significant update Woolpert completed for the Church Creek drainage basin. In order to add the seven (7) developments into the model, numerous new links and nodes were needed. The original link and node naming scheme was followed by adding increasing letters to the tie-in node. The updated Link/Node Connectivity Map is located in Section 3.

In addition, many new sub-basins were delineated within previous sub-basins and named according to the node it was associated with. The parameters of the new sub-basins were obtained from corresponding drainage reports and plans provided by engineers except where noted in the previous section. TR55 was used to update the curve number and time of concentration on orphaned sub-basin areas previously included in larger sub-basins.

A few sub-basins from the base model were reassigned to new nodes for this update. This was prevalent along the diversion channel in front of McAlister's Funeral home due to new points of entry for runoff associated with development. If a new node was closer to the sub-basin than a node within the base model, the sub-basin was assigned to the closest node. The updated Sub-Basin Map is located in Section 3.

Results

After integration of all seven (7) developments into the existing model, six (6) storm events were evaluated: 2-, 10-, 25-, 50-, 100- and 500-year storm events. The model results were reviewed to determine the aggregate effect the new developments had on the water surface elevations (WSE) for the overall watershed. The results varied for each area of new development and the full results can be found Section 5. Table 1: Key Nodes Summary (located in Section 2) compares the water surface elevations of several nodes throughout the model for the 2-, 10- and 100-year storm event for both the base and updated model. Only base nodes were included in this table as there is no data for the new nodes in the base model. Many of the new nodes are included in Table 2: New Nodes Summary (located in Section 2). Table 2 compared the updated water surface elevation to the warning stage. The warning stage usually indicates the approximate elevation at which the node/link will overtop or be out-of-bank; however, both tables have a column that clarifies the warning stage for each key or new node. It does not necessarily indicate that road or structural flooding is occurring.

Bees Ferry Road Widening & Traffic Circle

Because this model includes so many updates that impact the same key nodes, it is difficult to interpret the direct impact of these two road projects, as opposed to the other commercial and residential developments added during this update. However, both the Bees Ferry Road Widening project and Traffic Circle project have been previously modeled and reviewed individually by Woolpert in the following reports:

- ICPR Model Addition/Revisions Bees Ferry Road Widening dated January 30, 2009; and
- ICPR Model Addition/Revision West Ashley Traffic Circle dated April 29, 2010.

The previous modeling efforts indicated that both projects had negligible effect on the overall model due to their linear nature and location with the watershed. The linear nature allows the projects to have multiple outlets that spread out the runoff to many locations. In addition, since both projects are located in a more downstream section of the watershed, the runoff from the road projects drains through critical nodes approximately 11 to 12 hours sooner than the runoff produced by the upstream commercial and residential areas.

Verdier Pointe Apartments, Faison Apartments, & Blue Water Gas Station

Verdier Pointe Apartments, Faison Apartments, & Blue Water Gas Station all ultimately drain to an upgraded double 7 ft. x 5 ft. culvert under Bees Ferry Road (N-G020 and N-G010). The major concerns in this area are listed here and then discussed in more detail below.

- The culvert under Proximity Drive (N-G042 and N-G043) is constricting flow for large design storms and causing ponding upstream. WSEs overtop Proximity Drive during the 100-year storm.
- The eastern channel (N-G020 through N-G050) may overtop into the neighboring wetland in larger storm events.

The 10-year WSE increase at the culvert under Bees Ferry Road is 0.1 ft. at the upstream end (N-G020) and 0.3 ft. at the downstream end (N-G010) of the culvert. This culvert was upgraded and has higher invert elevations. The higher invert elevations cause increased WSEs during the smaller storm events. Because the culvert is now larger, it allows more stormwater to pass through and the difference in head through the culvert has decreased. This caused the increase in WSEs at the downstream side of Bees Ferry Road.

Just upstream of the culvert under Bees Ferry Road, the channel forks in two directions. The western side continues upstream towards N-G030. When compared to the base model, N-G030 showed very little increase in the WSE after Verdier Pointe Apartments was added to the updated model (see Table 1). Table 2 also showed that the ponds and channel associated with Verdier Pointe Apartments (N-G021 to N-G028) do not overtop their banks in either 10-year or 100-year storm event.

Both Faison and the Blue Water Gas Station drain to the eastern channel (N-G020 through N-G050) that ultimately flows through the previously referenced 7 ft. x 5 ft. culvert under Bees Ferry Road. The next upstream base model node on this channel is N-G050. The increase at this location during the 10-year storm event is 0.8 ft. (see Table 1). The flows in the channel remained approximately the same throughout the channel in the updated model so the water surface elevation increases appear to be a result of the culvert under Proximity Drive (N-G042 and N-G043). The water backs up behind the culvert and overtops Proximity Drive in the 100-year storm event by 0.5 ft. The channel segment upstream of Proximity Drive may also overtop in the larger storm events, but uncertainty in the actual elevation of the top of bank prevents confirmation. The warning stages from the original model indicate approximate elevations, but would need to be confirmed with survey.

McAlister's Funeral Home & Shadow Pointe Apartments

The greatest impact from the seven (7) added developments was located in the channel just upstream of the McAlister's Funeral Home and Shadow Pointe Apartments. The bulleted list summarizes the areas which appear subject to flooding and/or ponding.

- The culvert under Shadow Pointe Drive (N-C080 and N-C085) is constricting flow for large design storms and causing ponding upstream; however, Shadow Pointe Drive does not overtop in any storm event.
- The channel along Bees Ferry Road (N-C080 through N-C090) just upstream of the Shadow Pointe Drive culvert is now experiencing out-of-bank flooding in the 10-year storm.
- WSEs in the pond at McAlister's Funeral Home (N-C086B) exceed the capacity of the primary outlet structure and emergency spillway and overtop the banks of the pond in the 2-year storm.
- WSEs in one pond in Shadow Pointe Apartments (N-A083B) exceed the capacity of the primary outlet structure and emergency spillway and overtop the banks of the pond in the 10-year storm.

The referenced channel begins at N-C090 and continues southwest along Bees Ferry Road and eventually turns south. It continues to and then under the railroad tracks, through the Canterbury Woods neighborhood, and out to Church Creek. At the downstream end of the railroad tracks (N-A090), the WSE increase is 0.1 ft. for the 10-year storm event. Just upstream of the railroad (N-A100), the WSE increase is 0.3 ft. for the 10-year storm event. The culvert under Shadow Pointe Drive is the next major constriction in the channel. The 10-year WSE was 1 ft. higher than the WSE in the base model for the upstream side of the culvert (N-C080). In addition, it is overtopping the channel banks on the upstream side by approximately 0.5 ft., and there is 1.1 ft. of head loss through the culvert (see Table 2) for the 10-year storm event. The channel spills over into the adjacent wetland upstream of Shadow Pointe Drive when the banks overtop.

The increase in WSE continues upstream to N-C090 and under Bees Ferry Road to N-C100. At N-C100, the WSE increase was 0.7 ft. for the 10-year storm event. Nodes as far upstream as N-C130 and N-C150 have a 0.4 ft. increase in WSEs. During the 100-year storm event, the area upstream of the culvert under Shadow Pointe Drive has increased WSEs ranging between 0.5 ft. (N-C080) and 0.6 ft. (N-C090). Further upstream of Bees Ferry Road, the 100-year storm event increased 0.4 ft.

Two ponds in this area are overtopping in most storm events: the pond at McAlister's (N-C086B) and one of the ponds in Shadow Pointe Apartments (N-A083B). Both of these ponds overtop the side of the pond into adjacent wetland areas but appear unlikely to flood Bees Ferry Road or nearby structures bases on available topography. Detailed on-site survey data would have to be obtained to determine the potential for flooding.

The areas upstream of the culvert under Shadow Pointe Drive experience increased WSEs indicating that the culvert does not have sufficient capacity for design storms with a recurrence interval of 10 years or greater. Woolpert used design information provided by the City and/or design engineer for each development. Missing data and discrepancies between provided information made it difficult to determine the final design parameters and to discern the cause of the WSE increases.

The WSEs increases may also be partially due to the sub-division of larger sub-basins and redistributing the flow at upstream nodes. These changes can influence the modeled WSE at each node.

Recommendations

The purpose of the Special Stormwater Management Area ordinance is to limit the volume of water entering the stormwater system so that water surface elevations would not be effected by new development. The area near McAlister's Funeral Home and Shadow Pointe Apartments had the most significant increases in the water surface elevations; however there were additional increases upstream of Proximity Drive as well.

The channel running parallel to Bees Ferry Road between N-C090 and N-A100 was originally installed as a diversion channel to re-route some of the stormwater draining through Shadowmoss Plantation. The channel provided flooding relief for many homes within Shadowmoss. Although the WSE increases do not appear to cause flooding to structures at this time, we recommend that the City obtain finished floor elevations (FFE) for the funeral home, Shadow Pointe Apartments, and possibly some homes upstream of Bees Ferry in the area of the increases to verify that structural flooding will not occur.

Just to the northeast of McAlister's Funeral Home and Shadow Pointe Apartments is a section of undeveloped land. Some is wetland, but some is developable. Woolpert is aware of at least one development proposed for this area. With the increased WSEs in this area and the channel overtopping into the wetland, special care should be taken to verify that the ordinance requirements of the Special Stormwater Management Area are met in any new developments.

Woolpert noted the discrepancies between the pond areas in the model program and AutoCAD drawings for the Shadow Pointe Apartments. It is the responsibility of the Engineer of record to provide complete and accurate submittals to the City for review and the construction inspector to ensure that the stormwater controls are built as designed. Without the AutoCAD drawings, it would be difficult for the City to verify that accurate pond areas and volumes are used in the design and even harder to determine if they are constructed properly. The City may want to consider requiring developers to submit a digital AutoCAD file that includes the ponds and any other relevant areas as a part of the permit submittal, as well as as-built drawings to ensure construction of the permitted design.

Updates to the ICPR model should be completed as necessary to maintain an up-to-date model for the entire watershed. The City may choose to save all submittals within the Church Creek Watershed. Woolpert and the City expended considerable time and effort to track down the required information for each development. Saving this information at the time of submittal would reduce the time required to gather the data for future updates. The City should also continue to provide the design community with tail water conditions based on this model as needed.

In light of all of the attention that flood elevations in this watershed have received through the years, Woolpert recommends that the City conduct annual training for its planning, plan review, and permitting staff in regards to the Special Stormwater Management Area ordinance. It is imperative that the requirements of the ordinance be followed by the development community in order to maintain current flood elevations and avoid allowing significant deviations in water surface elevations from the current FEMA flood maps.

Table 1:
Key Nodes Summary Table

Table 1: Key Nodes Summary

Node	Storm	Warning Stage (ft)	WSE (ft)			Location	Warning Stage Description
			Base	Updated	Difference		
N-G010	2-Year	8.0	7.0	7.4	0.4	DS End of Culvert under Bees Ferry (Western Side)	Estimated top of bank in orginal model
	10-Year	8.0	7.8	8.1	0.3		
	100-Year	8.0	8.5	9.0	0.5		
N-G020	2-Year	8.0	7.1	7.4	0.3	US End of Culvert under Bees Ferry (Western Side)	Estimated top of bank in orginal model
	10-Year	8.0	8.1	8.2	0.1		
	100-Year	8.0	9.4	9.4	0.0		
N-G030	2-Year	10.0	7.1	7.6	0.5	US of Verdier Apartments	Estimated top of bank in orginal model
	10-Year	10.0	8.1	8.2	0.1		
	100-Year	10.0	9.4	9.4	0.0		
N-G050	2-Year	10.0	7.3	7.8	0.5	US of Faison	Estimated top of bank in orginal model
	10-Year	10.0	8.2	9.0	0.8		
	100-Year	10.0	9.5	10.8	1.3		
N-B020	2-Year	8.6	6.6	6.8	0.2	US end of Bridge along Bees Ferry	Estimated top of bank in orginal model
	10-Year	8.6	7.7	7.6	-0.1		
	100-Year	8.6	9.1	9.2	0.1		
N-B010	2-Year	8.1	6.1	6.1	0.0	DS end of Bridge along Bees Ferry	Estimated top of bank in orginal model
	10-Year	8.1	6.9	7.0	0.1		
	100-Year	8.1	8.0	8.4	0.4		
N-A120	2-Year	8.0	5.8	5.9	0.1	US of RR, DS of bridge on Bees Ferry	Estimated top of bank in orginal model
	10-Year	8.0	6.6	6.8	0.2		
	100-Year	8.0	7.8	8.2	0.4		
N-A140	2-Year	8.0	6.0	6.1	0.1	US of RR near Glenn McConnell	Estimated top of bank in orginal model
	10-Year	8.0	6.8	7.0	0.2		
	100-Year	8.0	7.9	8.3	0.4		
N-C150	2-Year	10.0	10.1	10.2	0.1	Within Shadowmoss	Estimated top of bank in orginal model
	10-Year	10.0	11.2	11.6	0.4		
	100-Year	10.0	12.1	12.4	0.3		

Table 1: Key Nodes Summary							
Node	Storm	Warning Stage (ft)	WSE (ft)			Location	Warning Stage Description
			Base	Updated	Difference		
N-C130	2-Year	10.0	10.1	10.2	0.1	Within Shadowmoss	Estimated top of bank in orginal model
	10-Year	10.0	11.2	11.6	0.4		
	100-Year	10.0	12.1	12.4	0.3		
N-C100	2-Year	11.9	9.1	9.8	0.7	US end of culvert under Bees Ferry	Estimated top of bank in orginal model
	10-Year	11.9	10.9	11.6	0.7		
	100-Year	11.9	11.9	12.3	0.4		
N-C090	2-Year	11.9	8.9	9.7	0.8	DS end of culvert under Bees Ferry	Estimated top of bank in orginal model
	10-Year	11.9	10.5	11.6	1.1		
	100-Year	11.9	11.7	12.3	0.6		
N-C080	2-Year	11.0	8.9	9.6	0.7	US end of culvert under Shadow Pointe Dr.	Approximate out-of-bank elevation
	10-Year	11.0	10.5	11.5	1.0		
	100-Year	11.0	11.7	12.2	0.5		
N-A100	2-Year	14.8	7.7	8.3	0.6	US end of culvert under RR tracks	Approx elev. Of overtopping the RR
	10-Year	14.8	8.7	9.0	0.3		
	100-Year	14.8	9.8	9.6	-0.2		
N-A090	2-Year	8.0	7.7	8.1	0.4	DS end of culvert under RR tracks	Estimated top of bank in orginal model
	10-Year	8.0	8.2	8.3	0.1		
	100-Year	8.0	8.4	8.4	0.0		

Table 2:
New Nodes Summary Table

Table 2: New Nodes Summary						
Node	Storm	Warning Stage (ft)	Updated WSE (ft)	Overtopping Depth (ft)	Location	Warning Stage Description
N-G025	2-Year 10-Year 100-Year	10.0 10.0 10.0	7.4 8.2 9.4	-2.6 -1.8 -0.6	Channel outside of Verdier	Top of Channel Banks
N-G025B	2-Year 10-Year 100-Year	12.0 12.0 12.0	10.2 10.9 11.4	-1.8 -1.1 -0.6	Pond in Verdier	Top of Pond
N-G025C	2-Year 10-Year 100-Year	12.0 12.0 12.0	10.2 10.9 11.4	-1.8 -1.1 -0.6	Pond in Verdier	Top of Pond
N-G028	2-Year 10-Year 100-Year	12.0 12.0 12.0	7.4 8.2 9.4	-4.6 -3.8 -2.6	Channel outside of Verdier	Top of Channel Banks
N-G028B	2-Year 10-Year 100-Year	12.0 12.0 12.0	10.2 10.9 11.5	-1.8 -1.1 -0.5	Pond in Verdier	Top of Pond
N-G030	2-Year 10-Year 100-Year	10.0 10.0 10.0	7.6 8.2 9.4	-2.4 -1.8 -0.6	Channel upstream of Verdier	Estimated top of bank in orginal model
N-G043	2-Year 10-Year 100-Year	10.3 10.3 10.3	7.8 9.0 10.8	-2.5 -1.3 0.5	US end of culvert under Proximity Dr.	Overtop Elevation for Proximity Dr.
N-G044	2-Year 10-Year 100-Year	10.0 10.0 10.0	7.8 9.0 10.9	-2.2 -1.0 0.9	Channel outside of Bluewater	Top of Channel Banks
N-G044B	2-Year 10-Year 100-Year	16.0 16.0 16.0	14.2 14.9 15.8	-1.8 -1.1 -0.2	Underground Storage at Bluewater	Top of Channel Banks
N-G043A	2-Year 10-Year 100-Year	10.0 10.0 10.0	8.0 9.0 10.8	-2.0 -1.0 0.8	Pond in Faison	Top of Pond

Table 2: New Nodes Summary						
Node	Storm	Warning Stage (ft)	Updated WSE (ft)	Overtopping Depth (ft)	Location	Warning Stage Description
N-G045	2-Year 10-Year 100-Year	10.0 10.0 10.0	7.8 9.0 10.8	-2.2 -1.0 0.8	Channel outside of Faison	Matched US node from original model
N-G045B	2-Year 10-Year 100-Year	10.0 10.0 10.0	8.4 9.0 10.8	-1.6 -1.0 0.8	Pond in Faison	Top of Pond
N-G045C	2-Year 10-Year 100-Year	10.0 10.0 10.0	8.4 9.0 10.8	-1.6 -1.0 0.8	Pond in Faison	Top of Pond
N-B075	2-Year 10-Year 100-Year	15.0 15.0 15.0	13.0 14.1 15.4	-2.0 -0.9 0.4	Traffic Circle	Approx. overtop elev of traffic circle
N-B073	2-Year 10-Year 100-Year	15.8 15.8 15.8	13.0 14.1 15.4	-2.8 -1.7 -0.4	Traffic Circle	Approx. overtop elev of traffic circle
N-B071	2-Year 10-Year 100-Year	11.5 11.5 11.5	10.1 10.9 11.7	-1.4 -0.6 0.2	Traffic Circle	Approx. overtop elev of traffic circle
N-B015	2-Year 10-Year 100-Year	10.5 10.5 10.5	6.1 7.1 8.7	-4.4 -3.4 -1.8	US end of culvert under Bees Ferry	Throat of inlet along Bees Ferry
N-B011	2-Year 10-Year 100-Year	8.1 8.1 8.1	6.1 7.0 8.5	-2.0 -1.1 0.4	DS end of culvert under Bees Ferry	Matched DS node from original model
N-B014	2-Year 10-Year 100-Year	12.0 12.0 12.0	11.1 11.1 11.7	-0.9 -0.9 -0.3	Southern portion of Traffic Circle	Approx. overtop elev of traffic circle
N-A142	2-Year 10-Year 100-Year	12.0 12.0 12.0	10.6 11.0 11.7	-1.4 -1.0 -0.3	Southern portion of Traffic Circle	Approx. overtop elev of traffic circle

Table 2: New Nodes Summary						
Node	Storm	Warning Stage (ft)	Updated WSE (ft)	Overtopping Depth (ft)	Location	Warning Stage Description
N-A162	2-Year 10-Year 100-Year	14.5 14.5 14.5	10.8 12.6 15.2	-3.7 -1.9 0.7	Pond at McAlisters Funeral Home	Approx overtop elev of Glen McConnell
N-C086B	2-Year 10-Year 100-Year	10.0 10.0 10.0	10.3 11.6 12.3	0.3 1.6 2.3	Pond at McAlisters Funeral Home	Top of Pond
N-C086	2-Year 10-Year 100-Year	11.0 11.0 11.0	9.7 11.6 12.3	-1.3 0.6 1.3	Channel along Bees Ferry in front of McAlisters	Approximate out-of-bank elevation
N-C080	2-Year 10-Year 100-Year	11.0 11.0 11.0	9.6 11.5 12.2	-1.4 0.5 1.2	US end of culvert under Shadow Pt Dr.	Approximate out-of-bank elevation
N-C085	2-Year 10-Year 100-Year	11.0 11.0 11.0	9.3 10.4 10.9	-1.7 -0.6 -0.1	DS end of culvert under Shadow Pt Rd	Approximate out-of-bank elevation
N-C083	2-Year 10-Year 100-Year	11.0 11.0 11.0	9.1 10.2 10.7	-1.9 -0.8 -0.3	Along diversion canal DS of Shadow Pointe Dr.	Approximate out-of-bank elevation
N-C086D	2-Year 10-Year 100-Year	14.2 14.2 14.2	10.7 11.9 13.7	-3.5 -2.3 -0.5	Pond in Shadow Pointe Apts	Top of Pond
N-A083B	2-Year 10-Year 100-Year	12.9 12.9 12.9	12.3 13.0 13.0	-0.6 0.1 0.1	Pond in Shadow Pointe Apts	Top of Pond
N-A102	2-Year 10-Year 100-Year	11.0 11.0 11.0	9.2 10.0 10.9	-1.8 -1.0 -0.1	Pond in Shadow Pointe Apts	Top of Pond

Updated Model
Basin Input

```
         Name: B-A030                  Node: N-A030                Status: Onsite
        Group: RR                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                 Peaking Factor: 323.0
          Rainfall File: Scsiii             Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                Time of Conc(min): 300.00
              Area(ac): 450.700                 Time Shift(hrs): 0.00
          Curve Number: 83.40               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

REVISED AREA PER PHASE II DELINEATION


-------------------------------------------------------------------------------------------------
         Name: B-A040                  Node: N-A040                Status: Onsite
        Group: RR                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                 Peaking Factor: 323.0
          Rainfall File: SCSIII             Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                Time of Conc(min): 275.00
              Area(ac): 402.600                 Time Shift(hrs): 0.00
          Curve Number: 82.30               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00



-------------------------------------------------------------------------------------------------
         Name: B-A041                  Node: N-A040                Status: Onsite
        Group: RR                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                 Peaking Factor: 323.0
          Rainfall File: SCSIII             Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                Time of Conc(min): 270.00
              Area(ac): 388.400                 Time Shift(hrs): 0.00
          Curve Number: 84.10               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00



-------------------------------------------------------------------------------------------------
         Name: B-A060                  Node: N-A060                Status: Onsite
        Group: RR                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                 Peaking Factor: 323.0
          Rainfall File: SCSIII             Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                Time of Conc(min): 133.00
              Area(ac): 35.800                  Time Shift(hrs): 0.00
          Curve Number: 74.60               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

REVISED AREA PER PHASE II DELINEATION

-------------------------------------------------------------------------------------------------
         Name: B-A083B                 Node: N-A083B               Status: Onsite
        Group: RR                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                 Peaking Factor: 323.0
          Rainfall File: Scsiii             Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                Time of Conc(min): 11.00
              Area(ac): 4.150                   Time Shift(hrs): 0.00
          Curve Number: 90.00               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

Added per Lowcountry development plans.  CN and TOC were recalcuated by me due to inconsistances in plans/report

-------------------------------------------------------------------------------------------------
         Name: B-A100                  Node: N-A100                Status: Onsite
        Group: RR                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                 Peaking Factor: 323.0
          Rainfall File: SCSIII             Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                Time of Conc(min): 47.00
              Area(ac): 38.329                  Time Shift(hrs): 0.00
          Curve Number: 83.00               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00
```

Revised basin area on 1-19-09 for Bees Ferry Widening.

Revised basin for June 2015 update. Bees Ferry Apts. JPI 6/29/15

```
         Name: B-A100A                 Node: N-A083                Status: Onsite
        Group: RR                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                 Peaking Factor: 323.0
          Rainfall File: Scsiii           Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600              Time of Conc(min): 6.00
             Area(ac): 0.220                  Time Shift(hrs): 0.00
         Curve Number: 98.00             Max Allowable Q(cfs): 999999.000
              DCIA(%): 0.00
```

Transystem Area 6C

Moved from N-A100. JPI 6/29/15.

```
         Name: B-A100B                 Node: N-C080                Status: Onsite
        Group: RR                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                 Peaking Factor: 323.0
          Rainfall File: Scsiii           Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600              Time of Conc(min): 7.92
             Area(ac): 1.490                  Time Shift(hrs): 0.00
         Curve Number: 98.00             Max Allowable Q(cfs): 999999.000
              DCIA(%): 0.00
```

Transystem Area 6D

Moved from N-A100. JPI 6/29/15.

```
         Name: B-A100C                 Node: N-C085                Status: Onsite
        Group: RR                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                 Peaking Factor: 323.0
          Rainfall File: Scsiii           Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600              Time of Conc(min): 11.40
             Area(ac): 4.390                  Time Shift(hrs): 0.00
         Curve Number: 98.00             Max Allowable Q(cfs): 999999.000
              DCIA(%): 0.00
```

Transystem Area 6B

Moved from node N-A100. JPI 6/29/15

```
         Name: B-A102                  Node: N-A102                Status: Onsite
        Group: RR                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                 Peaking Factor: 323.0
          Rainfall File: Scsiii           Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600              Time of Conc(min): 16.00
             Area(ac): 5.215                  Time Shift(hrs): 0.00
         Curve Number: 92.00             Max Allowable Q(cfs): 999999.000
              DCIA(%): 0.00
```

Added per Lowcountry development plans. CN and TOC were recalcuated by me due to inconsistances in plans/report

---

```
         Name: B-A120A                 Node: N-A120                Status: Onsite
        Group: RR                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                 Peaking Factor: 323.0
          Rainfall File: SCSIII           Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600              Time of Conc(min): 78.00
             Area(ac): 45.592                 Time Shift(hrs): 0.00
         Curve Number: 81.00             Max Allowable Q(cfs): 999999.000
              DCIA(%): 0.00
```

Revides basin area 1-19-09 for bees ferry widening

```
         Name: B-A120B                 Node: N-A120                Status: Onsite
        Group: RR                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File: Scsiii              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 87.00
              Area(ac): 41.815                   Time Shift(hrs): 0.00
           Curve Number: 86.00               Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00



-------------------------------------------------------------------------------------------------
         Name: B-A141                  Node: N-A141                Status: Onsite
        Group: RR                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File: Scsiii              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 97.00
              Area(ac): 6.556                    Time Shift(hrs): 0.00
           Curve Number: 82.00               Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00

Added per Traffic Circle.  Basin B-A150 in D&F report.  JPI 5/21/15.

-------------------------------------------------------------------------------------------------
         Name: B-A142                  Node: N-A142                Status: Onsite
        Group: RR                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File: Scsiii              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 15.00
              Area(ac): 4.539                    Time Shift(hrs): 0.00
           Curve Number: 91.00               Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00

Added per Traffic Circle.  Basin B-A151 in D&F report.  JPI 5/21/15.

-------------------------------------------------------------------------------------------------
         Name: B-A145                  Node: N-A145                Status: Onsite
        Group: RR                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File: Scsiii              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 62.00
              Area(ac): 25.499                   Time Shift(hrs): 0.00
           Curve Number: 76.00               Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00

Added per Traffic Circle.  Basin B-A160 in D&F report.  JPI 5/21/15.

-------------------------------------------------------------------------------------------------
         Name: B-A150                  Node: N-A150                Status: Onsite
        Group: RR                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File: Scsiii              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 62.00
              Area(ac): 246.500                  Time Shift(hrs): 0.00
           Curve Number: 76.00               Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00

Added per Traffic Circle.  JPI 5/21/15.

-------------------------------------------------------------------------------------------------
         Name: B-A160                  Node: N-A160                Status: Onsite
        Group: RR                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File: Scsiii              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 6.00
              Area(ac): 1.800                    Time Shift(hrs): 0.00
           Curve Number: 73.60               Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00

Bypass area per report.
```

Revised area 7/16/15 to match GIS area. JPI

```
         Name: B-A162                  Node: N-A162                Status: Onsite
        Group: RR                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File: Scsiii              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 106.00
              Area(ac): 17.030                   Time Shift(hrs): 0.00
          Curve Number: 79.00               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00
```

Added per Traffic Circle. JPI 5/21/15.

```
         Name: B-A200                  Node: N-A200                Status: Onsite
        Group: RR                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 41.00
              Area(ac): 9.200                    Time Shift(hrs): 0.00
          Curve Number: 66.30               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00
```

NEW WATERSHED PER PHASE II DELINEATION

```
         Name: B-A210                  Node: N-A210                Status: Onsite
        Group: RR                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 23.00
              Area(ac): 17.800                   Time Shift(hrs): 0.00
          Curve Number: 79.00               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00
```

NEW WATERSHED PER PHASE II DELINEATION

```
         Name: B-A320                  Node: N-A320                Status: Onsite
        Group: RR                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 104.00
              Area(ac): 69.198                   Time Shift(hrs): 0.00
          Curve Number: 80.50               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00
```

NEW WATERSHED PER PHASE II DELINEATION

Updated per addtion of Bees Ferry Apts and McAllisters Funeral hope. JPI 6/29/15.

```
         Name: B-B010                  Node: N-B010                Status: Onsite
        Group: HH                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File: Scsiii              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 9.84
              Area(ac): 2.670                    Time Shift(hrs): 0.00
          Curve Number: 98.00               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00
```

Transystem Area 5B

```
         Name: B-B010A                 Node: N-B010                Status: Onsite
        Group: HH                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File: Scsiii              Storm Duration(hrs): 24.00
```

```
    Rainfall Amount(in): 4.600                Time of Conc(min): 14.52
                Area(ac): 8.900                  Time Shift(hrs): 0.00
           Curve Number: 98.00              Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00

Transystems Area 5A

-------------------------------------------------------------------------------------------------
         Name: B-B011                  Node: N-B014                Status: Onsite
        Group: HH                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File: Scsiii              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                Time of Conc(min): 97.00
                Area(ac): 9.590                  Time Shift(hrs): 0.00
           Curve Number: 85.00              Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00

Added per Traffic Circle.  JPI 5/19/15

-------------------------------------------------------------------------------------------------
         Name: B-B020                  Node: N-B020                Status: Onsite
        Group: HH                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                Time of Conc(min): 138.00
                Area(ac): 92.880                 Time Shift(hrs): 0.00
           Curve Number: 85.40              Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00

Revised basin area on 1-19-09 for Bees Ferry Widening.

-------------------------------------------------------------------------------------------------
         Name: B-B040                  Node: N-B040                Status: Onsite
        Group: HH                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                Time of Conc(min): 27.00
                Area(ac): 8.770                  Time Shift(hrs): 0.00
           Curve Number: 88.20              Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00

Revised basin area on 1-19-09 for Bees Ferry Widening.

-------------------------------------------------------------------------------------------------
         Name: B-B060                  Node: N-B060                Status: Onsite
        Group: HH                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                Time of Conc(min): 40.00
                Area(ac): 11.533                 Time Shift(hrs): 0.00
           Curve Number: 82.00              Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00

Revised basin area on 1-19-09 for Bees Ferry Widening.

Updated per Traffic Circle.  JPI 5/21/15.

-------------------------------------------------------------------------------------------------
         Name: B-B071                  Node: N-B071                Status: Onsite
        Group: HH                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File: Scsiii              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                Time of Conc(min): 60.00
                Area(ac): 43.560                 Time Shift(hrs): 0.00
           Curve Number: 87.00              Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00

Added per Traffic Circle.  JPI 5/19/15

-------------------------------------------------------------------------------------------------
         Name: B-B073                  Node: N-B073                Status: Onsite
```

```
        Group: HH                       Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File: Scsiii              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 60.00
                Area(ac): 8.810                  Time Shift(hrs): 0.00
            Curve Number: 73.00              Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00

Added per Traffic Circle.  JPI 5/19/15

-------------------------------------------------------------------------------------------------
         Name: B-B075                   Node: N-B075                Status: Onsite
        Group: HH                       Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File: Scsiii              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 60.00
                Area(ac): 39.230                 Time Shift(hrs): 0.00
            Curve Number: 73.00              Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00

Added per Traffic Circle.  JPI 5/19/15

-------------------------------------------------------------------------------------------------
         Name: B-B100                   Node: N-B100                Status: Onsite
        Group: HH                       Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 87.00
                Area(ac): 26.300                 Time Shift(hrs): 0.00
            Curve Number: 78.00              Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00



-------------------------------------------------------------------------------------------------
         Name: B-B140                   Node: N-B140                Status: Onsite
        Group: HH                       Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 204.00
                Area(ac): 77.500                 Time Shift(hrs): 0.00
            Curve Number: 78.30              Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00

Revised area on 04/28/04 from 90.2 acres in original study to 77.5 acres based on new delineation by SWA for Mt.


-------------------------------------------------------------------------------------------------
         Name: B-B160                   Node: N-B160                Status: Onsite
        Group: HH                       Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 76.00
                Area(ac): 30.470                 Time Shift(hrs): 0.00
            Curve Number: 85.30              Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00

Revised basin area on 1-19-09 for Bees Ferry Widening.

-------------------------------------------------------------------------------------------------
         Name: B-B170                   Node: N-B170                Status: Onsite
        Group: HH                       Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 31.00
                Area(ac): 16.600                 Time Shift(hrs): 0.00
            Curve Number: 86.90              Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00
```

```
-------------------------------------------------------------------------------------------------
         Name: B-B220                  Node: N-B220                Status: Onsite
        Group: HH                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                 Peaking Factor: 323.0
          Rainfall File: Scsiii             Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                Time of Conc(min): 6.00
             Area(ac): 0.490                    Time Shift(hrs): 0.00
         Curve Number: 98.00               Max Allowable Q(cfs): 999999.000
              DCIA(%): 0.00

Transystem Area 6A

-------------------------------------------------------------------------------------------------
         Name: B-B230                  Node: N-B230                Status: Onsite
        Group: HH                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                 Peaking Factor: 323.0
          Rainfall File: SCSIII             Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                Time of Conc(min): 32.00
             Area(ac): 24.570                   Time Shift(hrs): 0.00
         Curve Number: 88.40               Max Allowable Q(cfs): 999999.000
              DCIA(%): 0.00

Revised basin area on 1-19-09 for Bees Ferry Widening.

-------------------------------------------------------------------------------------------------
         Name: B-C010                  Node: N-C010                Status: Onsite
        Group: SM1                     Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                 Peaking Factor: 323.0
          Rainfall File: SCSIII             Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                Time of Conc(min): 52.00
             Area(ac): 21.610                   Time Shift(hrs): 0.00
         Curve Number: 83.50               Max Allowable Q(cfs): 999999.000
              DCIA(%): 0.00

Revised basin area on 1-19-09 for Bees Ferry Widening.

-------------------------------------------------------------------------------------------------
         Name: B-C050                  Node: N-C050                Status: Onsite
        Group: SM1                     Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                 Peaking Factor: 323.0
          Rainfall File: SCSIII             Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                Time of Conc(min): 51.00
             Area(ac): 6.940                    Time Shift(hrs): 0.00
         Curve Number: 80.70               Max Allowable Q(cfs): 999999.000
              DCIA(%): 0.00

Revised basin area on 1-19-09 for Bees Ferry Widening.

-------------------------------------------------------------------------------------------------
         Name: B-C080                  Node: N-C090                Status: Onsite
        Group: RR                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                 Peaking Factor: 323.0
          Rainfall File: Scsiii             Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                Time of Conc(min): 53.00
             Area(ac): 61.470                   Time Shift(hrs): 0.00
         Curve Number: 83.00               Max Allowable Q(cfs): 999999.000
              DCIA(%): 0.00

Revised basin area on 1-19-09 for Bees Ferry Widening.

Revised per Bees Ferry Apts/McAlisters update.  JPI 6/29/15.

-------------------------------------------------------------------------------------------------
         Name: B-C080A                 Node: N-C090                Status: Onsite
        Group: SM1                     Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                 Peaking Factor: 323.0
          Rainfall File: Scsiii             Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                Time of Conc(min): 11.34
             Area(ac): 3.810                    Time Shift(hrs): 0.00
```

```
           Curve Number: 98.00             Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00

Transystem Area 6F

Moved from N-C080 for June 2015 update.  JPI 6/29/15

-------------------------------------------------------------------------------------------------
         Name: B-C080B                 Node: N-C090                Status: Onsite
        Group: SM1                     Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File: Scsiii             Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                Time of Conc(min): 7.50
                Area(ac): 2.590                 Time Shift(hrs): 0.00
           Curve Number: 98.00             Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00

Transystem Area 6E

Moved from N-C080 for June 2015 update.  JPI 6/29/15

-------------------------------------------------------------------------------------------------
         Name: B-C086                  Node: N-C086                Status: Onsite
        Group: RR                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File: Scsiii             Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                Time of Conc(min): 47.00
                Area(ac): 22.530                Time Shift(hrs): 0.00
           Curve Number: 83.00             Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00

Added per McAlisters/Bees Ferry Apts additon.  CN and TOC calucated using TR55.  JPI 6/29/15.

-------------------------------------------------------------------------------------------------
         Name: B-C086B                 Node: N-C086B               Status: Onsite
        Group: RR                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File: Scsiii             Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                Time of Conc(min): 25.00
                Area(ac): 4.920                 Time Shift(hrs): 0.00
           Curve Number: 81.00             Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00

Added based on aereal/field visit for McAlisters Funeral Home.  JPI 6/29/15.

-------------------------------------------------------------------------------------------------
         Name: B-C086D                 Node: N-C086D               Status: Onsite
        Group: RR                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File: Scsiii             Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                Time of Conc(min): 11.00
                Area(ac): 6.620                 Time Shift(hrs): 0.00
           Curve Number: 90.00             Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00

Added per Lowcountry development plans.  CN and TOC were recalcuated by me due to inconsistances in plans/report

-------------------------------------------------------------------------------------------------
         Name: B-C120                  Node: N-C120                Status: Onsite
        Group: SM1                     Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII             Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                Time of Conc(min): 100.00
                Area(ac): 59.980                Time Shift(hrs): 0.00
           Curve Number: 84.20             Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00

Revised basin area on 1-19-09 for Bees Ferry Widening.

-------------------------------------------------------------------------------------------------
         Name: B-C120A                 Node: N-C100                Status: Onsite
```

```
        Group: SM1                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File: Scsiii              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 6.00
                Area(ac): 0.500                  Time Shift(hrs): 0.00
           Curve Number: 98.00              Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00

Transystem Area 7A

--------------------------------------------------------------------------------------------------
         Name: B-C130                   Node: N-C130                Status: Onsite
        Group: SM1                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 40.00
                Area(ac): 40.600                 Time Shift(hrs): 0.00
           Curve Number: 85.00              Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00



--------------------------------------------------------------------------------------------------
         Name: B-C140                   Node: N-C140                Status: Onsite
        Group: SM1                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 37.00
                Area(ac): 14.432                 Time Shift(hrs): 0.00
           Curve Number: 85.40              Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00

Basin area updated based on LiDAR.  4/21/09.  JP

--------------------------------------------------------------------------------------------------
         Name: B-C150                   Node: N-C150                Status: Onsite
        Group: SM1                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 88.00
                Area(ac): 36.100                 Time Shift(hrs): 0.00
           Curve Number: 76.40              Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00



--------------------------------------------------------------------------------------------------
         Name: B-C170                   Node: N-C170                Status: Onsite
        Group: SM1                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 61.00
                Area(ac): 101.200                Time Shift(hrs): 0.00
           Curve Number: 81.40              Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00



--------------------------------------------------------------------------------------------------
         Name: B-C210                   Node: N-C210                Status: Onsite
        Group: MB                       Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File: Scsiii              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 48.00
                Area(ac): 21.062                 Time Shift(hrs): 0.00
           Curve Number: 82.00              Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00

Basin added back in... was missing.  4/21/09.  JP
```

```
-----------------------------------------------------------------------------------------------
         Name: B-C230                  Node: N-C230                Status: Onsite
        Group: SM1                     Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                 Peaking Factor: 323.0
          Rainfall File: SCSIII             Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                Time of Conc(min): 28.00
              Area(ac): 48.140                  Time Shift(hrs): 0.00
         Curve Number: 85.40              Max Allowable Q(cfs): 999999.000
              DCIA(%): 0.00

Revised basin area on 1-19-09 for Bees Ferry Widening.

-----------------------------------------------------------------------------------------------
         Name: B-G010                  Node: N-G010                Status: Onsite
        Group: BL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                 Peaking Factor: 323.0
          Rainfall File: Scsiii             Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                Time of Conc(min): 8.52
              Area(ac): 7.440                   Time Shift(hrs): 0.00
         Curve Number: 98.00              Max Allowable Q(cfs): 999999.000
              DCIA(%): 0.00

Added per Bees Ferry Rd Wideing.  7/16/15.  JPI

-----------------------------------------------------------------------------------------------
         Name: B-G010A                 Node: N-G010                Status: Onsite
        Group: BL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                 Peaking Factor: 323.0
          Rainfall File: Scsiii             Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                Time of Conc(min): 15.00
              Area(ac): 5.460                   Time Shift(hrs): 0.00
         Curve Number: 98.00              Max Allowable Q(cfs): 999999.000
              DCIA(%): 0.00

Added per Bees Ferry Rd Wideing.  JPI 7/16/15.

-----------------------------------------------------------------------------------------------
         Name: B-G020                  Node: N-G020                Status: Onsite
        Group: BL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                 Peaking Factor: 323.0
          Rainfall File: SCSIII             Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                Time of Conc(min): 46.00
              Area(ac): 20.720                  Time Shift(hrs): 0.00
         Curve Number: 74.80              Max Allowable Q(cfs): 999999.000
              DCIA(%): 0.00

Revised basin area on 1-19-09 for Bees Ferry Widening.

Revised basin area and TOC for Faison and Verdier Apts.  JPI 6/2/15

-----------------------------------------------------------------------------------------------
         Name: B-G023                  Node: N-G023                Status: Onsite
        Group: BL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                 Peaking Factor: 323.0
          Rainfall File: Scsiii             Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                Time of Conc(min): 46.74
              Area(ac): 21.740                  Time Shift(hrs): 0.00
         Curve Number: 74.80              Max Allowable Q(cfs): 999999.000
              DCIA(%): 0.00

Added per Verdier Apts.  Previoulsy part of B-G020.  JPI 6/2/15

-----------------------------------------------------------------------------------------------
         Name: B-G025B                 Node: N-G025B               Status: Onsite
        Group: BL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                 Peaking Factor: 323.0
          Rainfall File: Scsiii             Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                Time of Conc(min): 12.90
              Area(ac): 3.710                   Time Shift(hrs): 0.00
         Curve Number: 89.00              Max Allowable Q(cfs): 999999.000
```

```
               DCIA(%): 0.00

Added per Verdier Apts.  JPI 6/2/15

-------------------------------------------------------------------------------------------------
         Name: B-G025C                 Node: N-G025C               Status: Onsite
        Group: BL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File: Scsiii             Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                Time of Conc(min): 28.50
               Area(ac): 3.140                  Time Shift(hrs): 0.00
           Curve Number: 86.00               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

Added per Verdier Apts.  JPI 6/2/15

-------------------------------------------------------------------------------------------------
         Name: B-G028                  Node: N-G028                Status: Onsite
        Group: BL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File: Scsiii             Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                Time of Conc(min): 47.28
               Area(ac): 59.780                 Time Shift(hrs): 0.00
           Curve Number: 74.80               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

Added per Verdier Apts.  Previously part of B-G020.  JPI 6/2/15

-------------------------------------------------------------------------------------------------
         Name: B-G028B                 Node: N-G028B               Status: Onsite
        Group: BL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File: Scsiii             Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                Time of Conc(min): 34.20
               Area(ac): 15.000                 Time Shift(hrs): 0.00
           Curve Number: 91.00               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

Added per Verdier Apts.  JPI 6/2/15

-------------------------------------------------------------------------------------------------
         Name: B-G043                  Node: N-G043                Status: Onsite
        Group: BL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File: Scsiii             Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                Time of Conc(min): 46.68
               Area(ac): 28.940                 Time Shift(hrs): 0.00
           Curve Number: 74.80               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

Added due to Faison Apts and Blue Water Gas Station.  Previously this area was part of B-G020.  JPI 6/4/15.

-------------------------------------------------------------------------------------------------
         Name: B-G043A                 Node: N-G043A               Status: Onsite
        Group: BL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File: Scsiii             Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                Time of Conc(min): 13.80
               Area(ac): 3.160                  Time Shift(hrs): 0.00
           Curve Number: 86.00               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

Added on 6/2/15 for Faison apts plans dated 11/29/12.  JPI

-------------------------------------------------------------------------------------------------
         Name: B-G044B                 Node: N-G044B               Status: Onsite
        Group: BL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File: Scsiii             Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                Time of Conc(min): 5.00
```

```
              Area(ac): 0.900                 Time Shift(hrs): 0.00
          Curve Number: 90.00              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

Added per Blue water Gas Station.  This basin is not actually built out yet and no future plans are known.  Howe

-------------------------------------------------------------------------------------------------------
         Name: B-G044C                 Node: N-G044B               Status: Onsite
        Group: BL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File: Scsiii              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 5.00
              Area(ac): 1.790                   Time Shift(hrs): 0.00
          Curve Number: 90.00              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

Added per Blue Water Gas Station.  JPI 6/4/15

-------------------------------------------------------------------------------------------------------
         Name: B-G045B                 Node: N-G045B               Status: Onsite
        Group: BL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File: Scsiii              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 22.20
              Area(ac): 14.120                  Time Shift(hrs): 0.00
          Curve Number: 88.00              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

Added on 6/2/15 for Faison apts plans dated 11/29/12.  JPI

-------------------------------------------------------------------------------------------------------
         Name: B-G045C                 Node: N-G045C               Status: Onsite
        Group: BL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File: Scsiii              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 23.70
              Area(ac): 5.830                   Time Shift(hrs): 0.00
          Curve Number: 83.50              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

Added on 6/2/15 for Faison apts plans dated 11/29/12.  JPI

-------------------------------------------------------------------------------------------------------
         Name: B-G050                  Node: N-G050                Status: Onsite
        Group: BL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 180.00
              Area(ac): 70.200                  Time Shift(hrs): 0.00
          Curve Number: 75.00              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

Revised area per Faison and Verdier Apts.  JPI 6/2/15

-------------------------------------------------------------------------------------------------------
         Name: B-G060                  Node: N-G060                Status: Onsite
        Group: BL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 23.00
              Area(ac): 6.220                   Time Shift(hrs): 0.00
          Curve Number: 82.00              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

PS B-I1

-------------------------------------------------------------------------------------------------------
         Name: B-G070                  Node: N-G070                Status: Onsite
        Group: BL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
```

```
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 16.00
                Area(ac): 2.370                   Time Shift(hrs): 0.00
           Curve Number: 83.20               Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00

PS B-H1

-------------------------------------------------------------------------------------------------
         Name: B-G080                   Node: N-G080                 Status: Onsite
        Group: BL                       Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                   Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 14.00
                Area(ac): 5.290                   Time Shift(hrs): 0.00
           Curve Number: 82.80               Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00

PS B-G1

-------------------------------------------------------------------------------------------------
         Name: B-G090                   Node: N-G090                 Status: Onsite
        Group: BL                       Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                   Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 19.00
                Area(ac): 7.380                   Time Shift(hrs): 0.00
           Curve Number: 83.00               Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00

PS B-F1

-------------------------------------------------------------------------------------------------
         Name: B-G110                   Node: N-G110                 Status: Onsite
        Group: BL                       Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                   Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 13.00
                Area(ac): 7.360                   Time Shift(hrs): 0.00
           Curve Number: 82.40               Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00

PS B-D1

-------------------------------------------------------------------------------------------------
         Name: B-G120                   Node: N-G120                 Status: Onsite
        Group: BL                       Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                   Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 24.00
                Area(ac): 7.880                   Time Shift(hrs): 0.00
           Curve Number: 83.00               Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00

PS B-C1

-------------------------------------------------------------------------------------------------
         Name: B-G130                   Node: N-G130                 Status: Onsite
        Group: BL                       Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                   Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 28.00
                Area(ac): 11.790                  Time Shift(hrs): 0.00
           Curve Number: 84.60               Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00

PS B-B1

-------------------------------------------------------------------------------------------------
         Name: B-G140                   Node: N-G140                 Status: Onsite
        Group: BL                       Type: SCS Unit Hydrograph CN
```

```
        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 27.00
              Area(ac): 4.860                    Time Shift(hrs): 0.00
          Curve Number: 84.10               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

PS B-A1

-------------------------------------------------------------------------------------------------
         Name: B-G150                   Node: N-G150                Status: Onsite
        Group: BL                       Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 123.00
              Area(ac): 17.800                   Time Shift(hrs): 0.00
          Curve Number: 77.50               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

PS B-OFF

Revised area on 04/28/04 from 37 acres in original study to 17.8 acreas per the delination by SWA for the Mt. Ro


-------------------------------------------------------------------------------------------------
         Name: B-G160                   Node: N-G160                Status: Onsite
        Group: BL                       Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 18.00
              Area(ac): 3.690                    Time Shift(hrs): 0.00
          Curve Number: 80.20               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

PS B-E1

-------------------------------------------------------------------------------------------------
         Name: B-G170                   Node: N-G170                Status: Onsite
        Group: BL                       Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File: Scsiii              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 94.00
              Area(ac): 16.460                   Time Shift(hrs): 0.00
          Curve Number: 68.30               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

SWA - B-14 per Hamilton Grove model.

SWA did not include this watershed in the submittal to the City since downstream of the development.  Approximat

-------------------------------------------------------------------------------------------------
         Name: B-G180                   Node: N-G180                Status: Onsite
        Group: BL                       Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File: Scsiii              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 94.00
              Area(ac): 25.810                   Time Shift(hrs): 0.00
          Curve Number: 76.90               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

Used B-15 per Hamilton Grove project since a portion of Basin 15 as shown in the Mt Royall construction plans wa

-------------------------------------------------------------------------------------------------
         Name: B-G200                   Node: N-G200                Status: Onsite
        Group: BL                       Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File: Scsiii              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 28.00
              Area(ac): 3.190                    Time Shift(hrs): 0.00
          Curve Number: 72.80               Max Allowable Q(cfs): 999999.000
```

DCIA(%): 0.00

SWA - B-23

Name: B-G210 Node: N-G210 Status: Onsite
Group: BL Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh323 Peaking Factor: 323.0
Rainfall File: Scsiii Storm Duration(hrs): 24.00
Rainfall Amount(in): 4.600 Time of Conc(min): 91.00
Area(ac): 53.060 Time Shift(hrs): 0.00
Curve Number: 76.60 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

SWA - B-26

Name: B-G220 Node: N-G220 Status: Onsite
Group: BL Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh323 Peaking Factor: 323.0
Rainfall File: Scsiii Storm Duration(hrs): 24.00
Rainfall Amount(in): 4.600 Time of Conc(min): 34.00
Area(ac): 10.310 Time Shift(hrs): 0.00
Curve Number: 71.70 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

SWA - B-25

Name: B-G230 Node: N-G230 Status: Onsite
Group: BL Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh323 Peaking Factor: 323.0
Rainfall File: Scsiii Storm Duration(hrs): 24.00
Rainfall Amount(in): 4.600 Time of Conc(min): 19.00
Area(ac): 2.880 Time Shift(hrs): 0.00
Curve Number: 72.70 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

SWA B-24

Name: B-G260 Node: N-G260 Status: Onsite
Group: BL Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh323 Peaking Factor: 323.0
Rainfall File: Scsiii Storm Duration(hrs): 24.00
Rainfall Amount(in): 4.600 Time of Conc(min): 33.00
Area(ac): 6.900 Time Shift(hrs): 0.00
Curve Number: 77.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

SWA - B-22

Name: B-G290 Node: N-G290 Status: Onsite
Group: BL Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh323 Peaking Factor: 323.0
Rainfall File: Scsiii Storm Duration(hrs): 24.00
Rainfall Amount(in): 4.600 Time of Conc(min): 59.00
Area(ac): 9.940 Time Shift(hrs): 0.00
Curve Number: 74.10 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

SWA - B-21

Name: B-G330 Node: N-G330 Status: Onsite
Group: BL Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh323 Peaking Factor: 323.0

```
          Rainfall File: Scsiii              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 204.00
                Area(ac): 56.710                 Time Shift(hrs): 0.00
           Curve Number: 76.90               Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00
```

SWA - B-20

Had named this watershed G-210B entering node N-G210 per the Hamilton Grove ICPR model from SWA. However, the l

```
----------------------------------------------------------------------------------------------------
         Name: B-G340                  Node: N-G340                Status: Onsite
        Group: BL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File: Scsiii             Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 118.00
                Area(ac): 23.640                 Time Shift(hrs): 0.00
           Curve Number: 77.00               Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00
```

SWA - B-18

```
----------------------------------------------------------------------------------------------------
         Name: B-G350                  Node: N-G350                Status: Onsite
        Group: BL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File: Scsiii             Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 40.00
                Area(ac): 10.120                 Time Shift(hrs): 0.00
           Curve Number: 63.50               Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00
```

SWA - B-19

```
----------------------------------------------------------------------------------------------------
         Name: B-G360                  Node: N-G360                Status: Onsite
        Group: BL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File: Scsiii             Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 57.00
                Area(ac): 17.900                 Time Shift(hrs): 0.00
           Curve Number: 58.90               Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00
```

SWA - B-17

```
----------------------------------------------------------------------------------------------------
         Name: B-G370                  Node: N-G370                Status: Onsite
        Group: BL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                  Peaking Factor: 323.0
          Rainfall File: Scsiii             Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 146.00
                Area(ac): 114.860                Time Shift(hrs): 0.00
           Curve Number: 61.40               Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00
```

SWA - B-16

```
----------------------------------------------------------------------------------------------------
         Name: B-G400A                 Node: N-G400                Status: Onsite
        Group: BL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII             Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 76.00
                Area(ac): 10.760                 Time Shift(hrs): 0.00
           Curve Number: 76.80               Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00
```

SWA B-8

```
-------------------------------------------------------------------------------------------------
         Name: B-G400B                 Node: N-G400                Status: Onsite
        Group: BL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 34.00
              Area(ac): 4.600                    Time Shift(hrs): 0.00
          Curve Number: 88.30               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

SWA B-9


-------------------------------------------------------------------------------------------------
         Name: B-G400C                 Node: N-G400                Status: Onsite
        Group: BL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 27.00
              Area(ac): 25.070                   Time Shift(hrs): 0.00
          Curve Number: 73.40               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

SWA B-10


-------------------------------------------------------------------------------------------------
         Name: B-G410                  Node: N-G410                Status: Onsite
        Group: BL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 25.00
              Area(ac): 10.860                   Time Shift(hrs): 0.00
          Curve Number: 77.00               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

SWA B-11


-------------------------------------------------------------------------------------------------
         Name: B-G420                  Node: N-G420                Status: Onsite
        Group: BL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 19.00
              Area(ac): 12.140                   Time Shift(hrs): 0.00
          Curve Number: 77.10               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

SWA B-2


-------------------------------------------------------------------------------------------------
         Name: B-G430A                 Node: N-G430                Status: Onsite
        Group: BL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 89.00
              Area(ac): 20.270                   Time Shift(hrs): 0.00
          Curve Number: 68.30               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00



-------------------------------------------------------------------------------------------------
         Name: B-G430B                 Node: N-G430                Status: Onsite
        Group: BL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 30.00
```

```
              Area(ac): 8.640                 Time Shift(hrs): 0.00
          Curve Number: 77.10              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00



-------------------------------------------------------------------------------------------------
         Name: B-G430C                 Node: N-G430                 Status: Onsite
        Group: BL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 55.00
              Area(ac): 4.430                    Time Shift(hrs): 0.00
          Curve Number: 64.70              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00



-------------------------------------------------------------------------------------------------
         Name: B-G440A                 Node: N-G440                 Status: Onsite
        Group: BL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 21.00
              Area(ac): 6.410                    Time Shift(hrs): 0.00
          Curve Number: 74.40              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

SWA B-4


-------------------------------------------------------------------------------------------------
         Name: B-G440B                 Node: N-G440                 Status: Onsite
        Group: BL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 44.00
              Area(ac): 6.070                    Time Shift(hrs): 0.00
          Curve Number: 75.80              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

SWA B-3B


-------------------------------------------------------------------------------------------------
         Name: B-G450                  Node: N-G450                 Status: Onsite
        Group: BL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 31.00
              Area(ac): 4.190                    Time Shift(hrs): 0.00
          Curve Number: 70.30              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

SWA B-3F2


-------------------------------------------------------------------------------------------------
         Name: B-G460A                 Node: N-G460                 Status: Onsite
        Group: BL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 59.00
              Area(ac): 18.950                   Time Shift(hrs): 0.00
          Curve Number: 53.80              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

SWA B-1F


-------------------------------------------------------------------------------------------------
```

```
         Name: B-G460B                 Node: N-G460                Status: Onsite
        Group: BL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 22.00
              Area(ac): 3.300                    Time Shift(hrs): 0.00
          Curve Number: 61.60               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

SWA B-3F1


-------------------------------------------------------------------------------------------------
         Name: B-G470A                 Node: N-G470                Status: Onsite
        Group: BL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 54.00
              Area(ac): 8.010                    Time Shift(hrs): 0.00
          Curve Number: 82.20               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

SWA B-5


-------------------------------------------------------------------------------------------------
         Name: B-G470B                 Node: N-G470                Status: Onsite
        Group: BL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 17.00
              Area(ac): 12.750                   Time Shift(hrs): 0.00
          Curve Number: 73.80               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

SWA B-6


-------------------------------------------------------------------------------------------------
         Name: B-G470C                 Node: N-G470                Status: Onsite
        Group: BL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 92.00
              Area(ac): 41.020                   Time Shift(hrs): 0.00
          Curve Number: 77.80               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

SWA B-7


-------------------------------------------------------------------------------------------------
         Name: B-G480A                 Node: N-G480                Status: Onsite
        Group: BL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 37.00
              Area(ac): 8.180                    Time Shift(hrs): 0.00
          Curve Number: 70.90               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

SWA B-5F1


-------------------------------------------------------------------------------------------------
         Name: B-G480B                 Node: N-G480                Status: Onsite
        Group: BL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 37.00
```

```
             Area(ac): 4.460                 Time Shift(hrs): 0.00
          Curve Number: 73.00              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

SWA B-5F2


-------------------------------------------------------------------------------------------------
         Name: B-G500                   Node: N-G170                 Status: Onsite
        Group: BL                       Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                   Peaking Factor: 323.0
          Rainfall File: Scsiii               Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                  Time of Conc(min): 14.00
             Area(ac): 0.590                    Time Shift(hrs): 0.00
          Curve Number: 70.90              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

SWA - B-13

-------------------------------------------------------------------------------------------------
         Name: B-G510                   Node: N-G510                 Status: Onsite
        Group: BL                       Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                   Peaking Factor: 323.0
          Rainfall File: Scsiii               Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                  Time of Conc(min): 21.00
             Area(ac): 4.040                    Time Shift(hrs): 0.00
          Curve Number: 70.20              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

SWA - B-12

-------------------------------------------------------------------------------------------------
         Name: B-H100                   Node: N-H100                 Status: Onsite
        Group: WAL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                   Peaking Factor: 323.0
          Rainfall File: SCSIII               Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                  Time of Conc(min): 6.00
             Area(ac): 22.300                   Time Shift(hrs): 0.00
          Curve Number: 71.50              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

Basin #1


-------------------------------------------------------------------------------------------------
         Name: B-H110                   Node: N-H110                 Status: Onsite
        Group: WAL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh323                   Peaking Factor: 323.0
          Rainfall File: Scsiii               Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                  Time of Conc(min): 6.00
             Area(ac): 9.350                    Time Shift(hrs): 0.00
          Curve Number: 92.00              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

Basin #2

-------------------------------------------------------------------------------------------------
         Name: B-H120                   Node: N-H120                 Status: Onsite
        Group: WAL                      Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                   Peaking Factor: 323.0
          Rainfall File: Scsiii               Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                  Time of Conc(min): 6.00
             Area(ac): 3.650                    Time Shift(hrs): 0.00
          Curve Number: 92.00              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

Basin #2A/3

-------------------------------------------------------------------------------------------------
         Name: B-H130                   Node: N-H130                 Status: Onsite
        Group: WAL                      Type: SCS Unit Hydrograph CN
```

```
        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: Scsiii              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 6.00
              Area(ac): 4.300                    Time Shift(hrs): 0.00
          Curve Number: 92.00               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

Basin #2C/4

-------------------------------------------------------------------------------------------------
         Name: B-I040                   Node: N-I042                Status: Onsite
        Group: MB                       Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 28.50
              Area(ac): 5.170                    Time Shift(hrs): 0.00
          Curve Number: 74.10               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

changed node

-------------------------------------------------------------------------------------------------
         Name: B-I060                   Node: N-I060                Status: Onsite
        Group: MB                       Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 35.70
              Area(ac): 14.242                   Time Shift(hrs): 0.00
          Curve Number: 81.00               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

Previous called basin d in connor's estate report.  Used info in estate report on page 6 for area and toc.


-------------------------------------------------------------------------------------------------
         Name: B-I080                   Node: N-I080                Status: Onsite
        Group: MB                       Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 26.00
              Area(ac): 3.570                    Time Shift(hrs): 0.00
          Curve Number: 70.70               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

In connor's work he has this basin as part of a larger basin called basin E.  I used info from estate report to

Basin area updated based on LiDAR.  4/21/09.  JP

-------------------------------------------------------------------------------------------------
         Name: B-I090                   Node: N-I090                Status: Onsite
        Group: MB                       Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 33.00
              Area(ac): 12.802                   Time Shift(hrs): 0.00
          Curve Number: 77.80               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

In connor's work he has this basin as part of a larger basin called basin F.  I used info from estate report to

Basin area updated based on LiDAR.  4/21/09.  JP

-------------------------------------------------------------------------------------------------
         Name: B-I100                   Node: N-I100                Status: Onsite
        Group: MB                       Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 54.70
              Area(ac): 4.754                    Time Shift(hrs): 0.00
          Curve Number: 78.30               Max Allowable Q(cfs): 999999.000
```

DCIA(%): 0.00

In connor's work he has this basin as part of a larger basin called basin H. I used info from estate report to

---

Name: B-I150 Node: N-I150 Status: Onsite
Group: MB Type: SCS Unit Hydrograph CN

Unit Hydrograph: UH323 Peaking Factor: 323.0
Rainfall File: SCSIII Storm Duration(hrs): 24.00
Rainfall Amount(in): 4.600 Time of Conc(min): 15.80
Area(ac): 6.283 Time Shift(hrs): 0.00
Curve Number: 77.90 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Basin area updated based on LiDAR. 4/21/09. JP

Name: B-I180 Node: N-I180 Status: Onsite
Group: MB Type: SCS Unit Hydrograph CN

Unit Hydrograph: UH323 Peaking Factor: 323.0
Rainfall File: SCSIII Storm Duration(hrs): 24.00
Rainfall Amount(in): 4.600 Time of Conc(min): 35.80
Area(ac): 9.486 Time Shift(hrs): 0.00
Curve Number: 85.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

In connor's work he has this basin as part of a larger basin called basin A1. I used info from VILLA report to

CN adjusted for builtout 1/8 parcels and HG C. 4/9/09 JP

Name: B-I200 Node: N-I180 Status: Onsite
Group: MB Type: SCS Unit Hydrograph CN

Unit Hydrograph: UH323 Peaking Factor: 323.0
Rainfall File: SCSIII Storm Duration(hrs): 24.00
Rainfall Amount(in): 4.600 Time of Conc(min): 47.10
Area(ac): 29.877 Time Shift(hrs): 0.00
Curve Number: 85.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

This basin was attached to Node I200, but that node was removed because ponds are actually one pond. Attached t

Basin area updated based on LiDAR. 4/21/09. JP

Name: B-I230 Node: N-I230 Status: Onsite
Group: MB Type: SCS Unit Hydrograph CN

Unit Hydrograph: UH323 Peaking Factor: 323.0
Rainfall File: SCSIII Storm Duration(hrs): 24.00
Rainfall Amount(in): 4.600 Time of Conc(min): 20.10
Area(ac): 6.716 Time Shift(hrs): 0.00
Curve Number: 77.10 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B-I240 Node: N-I240 Status: Onsite
Group: MB Type: SCS Unit Hydrograph CN

Unit Hydrograph: UH323 Peaking Factor: 323.0
Rainfall File: SCSIII Storm Duration(hrs): 24.00
Rainfall Amount(in): 4.600 Time of Conc(min): 30.00
Area(ac): 6.489 Time Shift(hrs): 0.00
Curve Number: 77.20 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

In connor's work he has this basin as part of a larger basin called basin A2. I used info from villa report to

---

Name: B-I250 Node: N-I250 Status: Onsite
Group: MB Type: SCS Unit Hydrograph CN

```
        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 24.60
              Area(ac): 21.630                   Time Shift(hrs): 0.00
          Curve Number: 76.20               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

In connor's work he has this basin as part of a larger basin called basin b.  I need to determine the new area o

Basin area updated based on LiDAR.  4/21/09.  JP

-------------------------------------------------------------------------------------------------
         Name: B-I260                   Node: N-I260                 Status: Onsite
        Group: MB                       Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 22.10
              Area(ac): 9.042                    Time Shift(hrs): 0.00
          Curve Number: 76.80               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

In connor's work he has this basin as part of a larger basin called basin b.  I need to determine the new area o

Estate Report area =  30.39 ac
GIS area =  12.535 ac

Basin area updated based on LiDAR.  4/21/09.  JP

-------------------------------------------------------------------------------------------------
         Name: B-I270                   Node: N-I270                 Status: Onsite
        Group: MB                       Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 24.80
              Area(ac): 2.277                    Time Shift(hrs): 0.00
          Curve Number: 76.10               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

Information taken from page 6 of estates report.
Estate Report area = 2.45 ac
GIS area = 3.278 ac

-------------------------------------------------------------------------------------------------
         Name: B-I280                   Node: N-I280                 Status: Onsite
        Group: MB                       Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 25.10
              Area(ac): 2.540                    Time Shift(hrs): 0.00
          Curve Number: 77.70               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00

THIS IS BASIN A.  Information taken from page 6 of estates report.
Time of Concentration came from the report.

Estate Report area =  2.54 ac
GIS area =  2.539 ac
The two basins agree.

-------------------------------------------------------------------------------------------------
         Name: B-I290                   Node: N-I290                 Status: Onsite
        Group: MB                       Type: SCS Unit Hydrograph CN

        Unit Hydrograph: UH323                  Peaking Factor: 323.0
          Rainfall File: SCSIII              Storm Duration(hrs): 24.00
    Rainfall Amount(in): 4.600                 Time of Conc(min): 19.90
              Area(ac): 3.278                    Time Shift(hrs): 0.00
          Curve Number: 81.00               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00
```

Updated Model
Node Input

Name: N-A010 Base Flow(cfs): 0.000 Init Stage(ft): 0.000
Group: RR Warn Stage(ft): 0.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	0.000
4.00	-1.100
10.00	4.800
16.00	-1.100
22.00	4.800
28.00	-1.100
34.00	4.800
40.00	-1.100
46.00	4.800
52.00	-1.100
58.00	4.800
64.00	-1.100
70.00	4.800
76.00	-1.100
82.00	4.800
88.00	-1.100
94.00	4.800
400.00	4.800

Name: N-A015 Base Flow(cfs): 0.000 Init Stage(ft): 0.000
Group: RR Warn Stage(ft): 0.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-A020 Base Flow(cfs): 0.000 Init Stage(ft): 0.000
Group: RR Warn Stage(ft): 0.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-A030 Base Flow(cfs): 0.000 Init Stage(ft): 0.000
Group: RR Warn Stage(ft): 0.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-A040 Base Flow(cfs): 0.000 Init Stage(ft): 1.000
Group: RR Warn Stage(ft): 0.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-A050 Base Flow(cfs): 0.000 Init Stage(ft): 1.000
Group: RR Warn Stage(ft): 8.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-A060 Base Flow(cfs): 0.000 Init Stage(ft): 3.000
Group: RR Warn Stage(ft): 8.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-A070 Base Flow(cfs): 0.000 Init Stage(ft): 3.100
Group: RR Warn Stage(ft): 8.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-A075 Base Flow(cfs): 0.000 Init Stage(ft): 4.000
Group: RR Warn Stage(ft): 8.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-A080 Base Flow(cfs): 0.000 Init Stage(ft): 3.920
Group: RR Warn Stage(ft): 7.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-A083 Base Flow(cfs): 0.000 Init Stage(ft): 4.100
Group: RR Warn Stage(ft): 11.000
Type: Stage/Area

Added per Bees Ferry Apts update (Lowcountry Consulting) JPI 6/23/15.

Stage(ft)	Area(ac)

Name: N-A083A Base Flow(cfs): 0.000 Init Stage(ft): 9.000
Group: RR Warn Stage(ft): 12.000
Type: Stage/Area

Added per Bees Ferry Apts. JPI 6/25/15

Stage(ft)	Area(ac)

Name: N-A083B Base Flow(cfs): 0.000 Init Stage(ft): 10.570
Group: RR Warn Stage(ft): 12.920
Type: Stage/Area

Pond 2 from Lowcountry Land Development Plans. Contours based on CAD file. The 14 Contour represents the pond

Stage(ft)	Area(ac)
4.000	0.1000
5.000	0.1410
6.000	0.1690
7.000	0.1990
8.000	0.2300
9.000	0.2630

10.000	0.2970
11.000	0.3310
12.000	0.3370
13.000	0.4060
14.000	0.4100

Name: N-A090 Base Flow(cfs): 0.000 Init Stage(ft): 3.960
Group: RR Warn Stage(ft): 8.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-A100 Base Flow(cfs): 0.000 Init Stage(ft): 4.000
Group: RR Warn Stage(ft): 14.800
Type: Stage/Area

Stage(ft)	Area(ac)
3.970	0.0000
5.850	0.2000
8.000	0.6600
8.500	3.1300
9.000	6.4100
9.500	11.2400
10.000	13.8100
10.500	15.9500
11.000	18.6000

Name: N-A101 Base Flow(cfs): 0.000 Init Stage(ft): 7.950
Group: RR Warn Stage(ft): 11.000
Type: Stage/Area

Added per Lowcountry plans

Stage(ft)	Area(ac)

Name: N-A102 Base Flow(cfs): 0.000 Init Stage(ft): 7.400
Group: RR Warn Stage(ft): 10.950
Type: Stage/Area

Pond 3 from Lowcountry Land Development Plans. Contours based on CAD file. JPI 6/23/15.

Stage(ft)	Area(ac)
4.000	0.1160
5.000	0.1410
6.000	0.2010
7.000	0.2960
8.000	0.4580
9.000	0.5730
10.000	0.6820
11.000	0.6820

Name: N-A110 Base Flow(cfs): 0.000 Init Stage(ft): 1.500
Group: RR Warn Stage(ft): 8.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-A120 Base Flow(cfs): 0.000 Init Stage(ft): 1.700
Group: RR Warn Stage(ft): 8.000

```
      Type: Stage/Area


      Stage(ft)        Area(ac)
--------------- ---------------

□
      Name: N-A130              Base Flow(cfs): 0.000          Init Stage(ft): 4.000
     Group: RR                                               Warn Stage(ft): 8.000
      Type: Stage/Area


      Stage(ft)        Area(ac)
--------------- ---------------

□
      Name: N-A140              Base Flow(cfs): 0.000          Init Stage(ft): 1.700
     Group: RR                                               Warn Stage(ft): 8.000
      Type: Stage/Area

Updated per Traffic Circle plans.  JPI 5/21/15

      Stage(ft)        Area(ac)
--------------- ---------------

□
      Name: N-A141              Base Flow(cfs): 0.000          Init Stage(ft): 8.000
     Group: RR                                               Warn Stage(ft): 12.000
      Type: Stage/Area

Added per Traffic Circle.  Node N-A150 is D&F report.  JPI 5/21/15

      Stage(ft)        Area(ac)
--------------- ---------------

□
      Name: N-A142              Base Flow(cfs): 0.000          Init Stage(ft): 9.000
     Group: RR                                               Warn Stage(ft): 12.000
      Type: Stage/Area

Added per Traffic Circle.  D&F node N-A151.  JPI 5/21/15.

      Stage(ft)        Area(ac)
--------------- ---------------

□
      Name: N-A145              Base Flow(cfs): 0.000          Init Stage(ft): 3.500
     Group: RR                                               Warn Stage(ft): 8.000
      Type: Stage/Area

Updated per Traffic Circle.  Node N-A145 in D&F report.  JPI 5/21/15

      Stage(ft)        Area(ac)
--------------- ---------------

□
      Name: N-A150              Base Flow(cfs): 0.000          Init Stage(ft): 3.750
     Group: RR                                               Warn Stage(ft): 8.000
      Type: Stage/Area

D&F basin B-A170.  JPI 5/21/15

      Stage(ft)        Area(ac)
--------------- ---------------

□
      Name: N-A160              Base Flow(cfs): 0.000          Init Stage(ft): 3.750
     Group: RR                                               Warn Stage(ft): 8.000
      Type: Stage/Area


      Stage(ft)        Area(ac)
--------------- ---------------
```

Name: N-A161 Base Flow(cfs): 0.000 Init Stage(ft): 9.500
Group: RR Warn Stage(ft): 12.000
Type: Stage/Area

Added per Traffic Circle. 5/21/15.

Stage(ft)	Area(ac)

Name: N-A162 Base Flow(cfs): 0.000 Init Stage(ft): 10.000
Group: RR Warn Stage(ft): 14.500
Type: Stage/Area

Added per Traffic Circle. JPI 5/21/15

Stage(ft)	Area(ac)

Name: N-A200 Base Flow(cfs): 0.000 Init Stage(ft): 5.810
Group: RR Warn Stage(ft): 10.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-A210 Base Flow(cfs): 0.000 Init Stage(ft): 7.000
Group: RR Warn Stage(ft): 9.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-A300 Base Flow(cfs): 0.000 Init Stage(ft): 3.100
Group: RR Warn Stage(ft): 5.000
Type: Stage/Area

DETENTION POND - PERM POOL AT INV OF 12" OUTLET

Includes proposed stage/area data as delineated in CAD

Stage(ft)	Area(ac)
1.000	0.0200
2.000	0.0700
3.000	0.1800
4.000	0.3100
5.000	0.5500
6.000	0.6200
7.000	0.7100

Name: N-A310 Base Flow(cfs): 0.000 Init Stage(ft): 3.100
Group: RR Warn Stage(ft): 9.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-A320 Base Flow(cfs): 0.000 Init Stage(ft): 3.100
Group: RR Warn Stage(ft): 8.000
Type: Stage/Area

Revised storage above elev 9 due to filling ditch

Stage(ft)	Area(ac)
3.100	0.0000
4.440	0.0100
5.000	0.0400
6.000	0.2300
6.380	0.9200
7.000	0.9400
8.000	0.9600
9.000	1.4600
10.000	2.0500
11.000	2.7300

Name: N-A330 Base Flow(cfs): 0.000 Init Stage(ft): 3.860
Group: RR Plunge Factor: 1.00 Warn Stage(ft): 10.100
Type: Manhole, Flat Floor

Reducer from 10'x3' box to 8'x4' box

Stage(ft)	Area(ac)

Name: N-B010 Base Flow(cfs): 0.000 Init Stage(ft): 1.900
Group: HH Warn Stage(ft): 8.100
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-B011 Base Flow(cfs): 0.000 Init Stage(ft): 1.920
Group: RR Warn Stage(ft): 8.100
Type: Stage/Area

Added per Traffic Circle road plans only. JPI 5/18/15

Stage(ft)	Area(ac)

Name: N-B012 Base Flow(cfs): 0.000 Init Stage(ft): 5.470
Group: HH Warn Stage(ft): 10.000
Type: Stage/Area

Added per Traffic Circle. JPI 5/19/15

Stage(ft)	Area(ac)

Name: N-B013 Base Flow(cfs): 0.000 Init Stage(ft): 6.900
Group: HH Warn Stage(ft): 11.000
Type: Stage/Area

Added per Traffic Circle. JPI 5/19/15

Stage(ft)	Area(ac)

Name: N-B014 Base Flow(cfs): 0.000 Init Stage(ft): 11.080
Group: HH Warn Stage(ft): 12.000
Type: Stage/Area

Added per Traffic Circle. JPI 5/19/15

Stage(ft)	Area(ac)

Name: N-B015 Base Flow(cfs): 0.000 Init Stage(ft): 3.780

Group: HH Warn Stage(ft): 10.500
Type: Stage/Area

Added per Traffic Circle road plans only. JPI 5/18/15

Stage(ft)	Area(ac)

Name: N-B016 Base Flow(cfs): 0.000 Init Stage(ft): 7.360
Group: HH Warn Stage(ft): 10.050
Type: Stage/Area

Added per Traffic Circle. JPI 5/19/15

Stage(ft)	Area(ac)

Name: N-B020 Base Flow(cfs): 0.000 Init Stage(ft): 1.900
Group: HH Warn Stage(ft): 8.550
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-B030 Base Flow(cfs): 0.000 Init Stage(ft): 2.000
Group: HH Warn Stage(ft): 8.550
Type: Stage/Area

Stage(ft)	Area(ac)
2.000	0.6800
5.000	0.8700
5.500	0.9500
6.000	1.0100
6.500	1.0700
7.000	1.1400
7.500	1.7000
8.000	2.2100
8.500	2.6400
11.000	2.6400

Name: N-B040 Base Flow(cfs): 0.000 Init Stage(ft): 8.000
Group: HH Warn Stage(ft): 11.000
Type: Stage/Area

Elevation of pond set 3 ft lower than plans

Stage(ft)	Area(ac)
7.000	1.3600
7.500	1.3700
8.000	1.5000
8.500	1.6400
9.000	1.7900
9.500	1.9900
10.000	2.1000
10.500	2.2000
11.000	2.6100

Name: N-B050 Base Flow(cfs): 0.000 Init Stage(ft): 2.000
Group: HH Warn Stage(ft): 8.550
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-B060 Base Flow(cfs): 0.000 Init Stage(ft): 2.250
Group: HH Warn Stage(ft): 8.550
Type: Stage/Area

Added per Traffic Circle. JPI 5/21/15.

Stage(ft)	Area(ac)

Name: N-B070 Base Flow(cfs): 0.000 Init Stage(ft): 2.500
Group: HH Warn Stage(ft): 8.550
Type: Stage/Area

Added per Traffic Circle. JPI 5/21/15

Stage(ft)	Area(ac)

Name: N-B071 Base Flow(cfs): 0.000 Init Stage(ft): 8.360
Group: HH Warn Stage(ft): 11.500
Type: Stage/Area

Added per Traffic Circle. 11 & 12 Contour added to contain flooding. May need LIDAR to more accurately represe

Stage(ft)	Area(ac)
8.000	0.0000
10.000	11.4800
11.000	16.5000
12.000	16.5000

Name: N-B072 Base Flow(cfs): 0.000 Init Stage(ft): 10.000
Group: HH Warn Stage(ft): 12.000
Type: Stage/Area

Added per Traffic Circle. JPI 5/19/15

Stage(ft)	Area(ac)

Name: N-B073 Base Flow(cfs): 0.000 Init Stage(ft): 11.940
Group: HH Warn Stage(ft): 15.000
Type: Stage/Area

Added per Traffic Circle. JPI 5/19/15

Stage(ft)	Area(ac)

Name: N-B075 Base Flow(cfs): 0.000 Init Stage(ft): 11.000
Group: HH Warn Stage(ft): 15.000
Type: Stage/Area

Added per Traffic Circle. JPI 5/19/15

Stage(ft)	Area(ac)
12.000	1.6500
17.000	1.6500

Name: N-B080 Base Flow(cfs): 0.000 Init Stage(ft): 2.000
Group: HH Warn Stage(ft): 8.550
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-B090 Base Flow(cfs): 0.000 Init Stage(ft): 2.000
Group: HH Warn Stage(ft): 10.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-B100 Base Flow(cfs): 0.000 Init Stage(ft): 3.500
Group: HH Warn Stage(ft): 10.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-B110 Base Flow(cfs): 0.000 Init Stage(ft): 4.000
Group: HH Warn Stage(ft): 10.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-B120 Base Flow(cfs): 0.000 Init Stage(ft): 2.000
Group: HH Warn Stage(ft): 10.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-B125 Base Flow(cfs): 0.000 Init Stage(ft): 2.000
Group: HH Warn Stage(ft): 8.550
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-B130 Base Flow(cfs): 0.000 Init Stage(ft): 2.000
Group: HH Warn Stage(ft): 10.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-B140 Base Flow(cfs): 0.000 Init Stage(ft): 2.000
Group: HH Warn Stage(ft): 10.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-B150 Base Flow(cfs): 0.000 Init Stage(ft): 2.000
Group: HH Warn Stage(ft): 10.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-B160 Base Flow(cfs): 0.000 Init Stage(ft): 2.000
Group: HH Warn Stage(ft): 10.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-B164 Base Flow(cfs): 0.000 Init Stage(ft): 2.000
Group: HH Warn Stage(ft): 10.000
Type: Stage/Area

Updated per survey 4/9/09. Didn't change the warning stage because the far bank (which we have no survey for) c

Stage(ft)	Area(ac)

Name: N-B170 Base Flow(cfs): 0.000 Init Stage(ft): 2.000
Group: HH Warn Stage(ft): 9.500
Type: Stage/Area

Stage(ft)	Area(ac)
2.000	1.1000
5.000	1.4000
6.000	1.4400
7.000	1.5100
8.000	1.5700
9.000	1.6400
9.500	2.5400
11.000	2.5400

Name: N-B180 Base Flow(cfs): 0.000 Init Stage(ft): 2.000
Group: HH Warn Stage(ft): 10.000
Type: Stage/Area

Updated per survey 4/9/09. Didn't chance waring stage b/c far bank (which we don't have survey on) could be low

Stage(ft)	Area(ac)

Name: N-B200 Base Flow(cfs): 0.000 Init Stage(ft): 2.000
Group: HH Warn Stage(ft): 10.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-B220 Base Flow(cfs): 0.000 Init Stage(ft): 2.000
Group: HH Warn Stage(ft): 10.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-B230 Base Flow(cfs): 0.000 Init Stage(ft): 9.000
Group: HH Warn Stage(ft): 13.000

Type: Stage/Area

Elevation of pond set 3 ft lower than plans

Stage(ft)	Area(ac)
7.000	4.8500
9.000	4.8500
9.500	4.9300
10.000	5.3000
10.500	5.4100
11.000	5.5100
11.500	5.8700
12.000	6.1400
13.000	6.8200

Name: N-B320 Base Flow(cfs): 0.000 Init Stage(ft): 2.000
Group: HH Warn Stage(ft): 10.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-B380 Base Flow(cfs): 0.000 Init Stage(ft): 2.000
Group: HH Warn Stage(ft): 10.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-C010 Base Flow(cfs): 0.000 Init Stage(ft): 3.400
Group: SM1 Warn Stage(ft): 9.000
Type: Stage/Area

Updated per survey 4/9/09. JP

Stage(ft)	Area(ac)

Name: N-C020 Base Flow(cfs): 0.000 Init Stage(ft): 3.200
Group: SM1 Warn Stage(ft): 9.000
Type: Stage/Area

Warning stage updated per survey 4/9/09. JP

Stage(ft)	Area(ac)

Name: N-C030 Base Flow(cfs): 0.000 Init Stage(ft): 3.400
Group: SM1 Warn Stage(ft): 10.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-C040 Base Flow(cfs): 0.000 Init Stage(ft): 3.600
Group: SM1 Warn Stage(ft): 10.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-C050 Base Flow(cfs): 0.000 Init Stage(ft): 3.700
Group: SM1 Warn Stage(ft): 8.900
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-C060 Base Flow(cfs): 0.000 Init Stage(ft): 4.780
Group: SM1 Warn Stage(ft): 9.600
Type: Stage/Area

Stage(ft)	Area(ac)
0.000	0.0000
7.500	0.0000
7.750	0.1000
8.000	0.2000
8.500	0.5000
9.000	1.0800
9.500	3.6900
10.000	4.5200
10.500	5.3000
11.000	5.8700
11.500	6.7800
12.000	6.7800

Name: N-C070 Base Flow(cfs): 0.000 Init Stage(ft): 3.700
Group: SM1 Warn Stage(ft): 10.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-C080 Base Flow(cfs): 0.000 Init Stage(ft): 4.410
Group: SM1 Warn Stage(ft): 11.000
Type: Stage/Area

Updated initial stage. Moved storage area from this node to N-C086. JPI 6/25/15

Stage(ft)	Area(ac)

Name: N-C085 Base Flow(cfs): 0.000 Init Stage(ft): 4.180
Group: SM1 Warn Stage(ft): 11.000
Type: Stage/Area

Added 4/8/09. JP

Initial stage updated per survey. 6/23/15. JPI

Stage(ft)	Area(ac)

Name: N-C086 Base Flow(cfs): 0.000 Init Stage(ft): 4.000
Group: RR Warn Stage(ft): 11.000
Type: Stage/Area

Storage area removed from N-C080 and moved to this node. It represents the wetland storage area. JPI 6/25/15

Stage(ft)	Area(ac)
3.900	0.0000
4.000	0.3000
6.800	0.4000

7.000	2.0000
7.500	2.2600
8.000	2.3300
9.000	2.5300
9.500	2.9800
10.000	3.2200
10.500	3.4700
11.000	3.8800
13.000	13.0000

Name: N-C086A Base Flow(cfs): 0.000 Init Stage(ft): 7.020
Group: RR Warn Stage(ft): 10.000
Type: Stage/Area

Added per McAlisters. JPI 6/25/15

Stage(ft)	Area(ac)

Name: N-C086B Base Flow(cfs): 0.000 Init Stage(ft): 8.180
Group: RR Warn Stage(ft): 10.000
Type: Stage/Area

Added per McAlisters. The pond overtops at 10. The 13 contour represents the flooding area after it overtops (

Stage(ft)	Area(ac)
6.000	0.0560
7.000	0.0800
8.000	0.1160
9.000	0.1570
10.000	0.1980
13.000	0.6000

Name: N-C086C Base Flow(cfs): 0.000 Init Stage(ft): 6.110
Group: RR Warn Stage(ft): 13.500
Type: Stage/Area

Added per Bees Ferry Apts. JPI 6/29/15

Stage(ft)	Area(ac)

Name: N-C086D Base Flow(cfs): 0.000 Init Stage(ft): 7.620
Group: RR Warn Stage(ft): 14.200
Type: Stage/Area

Pond 1from Low Country development plans. Areas taken from CAD. JPI 6/29/15

Stage(ft)	Area(ac)
5.000	0.1850
6.000	0.2170
7.000	0.2500
8.000	0.3340
9.000	0.3770
10.000	0.4340
11.000	0.4920
12.000	0.5510
13.000	0.6100
14.000	0.6740
15.000	0.6800

Name: N-C090 Base Flow(cfs): 0.000 Init Stage(ft): 4.000
Group: SM1 Warn Stage(ft): 11.900
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-C100 Base Flow(cfs): 0.000 Init Stage(ft): 4.000
Group: SM1 Warn Stage(ft): 11.900
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-C110 Base Flow(cfs): 0.000 Init Stage(ft): 7.800
Group: SM1 Warn Stage(ft): 9.500
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-C120 Base Flow(cfs): 0.000 Init Stage(ft): 7.850
Group: SM1 Warn Stage(ft): 10.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-C130 Base Flow(cfs): 0.000 Init Stage(ft): 7.850
Group: SM1 Warn Stage(ft): 10.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-C140 Base Flow(cfs): 0.000 Init Stage(ft): 9.500
Group: SM1 Warn Stage(ft): 11.500
Type: Stage/Area

Stage(ft)	Area(ac)
9.500	0.5800
10.000	0.6200
10.500	0.7000
11.000	0.7400
11.500	0.9000
11.600	1.9200
12.000	2.7800
12.500	3.3000

Name: N-C150 Base Flow(cfs): 0.000 Init Stage(ft): 7.850
Group: SM1 Warn Stage(ft): 10.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-C160 Base Flow(cfs): 0.000 Init Stage(ft): 7.850
Group: SM1 Warn Stage(ft): 10.000
Type: Stage/Area

```
      Stage(ft)        Area(ac)
--------------- ---------------

□
      Name: N-C170             Base Flow(cfs): 0.000          Init Stage(ft): 7.850
     Group: SM1                                              Warn Stage(ft): 10.000
      Type: Stage/Area



      Stage(ft)        Area(ac)
--------------- ---------------

□
      Name: N-C180             Base Flow(cfs): 0.000          Init Stage(ft): 7.850
     Group: SM1                                              Warn Stage(ft): 10.000
      Type: Stage/Area



      Stage(ft)        Area(ac)
--------------- ---------------

□
      Name: N-C203             Base Flow(cfs): 0.000          Init Stage(ft): 8.100
     Group: MB                                               Warn Stage(ft): 10.000
      Type: Stage/Area

part of overflow system.  4/21/09.  JP

      Stage(ft)        Area(ac)
--------------- ---------------

□
      Name: N-C205             Base Flow(cfs): 0.000          Init Stage(ft): 7.700
     Group: MB                                               Warn Stage(ft): 9.000
      Type: Stage/Area

overflow node.  4/21/09.  JP

      Stage(ft)        Area(ac)
--------------- ---------------

□
      Name: N-C206             Base Flow(cfs): 0.000          Init Stage(ft): 5.590
     Group: MB                                               Warn Stage(ft): 10.000
      Type: Stage/Area

overflow area.  4/21/09.  JP

      Stage(ft)        Area(ac)
--------------- ---------------

□
      Name: N-C210             Base Flow(cfs): 0.000          Init Stage(ft): 5.300
     Group: SM1                                              Warn Stage(ft): 8.000
      Type: Stage/Area

Node N-C220 and L-C220C1 were eliminated and that area is modeled as a pond in N-C210.  This was changed  to mor

      Stage(ft)        Area(ac)
--------------- ---------------
          5.000          0.0457
          7.000          0.4638
          8.000          0.6415
          9.000          1.4950
         10.000          2.6919
         10.500          4.2510

□
      Name: N-C230             Base Flow(cfs): 0.000          Init Stage(ft): 5.700
     Group: SM1                                              Warn Stage(ft): 9.800
      Type: Stage/Area
```

Stage(ft)	Area(ac)
5.700	2.5300
7.500	2.5300
8.000	2.7600
8.500	2.8900
9.000	3.0600
9.500	4.8200
10.000	5.6700
10.500	6.6100
11.000	7.4000
11.500	10.9500
12.000	10.9500

Name: N-C240 Base Flow(cfs): 0.000 Init Stage(ft): 6.200
Group: SM1 Warn Stage(ft): 10.900
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-C243 Base Flow(cfs): 0.000 Init Stage(ft): 6.100
Group: SM1 Warn Stage(ft): 10.000
Type: Stage/Area

Added per FEMA comment. 3/16/11 JPI

Stage(ft)	Area(ac)

Name: N-C245 Base Flow(cfs): 0.000 Init Stage(ft): 6.200
Group: SM1 Warn Stage(ft): 10.000
Type: Stage/Area

Added per FEMA comment. 3/16/11 JPI

Stage(ft)	Area(ac)

Name: N-C250 Base Flow(cfs): 0.000 Init Stage(ft): 7.500
Group: SM1 Warn Stage(ft): 10.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-C255 Base Flow(cfs): 0.000 Init Stage(ft): 6.800
Group: SM1 Warn Stage(ft): 10.500
Type: Stage/Area

Added to break channel in two parts to better show overflow areas. JPI 4/21/11

Stage(ft)	Area(ac)

Name: N-C260 Base Flow(cfs): 0.000 Init Stage(ft): 7.850
Group: SM1 Warn Stage(ft): 10.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-C290 Base Flow(cfs): 0.000 Init Stage(ft): 6.970

```
     Group: SM1                                             Warn Stage(ft): 8.500
      Type: Stage/Area

Updated per survey 4/9/09.  JP

      Stage(ft)        Area(ac)
--------------- ---------------

□
      Name: N-C291             Base Flow(cfs): 0.000         Init Stage(ft): 4.720
     Group: SM1                                             Warn Stage(ft): 10.000
      Type: Stage/Area

Added per survey 4/9/09.  JP

      Stage(ft)        Area(ac)
--------------- ---------------

□
      Name: N-C292             Base Flow(cfs): 0.000         Init Stage(ft): 3.760
     Group: SM1                                             Warn Stage(ft): 12.500
      Type: Stage/Area

Added per survey 4/9/09.  JP

      Stage(ft)        Area(ac)
--------------- ---------------

□
      Name: N-C293             Base Flow(cfs): 0.000         Init Stage(ft): 3.660
     Group: SM1                                             Warn Stage(ft): 13.000
      Type: Stage/Area

Added per survey 4/9/09.  JP

      Stage(ft)        Area(ac)
--------------- ---------------

□
      Name: N-C294             Base Flow(cfs): 0.000         Init Stage(ft): 3.480
     Group: SM1                                             Warn Stage(ft): 13.000
      Type: Stage/Area

Added per survey 4/9/09.  JP

      Stage(ft)        Area(ac)
--------------- ---------------

□
      Name: N-C295             Base Flow(cfs): 0.000         Init Stage(ft): 4.770
     Group: SM1                                             Warn Stage(ft): 6.270
      Type: Stage/Area



      Stage(ft)        Area(ac)
--------------- ---------------

□
      Name: N-C296             Base Flow(cfs): 0.000         Init Stage(ft): 3.210
     Group: SM1                                             Warn Stage(ft): 13.000
      Type: Stage/Area

Added per survey 4/9/09.  JP

      Stage(ft)        Area(ac)
--------------- ---------------

□
      Name: N-C300             Base Flow(cfs): 0.000         Init Stage(ft): 3.000
     Group: MB                                              Warn Stage(ft): 9.000
      Type: Stage/Area

Updated per survey 4/9/09.  JP

      Stage(ft)        Area(ac)
```

--- ---

Name: N-C304 Base Flow(cfs): 0.000 Init Stage(ft): 5.770
Group: SM1 Warn Stage(ft): 8.000
Type: Stage/Area

Node part of overflow system. 4/21/09. JP

Stage(ft)	Area(ac)

Name: N-C305 Base Flow(cfs): 0.000 Init Stage(ft): 7.500
Group: SM1 Warn Stage(ft): 8.000
Type: Stage/Area

Node for overflow wier. Connects to overflow swale. 4/21/09 JP

Stage(ft)	Area(ac)

Name: N-C310 Base Flow(cfs): 0.000 Init Stage(ft): 3.200
Group: MB Warn Stage(ft): 8.000
Type: Stage/Area

Updated per survey 4/9/09. JP

Stage(ft)	Area(ac)

Name: N-C320 Base Flow(cfs): 0.000 Init Stage(ft): 2.860
Group: MB Warn Stage(ft): 11.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-C330 Base Flow(cfs): 0.000 Init Stage(ft): 2.000
Group: SM1 Warn Stage(ft): 10.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-D170 Base Flow(cfs): 0.000 Init Stage(ft): 7.500
Group: MB Warn Stage(ft): 10.800
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-G010 Base Flow(cfs): 0.000 Init Stage(ft): 4.000
Group: BL Warn Stage(ft): 8.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-G020 Base Flow(cfs): 0.000 Init Stage(ft): 3.510
Group: BL Warn Stage(ft): 8.000
Type: Stage/Area

Updated per Bees Ferry Rd Widening 5/5/15 JPI

Stage(ft)	Area(ac)

Name: N-G021 Base Flow(cfs): 0.000 Init Stage(ft): 4.000
Group: BL Warn Stage(ft): 8.000
Type: Stage/Area

Added per Verdier Apts. 6/2/15 JPI

Stage(ft)	Area(ac)

Name: N-G022 Base Flow(cfs): 0.000 Init Stage(ft): 7.810
Group: BL Warn Stage(ft): 10.000
Type: Stage/Area

Added per Verdier plans. JPI 6/2/15

Stage(ft)	Area(ac)

Name: N-G023 Base Flow(cfs): 0.000 Init Stage(ft): 8.080
Group: BL Warn Stage(ft): 10.000
Type: Stage/Area

Added per Verdier Apts. JPI 6/2/15

Stage(ft)	Area(ac)

Name: N-G025 Base Flow(cfs): 0.000 Init Stage(ft): 4.500
Group: BL Warn Stage(ft): 10.000
Type: Stage/Area

Added per Verdier Apts. JPI 6/2/15

Stage(ft)	Area(ac)

Name: N-G025A Base Flow(cfs): 0.000 Init Stage(ft): 7.730
Group: BL Warn Stage(ft): 11.000
Type: Stage/Area

Added per Verdier Apts. JPI 6/2/15

Stage(ft)	Area(ac)

Name: N-G025B Base Flow(cfs): 0.000 Init Stage(ft): 8.870
Group: BL Warn Stage(ft): 12.000
Type: Stage/Area

Added per Verdier Apts. Pond 1 data from report dated 5/30/12. JPI 6/2/15

Stage(ft)	Area(ac)
7.800	0.1000
8.000	0.3800
9.000	0.4600
10.000	0.5300
11.000	0.6200
12.000	0.7000

Name: N-G025C Base Flow(cfs): 0.000 Init Stage(ft): 8.870
Group: BL Warn Stage(ft): 12.000

Type: Stage/Area

Added per Verdier Apts. Pond 2 from report dated 5/30/15. JPI 6/2/15

Stage(ft)	Area(ac)
8.000	0.0200
9.000	0.0400
10.000	0.0500
11.000	0.0700
12.000	0.0900

Name: N-G028 Base Flow(cfs): 0.000 Init Stage(ft): 5.000
Group: BL Warn Stage(ft): 12.000
Type: Stage/Area

Added per Verdier Apts. JPI 6/2/15

Stage(ft)	Area(ac)

Name: N-G028A Base Flow(cfs): 0.000 Init Stage(ft): 7.780
Group: BL Warn Stage(ft): 12.000
Type: Stage/Area

Added per Verdier Apts. JPI 6/2/15

Stage(ft)	Area(ac)

Name: N-G028B Base Flow(cfs): 0.000 Init Stage(ft): 8.870
Group: BL Warn Stage(ft): 12.000
Type: Stage/Area

Added per Verdier Apts. Pond 3 from reported dated 5/30/15 JPI 6/2/15

Stage(ft)	Area(ac)
7.770	1.0000
8.000	1.6000
9.000	1.7500
10.000	1.9200
11.000	2.0800
12.000	2.2300

Name: N-G030 Base Flow(cfs): 0.000 Init Stage(ft): 6.000
Group: BL Warn Stage(ft): 10.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-G040 Base Flow(cfs): 0.000 Init Stage(ft): 6.000
Group: BL Warn Stage(ft): 11.500
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	6.000
12.00	8.000
24.00	8.000
36.00	7.000
48.00	6.000

Name: N-G042 Base Flow(cfs): 0.000 Init Stage(ft): 3.200
Group: BL Warn Stage(ft): 10.330

Type: Stage/Area

Added per Faison Apt. JPI 6/1/15

Stage(ft)	Area(ac)

Name: N-G043 Base Flow(cfs): 0.000 Init Stage(ft): 3.300
Group: BL Warn Stage(ft): 10.330
Type: Stage/Area

Added per Faison Apartments. JPI 6/1/15

Stage(ft)	Area(ac)

Name: N-G043A Base Flow(cfs): 0.000 Init Stage(ft): 6.700
Group: BL Warn Stage(ft): 10.000
Type: Stage/Area

Adder per Faison Apts. Pond 3 from asbuilts. The 11 contour represents the banks overflowing. The top of pond

Stage(ft)	Area(ac)
3.500	0.0000
6.600	0.3910
7.000	0.4100
8.000	0.4650
9.000	0.5220
10.000	0.5800
11.000	0.6000

Name: N-G044 Base Flow(cfs): 0.000 Init Stage(ft): 3.700
Group: BL Warn Stage(ft): 10.000
Type: Stage/Area

Added per Faison and Blue Water Gas Station. JPI 6/4/15

Stage(ft)	Area(ac)

Name: N-G044A Base Flow(cfs): 0.000 Init Stage(ft): 11.500
Group: BL Warn Stage(ft): 16.300
Type: Stage/Area

Added per Blue Water Gas Station. Plunge pool. Outfall of underground storage. 6/4/15 JPI

Stage(ft)	Area(ac)

Name: N-G044B Base Flow(cfs): 0.000 Init Stage(ft): 11.500
Group: BL Warn Stage(ft): 16.000
Type: Stage/Volume

IGNORE WARNING. Underground detention is made up of pipes, so the stage/area should get smaller as the elevatio

Added per Blue Water Gas Station. Underground storage device (Stormtech SC-740 chambers). Two seperate structu

Stage(ft)	Volume(af)
11.500	0.0000
12.000	0.0300
12.500	0.1000
13.000	0.1700
13.500	0.2300
14.000	0.2900
14.500	0.3900
15.000	0.4200
15.500	0.4600

16.000	0.4700

Name: N-G045 Base Flow(cfs): 0.000 Init Stage(ft): 4.000
Group: BL Warn Stage(ft): 10.000
Type: Stage/Area

Added per Faison Apartments. JPI 6/1/15.

Stage(ft)	Area(ac)

Name: N-G045A Base Flow(cfs): 0.000 Init Stage(ft): 6.650
Group: BL Warn Stage(ft): 9.500
Type: Stage/Area

Added per Faison Apt. JPI 6/1/15.

Stage(ft)	Area(ac)

Name: N-G045B Base Flow(cfs): 0.000 Init Stage(ft): 6.780
Group: BL Warn Stage(ft): 10.000
Type: Stage/Area

Added per Faison Apts. Pond 2 from Asbuilts. The 11 contour respresents the banks overflowing. 10 is the top

Stage(ft)	Area(ac)
3.300	0.0000
6.500	1.6800
7.000	1.7900
8.000	1.9600
9.000	2.1200
10.000	2.2800
11.000	2.3000

Name: N-G045C Base Flow(cfs): 0.000 Init Stage(ft): 6.780
Group: BL Warn Stage(ft): 10.000
Type: Stage/Area

Added per Faison Apts. Pond 1 from asbuilts. The 11 contour represents the banks overflowing. The top of bank

Stage(ft)	Area(ac)
3.600	0.0000
6.500	0.3100
7.000	0.3300
8.000	0.3800
9.000	0.4300
10.000	0.4900
11.000	0.5000

Name: N-G050 Base Flow(cfs): 0.000 Init Stage(ft): 4.300
Group: BL Warn Stage(ft): 10.000
Type: Stage/Area

Stage(ft)	Area(ac)

Name: N-G060 Base Flow(cfs): 0.000 Init Stage(ft): 9.500
Group: BL Warn Stage(ft): 13.900
Type: Stage/Area

PS N-I1

Stage(ft)	Area(ac)
3.500	0.1000

9.500	0.2200
10.000	0.2400
11.000	0.3000
12.000	0.3500
13.000	0.4100
14.000	0.4100

Name: N-G070 Base Flow(cfs): 0.000 Init Stage(ft): 9.500
Group: BL Warn Stage(ft): 33.500
Type: Stage/Area

PS N-H1

Stage(ft)	Area(ac)
3.500	0.0400
9.500	0.0900
10.000	0.1000
11.000	0.1200
12.000	0.1400
13.000	0.1700

Name: N-G080 Base Flow(cfs): 0.000 Init Stage(ft): 9.500
Group: RR Warn Stage(ft): 13.000
Type: Stage/Area

PS N-G1

Stage(ft)	Area(ac)
3.500	0.2700
9.500	0.6500
10.000	0.8000
12.000	0.8900
13.000	0.9900

Name: N-G090 Base Flow(cfs): 0.000 Init Stage(ft): 12.000
Group: BL Warn Stage(ft): 15.000
Type: Stage/Area

PS N-F1

Stage(ft)	Area(ac)
6.000	0.3800
12.000	0.6900
13.000	0.8000
14.000	0.9100
15.000	1.0200

Name: N-G100 Base Flow(cfs): 0.000 Init Stage(ft): 4.600
Group: BL Warn Stage(ft): 10.000
Type: Stage/Area

SWA - Same except Time/Stage and flat at 4.6

Stage(ft)	Area(ac)

Name: N-G110 Base Flow(cfs): 0.000 Init Stage(ft): 9.000
Group: BL Warn Stage(ft): 14.000
Type: Stage/Area

PS N-D1

Stage(ft)	Area(ac)
3.000	0.1100
10.000	0.2800
11.000	0.3200

12.000	0.3700
13.000	0.4200
14.000	0.5100

Name: N-G120 Base Flow(cfs): 0.000 Init Stage(ft): 9.500
Group: BL Warn Stage(ft): 14.000
Type: Stage/Area

PS N-C1

Stage(ft)	Area(ac)
3.500	0.1300
9.500	0.3000
10.000	0.3200
11.000	0.3700
12.000	0.4100
13.000	0.4600
14.000	0.5100

Name: N-G130 Base Flow(cfs): 0.000 Init Stage(ft): 10.500
Group: BL Warn Stage(ft): 15.000
Type: Stage/Area

PS N-B1

Stage(ft)	Area(ac)
4.500	0.2600
10.500	0.3900
11.000	0.4200
12.000	0.4700
13.000	0.5200
14.000	0.5800
15.000	0.6400

Name: N-G140 Base Flow(cfs): 0.000 Init Stage(ft): 10.500
Group: BL Warn Stage(ft): 17.000
Type: Stage/Area

PS N-A1

Stage(ft)	Area(ac)
4.500	0.1300
10.500	0.2400
11.000	0.2700
12.000	0.3100
13.000	0.3600
14.000	0.4100
15.000	0.4700
16.000	0.5900
17.000	0.7200

Name: N-G150 Base Flow(cfs): 0.000 Init Stage(ft): 10.750
Group: BL Warn Stage(ft): 13.500
Type: Stage/Area

PS N-OFF

Stage(ft)	Area(ac)
10.750	0.0010
11.200	0.0020
12.000	0.0400
13.000	0.2000
13.500	0.3100
17.000	0.3100

Name: N-G160 Base Flow(cfs): 0.000 Init Stage(ft): 11.000
Group: BL Warn Stage(ft): 14.000

Type: Stage/Area

PS N-E1

Stage(ft)	Area(ac)
5.000	0.2000
11.000	0.4500
12.000	0.5200
13.000	0.6000
14.000	0.6800

Name: N-G170 Base Flow(cfs): 0.000 Init Stage(ft): 5.800
Group: BL Warn Stage(ft): 12.000
Type: Stage/Area

No changes to this node

Stage(ft)	Area(ac)

Name: N-G170A Base Flow(cfs): 0.000 Init Stage(ft): 5.800
Group: BL Warn Stage(ft): 12.000
Type: Stage/Area

New node - per SWA a dummy node (no storage) used to transition from the channel to the culvert

Stage(ft)	Area(ac)

Name: N-G180 Base Flow(cfs): 0.000 Init Stage(ft): 5.720
Group: BL Warn Stage(ft): 11.000
Type: Stage/Area

SWA - N-15 per Hamilton Grove model - wetland storage not included (dummy manhole?)
SWA - N-W15A per Mt Royall model

Used stage/area data as contained within the Mt Royall model, rather than the previously delineated stage/area d

Requested and received addtional stage/area data at:
Elevation 11 of 5.8 acres
Elevation 12 of 12.4 acres
per SWA on 01/20/04.

Stage(ft)	Area(ac)
5.720	0.0010
9.000	0.8900
10.000	2.2600
11.000	5.8000
12.000	12.4000

Name: N-G200 Base Flow(cfs): 0.000 Init Stage(ft): 10.500
Group: BL Warn Stage(ft): 14.000
Type: Stage/Area

SWA - N-23

Stage(ft)	Area(ac)
4.500	0.0900
10.500	0.2000
11.000	0.2100
12.000	0.2400
13.000	0.3000
14.000	0.3300

Name: N-G210 Base Flow(cfs): 0.000 Init Stage(ft): 10.000
Group: BL Warn Stage(ft): 12.750
Type: Stage/Area

SWA - N-26

Stage(ft)	Area(ac)
4.000	4.4700
10.000	9.2000
11.000	14.4800
12.000	20.3000
12.500	22.2500

Name: N-G220 Base Flow(cfs): 0.000 Init Stage(ft): 10.500
Group: BL Warn Stage(ft): 15.000
Type: Stage/Area

SWA - N-25

Stage(ft)	Area(ac)
4.500	0.6200
10.500	1.0200
11.000	1.0900
12.000	1.2300
13.000	1.3700
14.000	1.5200
15.000	1.7000

Name: N-G230 Base Flow(cfs): 0.000 Init Stage(ft): 10.500
Group: BL Warn Stage(ft): 14.000
Type: Stage/Area

SWA - N-24

Stage(ft)	Area(ac)
4.500	0.1100
10.500	0.2500
11.000	0.2700
12.000	0.3300
13.000	0.4000
14.000	0.4500

Name: N-G240 Base Flow(cfs): 0.000 Init Stage(ft): 10.500
Group: BL Plunge Factor: 1.00 Warn Stage(ft): 15.000
Type: Manhole, Flat Floor

SWA - N-22B

Stage(ft)	Area(ac)

Name: N-G250 Base Flow(cfs): 0.000 Init Stage(ft): 10.500
Group: BL Plunge Factor: 1.00 Warn Stage(ft): 15.000
Type: Manhole, Flat Floor

SWA - N-22A

Stage(ft)	Area(ac)

Name: N-G260 Base Flow(cfs): 0.000 Init Stage(ft): 10.500
Group: BL Warn Stage(ft): 15.000
Type: Stage/Area

SWA - N-22

Stage(ft)	Area(ac)
4.500	0.1600
10.500	0.3000
11.000	0.3300
12.000	0.3900

13.000	0.4400
14.000	0.5300
15.000	0.6200

Name: N-G270 Base Flow(cfs): 0.000 Init Stage(ft): 4.810
Group: BL Plunge Factor: 1.00 Warn Stage(ft): 15.000
Type: Manhole, Flat Floor

SWA - N-21B

Stage(ft)	Area(ac)

Name: N-G280 Base Flow(cfs): 0.000 Init Stage(ft): 8.320
Group: BL Plunge Factor: 1.00 Warn Stage(ft): 15.000
Type: Manhole, Flat Floor

SWA - N-21A

Stage(ft)	Area(ac)

Name: N-G290 Base Flow(cfs): 0.000 Init Stage(ft): 11.000
Group: BL Warn Stage(ft): 16.000
Type: Stage/Area

SWA - N-21

Stage(ft)	Area(ac)
5.000	0.1300
11.000	0.2000
12.000	0.2300
13.000	0.2700
14.000	0.3200
15.000	0.3600
16.000	0.4000

Name: N-G300 Base Flow(cfs): 0.000 Init Stage(ft): 7.990
Group: BL Plunge Factor: 1.00 Warn Stage(ft): 15.000
Type: Manhole, Flat Floor

SWA - N-20C

Stage(ft)	Area(ac)

Name: N-G310 Base Flow(cfs): 0.000 Init Stage(ft): 8.940
Group: BL Plunge Factor: 1.00 Warn Stage(ft): 15.000
Type: Manhole, Flat Floor

SWA - N-20B

Stage(ft)	Area(ac)

Name: N-G320 Base Flow(cfs): 0.000 Init Stage(ft): 9.310
Group: BL Plunge Factor: 1.00 Warn Stage(ft): 13.000
Type: Manhole, Flat Floor

SWA - N-20A

Stage(ft)	Area(ac)

Name: N-G330 Base Flow(cfs): 0.000 Init Stage(ft): 13.500
Group: BL Warn Stage(ft): 14.500
Type: Stage/Area

SWA - N-20

Stage(ft)	Area(ac)
13.000	0.2100
14.000	1.2400

Name: N-G340 Base Flow(cfs): 0.000 Init Stage(ft): 10.000
Group: BL Warn Stage(ft): 12.500
Type: Stage/Area

SWA - N-18

Stage(ft)	Area(ac)
4.000	0.0800
10.000	0.1400
11.000	0.8100
12.000	7.1000
12.500	10.3100

Name: N-G350 Base Flow(cfs): 0.000 Init Stage(ft): 10.500
Group: BL Warn Stage(ft): 15.000
Type: Stage/Area

SWA - N-19

Stage(ft)	Area(ac)
4.500	0.2800
10.500	0.5300
12.000	0.5700
13.000	0.6600
14.000	0.7500
15.000	0.8500

Name: N-G360 Base Flow(cfs): 0.000 Init Stage(ft): 10.500
Group: BL Warn Stage(ft): 16.500
Type: Stage/Area

SWA - N-17

Stage(ft)	Area(ac)
4.500	0.2500
10.500	0.4700
12.000	0.5000
13.000	0.5500
14.000	0.6200
15.000	0.7400
16.000	0.8500
16.500	0.8800

Name: N-G370 Base Flow(cfs): 0.000 Init Stage(ft): 11.000
Group: BL Warn Stage(ft): 12.500
Type: Stage/Area

SWA - N-16

Per requesting and receiving data from SWA on 01/20/04, we revised the stage/area data from the Hamilton Grove m

Stage(ft)	Area(ac)
11.000	0.3100
12.000	6.9000
12.500	10.1000

Name: N-G400 Base Flow(cfs): 0.000 Init Stage(ft): 6.000
Group: BL Warn Stage(ft): 12.500
Type: Stage/Area

SWA - N-10

Stage(ft)	Area(ac)
-1.000	1.9100
6.000	2.5200
7.000	2.6500
8.000	2.7800
9.000	2.9100
10.000	3.0500
11.000	4.0900
12.000	4.5200
12.500	4.6700
13.250	4.8900

Name: N-G410 Base Flow(cfs): 0.000 Init Stage(ft): 8.000
Group: BL Warn Stage(ft): 13.000
Type: Stage/Area

SWA - N-11

Stage(ft)	Area(ac)
2.000	0.2400
8.000	0.5700
9.000	0.6100
10.000	0.7500
11.000	0.8300
12.000	0.9000
13.000	1.0600

Name: N-G420 Base Flow(cfs): 0.000 Init Stage(ft): 6.000
Group: BL Warn Stage(ft): 13.000
Type: Stage/Area

SWA - N-2

Stage(ft)	Area(ac)
0.000	1.2100
6.000	1.5100
7.000	1.6200
8.000	1.7300
9.000	1.8400
10.000	1.9500
11.000	2.0700
12.000	2.3400
13.000	2.6000

Name: N-G430 Base Flow(cfs): 0.000 Init Stage(ft): 8.000
Group: BL Warn Stage(ft): 13.000
Type: Stage/Area

SWA - N-3

Stage(ft)	Area(ac)
2.000	0.3900
8.000	0.5700
9.000	0.6400
10.000	0.7100
11.000	0.7800
12.000	0.8500
13.000	1.0500

Name: N-G440 Base Flow(cfs): 0.000 Init Stage(ft): 9.000
Group: BL Warn Stage(ft): 13.500
Type: Stage/Area

SWA - N-4

Stage(ft)	Area(ac)

3.000	0.2300
9.000	0.4100
10.000	0.4700
11.000	0.5400
12.000	0.6100
13.000	0.6800
13.500	0.7300

Name: N-G450 Base Flow(cfs): 0.000 Init Stage(ft): 10.000
Group: BL Warn Stage(ft): 17.000
Type: Stage/Area

SWA - N-3F2

Stage(ft)	Area(ac)
4.000	0.0900
10.000	0.1400
11.000	0.1600
12.000	0.1800
13.000	0.2100
14.000	0.2400
15.000	0.2600
16.000	0.2900
17.000	0.3200

Name: N-G460 Base Flow(cfs): 0.000 Init Stage(ft): 10.000
Group: BL Warn Stage(ft): 15.000
Type: Stage/Area

SWA - N-3F1

Stage(ft)	Area(ac)
4.000	0.2600
10.000	0.3500
11.000	0.4000
12.000	0.4500
13.000	0.5000
14.000	0.5600
15.000	0.6100

Name: N-G470 Base Flow(cfs): 0.000 Init Stage(ft): 9.000
Group: BL Warn Stage(ft): 15.000
Type: Stage/Area

SWA - N-6

Stage(ft)	Area(ac)
3.000	0.7400
9.000	0.9900
10.000	1.0700
11.000	1.1600
12.000	1.2600
13.000	1.4000
14.000	1.5400
15.000	1.8000

Name: N-G480 Base Flow(cfs): 0.000 Init Stage(ft): 10.000
Group: BL Warn Stage(ft): 17.000
Type: Stage/Area

SWA - N-5F1

Stage(ft)	Area(ac)
4.000	0.2500
10.000	0.3500
11.000	0.4000
12.000	0.4600

13.000	0.5100
14.000	0.5700
15.000	0.6200
16.000	0.6800
17.000	0.7400

Name: N-G490 Base Flow(cfs): 0.000 Init Stage(ft): 11.500
Group: BL Warn Stage(ft): 13.900
Type: Stage/Area

SWA - N-7

Requested and received additional stage/area data from SWA on 01/26/04 for elevation 14.1 to reduce extrapolatio

Stage(ft)	Area(ac)
11.500	0.0001
13.900	0.2500
14.100	0.3100

Name: N-G510 Base Flow(cfs): 0.000 Init Stage(ft): 11.000
Group: BL Warn Stage(ft): 14.000
Type: Stage/Area

SWA - N-12

Stage(ft)	Area(ac)
4.000	0.2300
11.000	0.3900
12.000	0.4400
13.000	0.5000
14.000	0.5600
14.500	0.5900

Name: N-H100 Base Flow(cfs): 0.000 Init Stage(ft): 5.500
Group: WAL Warn Stage(ft): 13.000
Type: Stage/Area

Haines, Gipson, & Associates - POND 1
Assume pond is now dry due to revised outlet structure that includes orifice

Stage(ft)	Area(ac)
5.500	1.6200
6.000	1.7000
7.000	1.7800
8.000	1.8700
9.000	1.9500
10.000	2.0400
11.000	2.1300
12.000	2.2200
13.000	2.3100

Name: N-H110 Base Flow(cfs): 0.000 Init Stage(ft): 6.000
Group: WAL Warn Stage(ft): 13.000
Type: Stage/Area

Haines, Gipson, & Associates - POND 2
Assume pond is now dry due to revised outlet structure that includes orifice

Stage(ft)	Area(ac)
6.000	1.0800
7.000	1.1700
8.000	1.2600
9.000	1.3600
10.000	1.4600
11.000	1.5600
12.000	1.6600

13.000	1.7600

Name: N-H120 Base Flow(cfs): 0.000 Init Stage(ft): 7.000
Group: WAL Warn Stage(ft): 13.000
Type: Stage/Area

Haines, Gipson, & Associates - POND 2A/3

Stage(ft)	Area(ac)
7.000	0.1300
8.000	0.1800
9.000	0.2200
10.000	0.2700
11.000	0.3200
12.000	0.3800
13.000	0.4300

Name: N-H130 Base Flow(cfs): 0.000 Init Stage(ft): 9.500
Group: WAL Warn Stage(ft): 13.000
Type: Stage/Area

Haines, Gipson, & Associates - POND 2B/4
Assumed pond remains wet - initial stage set to pond invert out

Stage(ft)	Area(ac)
7.000	0.0600
8.000	0.0800
9.000	0.1000
10.000	0.1300
11.000	0.1500
12.000	0.1800
13.000	0.2100

Name: N-I040 Base Flow(cfs): 0.000 Init Stage(ft): 7.000
Group: MB Warn Stage(ft): 12.000
Type: Stage/Area

Assumed that the pond created is the same that is in the detailed plan and the report.
Pond 3: stage area information found on page 52.

Where do I get base flow information?

Stage(ft)	Area(ac)
7.000	0.1000
8.000	0.1600
9.000	0.2100
10.000	0.2600
11.000	0.3100
12.000	0.3600

Name: N-I042 Base Flow(cfs): 0.000 Init Stage(ft): 7.760
Group: MB Plunge Factor: 1.00 Warn Stage(ft): 9.760
Type: Manhole, Flat Floor

Stage(ft)	Area(ac)

Name: N-I060 Base Flow(cfs): 0.000 Init Stage(ft): 5.000
Group: MB Warn Stage(ft): 7.400
Type: Stage/Area

Stage Area modified for existing conditions. Pulled information from connor's proposed plans.

Updated Areas based on survey and LiDAR 4/8/09 JP.

Stage(ft)	Area(ac)
5.000	0.9240
7.400	1.2971
8.000	4.4663
11.000	14.1480
12.000	15.1290

Name: N-I080 Base Flow(cfs): 0.000 Init Stage(ft): 7.300
Group: MB Warn Stage(ft): 9.200
Type: Stage/Area

Assumed that the pond created is the same that is in the detailed plan and the report.
Pond 5: stage area information found on page 67.

Where do I get base flow information?

Updated Areas based on survey and LiDAR 4/8/09 JP.

Stage(ft)	Area(ac)
7.300	0.1776
9.200	0.2502
10.000	0.3953
11.000	1.1696
12.000	2.9097

Name: N-I090 Base Flow(cfs): 0.000 Init Stage(ft): 5.500
Group: MB Warn Stage(ft): 7.500
Type: Stage/Area

Assumed that the pond created is the same that is in the detailed plan and the report.
Pond 1: stage area information found on page 79.

Added additional stage area data for 5', 6' & 7' were added to help the mass balance report and simulation.

Per Conversation on 12/13/05 and e-mail on 12/14/05 with Connor, Initial Stage was lowered from 8 to 5.5.

Updated Areas based on survey and LiDAR 4/8/09 JP.

Stage(ft)	Area(ac)
5.300	1.9503
7.500	2.4640
9.000	5.1757
11.000	9.3750
12.000	11.7330

Name: N-I098 Base Flow(cfs): 0.000 Init Stage(ft): 5.870
Group: MB Warn Stage(ft): 10.000
Type: Stage/Area

Added per survey 4/9/09. JP

Stage(ft)	Area(ac)

Name: N-I099 Base Flow(cfs): 0.000 Init Stage(ft): 6.430
Group: MB Warn Stage(ft): 10.000
Type: Stage/Area

Added per survey 4/9/09. Jp

Stage(ft)	Area(ac)

Name: N-I100 Base Flow(cfs): 0.000 Init Stage(ft): 6.310
Group: MB Warn Stage(ft): 10.400
Type: Stage/Area

Updated based on survey 4/8/09 JP.

Stage(ft)	Area(ac)

Name: N-I101 Base Flow(cfs): 0.000 Init Stage(ft): 6.700
Group: MB Warn Stage(ft): 8.000
Type: Stage/Area

Overflow area. Added 4/21/09. JP

Stage(ft)	Area(ac)
6.700	0.0215
8.000	0.1179
10.000	1.8261
11.000	4.9796
12.000	7.6081

Name: N-I150 Base Flow(cfs): 0.000 Init Stage(ft): 6.400
Group: MB Warn Stage(ft): 9.200
Type: Stage/Area

Assumed that the pond created is the same that is in the detailed plan and the report.
Pond 7: stage area information found on page .

Where do I get base flow information?

Updated areas and elevations from survey 4/9/09. JP

Stage(ft)	Area(ac)
5.000	0.0967
6.000	0.1200
6.400	0.1576
9.200	0.2349

Name: N-I152 Base Flow(cfs): 0.000 Init Stage(ft): 6.640
Group: MB Warn Stage(ft): 11.200
Type: Stage/Area

the warning stage was set at the rim elevation of 11.2'

Stage(ft)	Area(ac)

Name: N-I153 Base Flow(cfs): 0.000 Init Stage(ft): 6.590
Group: MB Warn Stage(ft): 11.250
Type: Stage/Area

Added per survey 4/9/09. JP

Stage(ft)	Area(ac)

Name: N-I170 Base Flow(cfs): 0.000 Init Stage(ft): 6.680
Group: MB Warn Stage(ft): 10.000
Type: Stage/Area

Added per survey 4/9/09. JP

Stage(ft)	Area(ac)

Name: N-I180 Base Flow(cfs): 0.000 Init Stage(ft): 8.030
Group: MB Warn Stage(ft): 9.200
Type: Stage/Area

Added additional stage area data from 0' to 6'' was added to help the mass balance report and simulation.

Per Connor's report stage area data is the following for pond 2,3,&4
82.37
92.82
104.32
1126.3 (This is a real concern, B-I200 has an area of 24.242, this stage area data at an

Decided to break the ponds and use the data derived from the cadd file. Hand-written data can be found on pg. 1

Updated Areas based on survey 4/8/09 JP.

Stage(ft)	Area(ac)
1.000	0.0392
2.000	0.0568
3.000	0.0752
4.000	0.0944
5.000	0.1140
6.000	0.1460
8.000	0.2160
8.100	1.5182
9.200	1.7618
11.000	25.7010
12.000	34.9340

♀
Name: N-I230 Base Flow(cfs): 0.000 Init Stage(ft): 6.900
Group: MB Warn Stage(ft): 10.000
Type: Stage/Area

Warning Stage is set at 10' at the rim elevation for junction box #48.

Stage(ft)	Area(ac)

♀
Name: N-I240 Base Flow(cfs): 0.000 Init Stage(ft): 8.000
Group: MB Warn Stage(ft): 10.000
Type: Stage/Area

Information on Pond 1 is located in Shadowmoss Report on page 48.

Added additional stage area data for 5', 4', & 3' w

ere added to help the mass balance report and simulation.
Per AutoCAD file and plan, stage area at 11' was removed because it was not delineated.

Revised stage area data, based on AutoCAD file the stage in the report were set one 1' above the actual area. F

Added additional stage area data for 6' & 7'.

Elevation 11 and 12 were estimated with LiDAR. Pond does not yet exist, so this is just a flood plain. All ele

Stage(ft)	Area(ac)
3.000	0.4280
4.000	0.4800
5.000	0.5320
6.000	0.5840
7.000	0.6370
8.000	0.7200
9.000	0.8000
10.000	0.8900
11.000	11.7970
12.000	16.4740

♀
Name: N-I250 Base Flow(cfs): 0.000 Init Stage(ft): 8.600
Group: MB Warn Stage(ft): 11.200
Type: Stage/Area

10/18/05 Notes
POND STAGE AREA DATA IN B-I250 AND B-I260 HAVE BEEN DIVIDED. THE INFORMATION IN THE REPORT SHOWS THE STAGE AREA

Report - Post Development Map shows B-I250 & B-I240 to both be

Details for structure #54 found on page 22 of villa plans.
30'-15" HDPE (.010); In 8.0, Out 7.0
not twin pipes.

ORIGINAL NOTES
I PULLED THE STAGE AREA DATA OFF THE CAD FILES.

NOTE - THIS BASIN WAS SPLIT SO THE STAGE AREA INFORMATION NEEDED TO BE DIVIDED BETWEEN THE SEGMENTED BASINS.

NOTE - THE AREA OF THE POND DECRESED AS THE STAGE LEVEL RISES FROM 7 TO 8. AS THE STAGE MOVES UP TO 8 FEET THE

Updated Areas based on survey and LiDAR 4/8/09 JP.

Stage(ft)	Area(ac)
8.600	0.3171
11.200	0.4828
13.000	2.3639
14.000	8.5451

□
Name: N-I252 Base Flow(cfs): 0.000 Init Stage(ft): 8.570
Group: MB Warn Stage(ft): 12.000
Type: Stage/Area

Added per survey 4/9/09. JP

Stage(ft)	Area(ac)

□
Name: N-I255 Base Flow(cfs): 0.000 Init Stage(ft): 8.380
Group: MB Warn Stage(ft): 12.000
Type: Stage/Area

Added per survey 4/9/09. JP

Stage(ft)	Area(ac)

□
Name: N-I260 Base Flow(cfs): 0.000 Init Stage(ft): 7.600
Group: MB Warn Stage(ft): 11.000
Type: Stage/Area

POND STAGE AREA DATA IN B-I250 AND B-I260 HAVE BEEN DIVIDED. THE INFORMATION IN THE REPORT SHOWS THE STAGE AREA

Assumed that the pond created is the same that is in the detailed plan and the report.
Pond 2: stage area information found on page 39.

Pond 2 appears to include both ponds in basin B. As I see it there are three options:
1. Keep this stage area information as it is in the first pond and keep the same layout in the model
2. Keep this stage area information as it is in the first pond and eliminate the second pond in basin B
 from the ICPR layout.
3. Separate the stage area information and determine areas for each pond separately and keep the same layout in

Where do I get base flow information?

Report Stage area
81.57
91.74
101.9

This data does not agree with cadd file areas. I used the cadd data

Updated Areas based on survey and LiDAR 4/8/09 JP.

Stage(ft)	Area(ac)
7.600	1.5363
11.000	2.2169
12.000	2.6868

♀
Name: N-I265 Base Flow(cfs): 0.000 Init Stage(ft): 7.380

Group: MB Warn Stage(ft): 16.000
Type: Stage/Area

Added per survey 4/9/09. JP

Stage(ft)	Area(ac)

Name: N-I270 Base Flow(cfs): 0.000 Init Stage(ft): 5.000
Group: MB Warn Stage(ft): 8.000
Type: Stage/Area

Node N-C200 and L-C200C1 eliminated and area modeled as pond in this node. Thsi was done to more accurately sho

Stage(ft)	Area(ac)
5.000	0.0668
7.000	0.2122
8.000	0.2700
9.000	0.3514
10.000	0.5868
10.500	0.8600

Name: N-I280 Base Flow(cfs): 0.000 Init Stage(ft): 9.460
Group: MB Warn Stage(ft): 10.200
Type: Stage/Area

10/18/05 Notes
Report - Post Development Map shows B-I250 & B-I240 to both be

Details for structure #54 found on page 22 of villa plans.
30'-15" HDPE (.010); In 8.0, Out 7.0
not twin pipes.

ORIGINAL NOTES
Assumed that the pond created is the same that is in the detailed plan and the report.
Pond 1: stage area information found on page 19 IN REPORT

Updated per survey 4/9/09. Modeled full because no reason for lower water level could be found. JP

Stage(ft)	Area(ac)
6.400	0.1633
10.200	0.3277
11.000	0.4204

Name: N-I290 Base Flow(cfs): 0.000 Init Stage(ft): 7.600
Group: MB Warn Stage(ft): 8.300
Type: Stage/Area

Because the engineer designed CT basin without a release area. I have inserted this node into the model. I have

I used the digital information provided by conner in cadd on the existing pond for the stage area information.

Updated Areas based on survey and LiDAR 4/8/09 JP.

Stage(ft)	Area(ac)
7.400	0.1744
8.300	0.2539
9.000	0.5140
10.000	0.7869

Updated Model
Pipe Input

```
        Name: L-A060P2            From Node: N-A060            Length(ft): 43.00
       Group: RR                    To Node: N-A050                 Count: 2
                                                        Friction Equation: Average Conveyance
              UPSTREAM       DOWNSTREAM                Solution Algorithm: Automatic
    Geometry: Rectangular    Rectangular                         Flow: Both
    Span(in): 96.00          96.00                     Entrance Loss Coef: 0.20
    Rise(in): 30.00          30.00                         Exit Loss Coef: 0.20
  Invert(ft): 4.000          4.000                         Bend Loss Coef: 0.00
 Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
Top Clip(in): 0.000          0.000                       Inlet Ctrl Spec: Use dn
Bot Clip(in): 0.000          0.000                    Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Rectangular Box: 30° to 75° wingwall flares

Downstream FHWA Inlet Edge Description:
Rectangular Box: 30° to 75° wingwall flares



-------------------------------------------------------------------------------------------------------
        Name: L-A080P1            From Node: N-A080            Length(ft): 256.00
       Group: RR                    To Node: N-A330                 Count: 1
                                                        Friction Equation: Average Conveyance
              UPSTREAM       DOWNSTREAM                Solution Algorithm: Always Outlet
    Geometry: Rectangular    Rectangular                         Flow: Both
    Span(in): 120.00         120.00                    Entrance Loss Coef: 0.40
    Rise(in): 36.00          36.00                         Exit Loss Coef: 0.40
  Invert(ft): 3.910          3.860                         Bend Loss Coef: 0.00
 Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
Top Clip(in): 0.000          0.000                       Inlet Ctrl Spec: Use dn
Bot Clip(in): 0.000          0.000                    Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Rectangular Box: 30° to 75° wingwall flares

Downstream FHWA Inlet Edge Description:
Rectangular Box: 30° to 75° wingwall flares

NEW PIPES THROUGH SCE&G ROW

-------------------------------------------------------------------------------------------------------
        Name: L-A100P1            From Node: N-A100            Length(ft): 52.00
       Group: RR                    To Node: N-A090                 Count: 1
                                                        Friction Equation: Average Conveyance
              UPSTREAM       DOWNSTREAM                Solution Algorithm: Automatic
    Geometry: Circular       Circular                            Flow: Both
    Span(in): 30.00          30.00                     Entrance Loss Coef: 0.25
    Rise(in): 30.00          30.00                         Exit Loss Coef: 0.25
  Invert(ft): 5.710          6.430                         Bend Loss Coef: 0.00
 Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
Top Clip(in): 0.000          0.000                       Inlet Ctrl Spec: Use dn
Bot Clip(in): 0.000          0.000                    Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

INVERTS REVISED PER FORSBERG SURVEY

-------------------------------------------------------------------------------------------------------
        Name: L-A100P2            From Node: N-A100            Length(ft): 52.00
       Group: RR                    To Node: N-A090                 Count: 1
                                                        Friction Equation: Average Conveyance
              UPSTREAM       DOWNSTREAM                Solution Algorithm: Automatic
    Geometry: Rectangular    Rectangular                         Flow: Both
    Span(in): 96.00          96.00                     Entrance Loss Coef: 0.20
    Rise(in): 48.00          48.00                         Exit Loss Coef: 0.20
```

Invert(ft):	3.970	3.960	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Rectangular Box: 30° to 75° wingwall flares

Downstream FHWA Inlet Edge Description:
Rectangular Box: 30° to 75° wingwall flares

NEW BOX CULVERT TO BE BORED AND JACKED UNDER CSX

Name:	L-A120P1	From Node: N-A120	Length(ft): 74.00
Group:	RR	To Node: N-A110	Count: 1
			Friction Equation: Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Automatic
Geometry:	Circular	Circular	Flow: Both
Span(in):	68.00	68.00	Entrance Loss Coef: 0.20
Rise(in):	68.00	68.00	Exit Loss Coef: 0.20
Invert(ft):	1.810	2.060	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	34.000	34.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Arch part of concrete culvert under RR

Name:	L-A120P2	From Node: N-A120	Length(ft): 74.00
Group:	RR	To Node: N-A110	Count: 1
			Friction Equation: Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Automatic
Geometry:	Rectangular	Rectangular	Flow: Both
Span(in):	68.00	68.00	Entrance Loss Coef: 0.20
Rise(in):	38.00	38.00	Exit Loss Coef: 0.20
Invert(ft):	1.480	1.730	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Rectangular Box: 30° to 75° wingwall flares

Downstream FHWA Inlet Edge Description:
Rectangular Box: 30° to 75° wingwall flares

Bottom part of concrete culvert under RR

Name:	L-A120P3	From Node: N-A120	Length(ft): 74.00
Group:	RR	To Node: N-A110	Count: 1
			Friction Equation: Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Automatic
Geometry:	Circular	Circular	Flow: Both
Span(in):	72.00	72.00	Entrance Loss Coef: 0.20
Rise(in):	72.00	72.00	Exit Loss Coef: 0.20
Invert(ft):	1.820	1.730	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

steel pipe #1

Name:	L-A120P4	From Node: N-A120	Length(ft):	74.00
Group:	RR	To Node: N-A110	Count:	1
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	72.00	72.00	Entrance Loss Coef:	0.20
Rise(in):	72.00	72.00	Exit Loss Coef:	0.20
Invert(ft):	1.500	1.730	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

steel pipe #2

Name:	L-A120P5	From Node: N-A120	Length(ft):	74.00
Group:	RR	To Node: N-A110	Count:	1
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	72.00	72.00	Entrance Loss Coef:	0.20
Rise(in):	72.00	72.00	Exit Loss Coef:	0.20
Invert(ft):	1.030	1.700	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

steel pipe #3

Name:	L-A120P6	From Node: N-A120	Length(ft):	46.00
Group:	RR	To Node: N-A110	Count:	1
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	48.00	48.00	Entrance Loss Coef:	0.20
Rise(in):	48.00	48.00	Exit Loss Coef:	0.20
Invert(ft):	2.390	3.170	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Pipe off to the side

```
-------------------------------------------------------------------------------------------------
         Name: L-A120P7            From Node: N-A120             Length(ft): 46.00
        Group: RR                    To Node: N-A110                  Count: 1
                                                          Friction Equation: Average Conveyance
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Automatic
     Geometry: Circular       Circular                             Flow: Both
     Span(in): 48.00          48.00                    Entrance Loss Coef: 0.20
     Rise(in): 48.00          48.00                        Exit Loss Coef: 0.20
   Invert(ft): 2.970          3.510                        Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                  Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                       Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                    Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Pipe off to the side

-------------------------------------------------------------------------------------------------
         Name: L-A140P1            From Node: N-A140             Length(ft): 46.00
        Group: RR                    To Node: N-A130                  Count: 1
                                                          Friction Equation: Average Conveyance
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Automatic
     Geometry: Circular       Circular                             Flow: Both
     Span(in): 48.00          48.00                    Entrance Loss Coef: 0.20
     Rise(in): 48.00          48.00                        Exit Loss Coef: 0.20
   Invert(ft): 3.330          3.390                        Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                  Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                       Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                    Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting


-------------------------------------------------------------------------------------------------
         Name: L-A140P2            From Node: N-A140             Length(ft): 46.00
        Group: RR                    To Node: N-A130                  Count: 1
                                                          Friction Equation: Average Conveyance
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Automatic
     Geometry: Circular       Circular                             Flow: Both
     Span(in): 48.00          48.00                    Entrance Loss Coef: 0.20
     Rise(in): 48.00          48.00                        Exit Loss Coef: 0.20
   Invert(ft): 3.470          3.810                        Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                  Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                       Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                    Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting


-------------------------------------------------------------------------------------------------
         Name: L-A142P1            From Node: N-A142             Length(ft): 105.00
        Group: RR                    To Node: N-A141                  Count: 1
                                                          Friction Equation: Average Conveyance
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Automatic
     Geometry: Circular       Circular                             Flow: Both
```

Span(in):	30.00	30.00	Entrance Loss Coef:	0.50
Rise(in):	30.00	30.00	Exit Loss Coef:	1.00
Invert(ft):	9.000	8.000	Bend Loss Coef:	0.00
Manning's N:	0.013000	0.013000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Added per Traffic Circle. Line 6-A152P1 in D&F report. JPI 5/21/15

Name:	L-A162P1	From Node: N-A162	Length(ft):	240.00
Group:	RR	To Node: N-A161	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	0.20
Rise(in):	24.00	24.00	Exit Loss Coef:	0.20
Invert(ft):	8.990	8.480	Bend Loss Coef:	0.00
Manning's N:	0.013000	0.013000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Added per Traffic Circle. JPI 5/21/15

Name:	L-A200P1	From Node: N-A200	Length(ft):	425.00
Group:	RR	To Node: N-A070	Count:	1
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	54.00	54.00	Entrance Loss Coef:	0.10
Rise(in):	54.00	54.00	Exit Loss Coef:	0.30
Invert(ft):	5.810	3.940	Bend Loss Coef:	0.00
Manning's N:	0.013000	0.013000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

1-54" RCP ON SOUTH SIDE OF CANT WOODS

Name:	L-A300P1	From Node: N-A300	Length(ft):	36.00
Group:	RR	To Node: N-A050	Count:	1
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	12.00	12.00	Entrance Loss Coef:	0.10
Rise(in):	12.00	12.00	Exit Loss Coef:	0.30
Invert(ft):	3.120	3.110	Bend Loss Coef:	0.00
Manning's N:	0.024000	0.024000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

LOW OUTLET OF DETENTION POND

Name:	L-A320P1	From Node:	N-A320	Length(ft):	86.00
Group:	RR	To Node:	N-A310	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Horz Ellipse	Horz Ellipse		Flow:	None
Span(in):	57.00	57.00		Entrance Loss Coef:	0.10
Rise(in):	38.00	38.00		Exit Loss Coef:	0.30
Invert(ft):	3.100	1.920		Bend Loss Coef:	0.00
Manning's N:	0.013000	0.013000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Groove end projecting

EXISTING ELLIPTICAL PIPE

Name:	L-A320P2	From Node:	N-A320	Length(ft):	86.00
Group:	RR	To Node:	N-A310	Count:	2
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	None
Span(in):	60.00	60.00		Entrance Loss Coef:	0.10
Rise(in):	60.00	60.00		Exit Loss Coef:	0.30
Invert(ft):	3.100	1.920		Bend Loss Coef:	0.00
Manning's N:	0.013000	0.013000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

PROPOSED ADJACENT TWIN 60"RCPs

Name:	L-A320P3	From Node:	N-A320	Length(ft):	86.00
Group:	RR	To Node:	N-A310	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Rectangular	Rectangular		Flow:	Both
Span(in):	96.00	96.00		Entrance Loss Coef:	0.10
Rise(in):	48.00	48.00		Exit Loss Coef:	0.30
Invert(ft):	3.200	3.100		Bend Loss Coef:	0.00
Manning's N:	0.013000	0.013000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Rectangular Box: 30° to 75° wingwall flares

Downstream FHWA Inlet Edge Description:
Rectangular Box: 30° to 75° wingwall flares

```
-------------------------------------------------------------------------------------------------
         Name: L-A330P1            From Node: N-A330            Length(ft): 1420.00
        Group: RR                    To Node: N-A320                 Count: 1
                                                          Friction Equation: Average Conveyance
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Automatic
     Geometry: Rectangular    Rectangular                           Flow: Both
     Span(in): 96.00          96.00                    Entrance Loss Coef: 0.40
     Rise(in): 48.00          48.00                        Exit Loss Coef: 0.40
   Invert(ft): 3.860          3.570                        Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                  Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                       Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                    Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Rectangular Box: 30° to 75° wingwall flares

Downstream FHWA Inlet Edge Description:
Rectangular Box: 30° to 75° wingwall flares

NEW PIPES THROUGH SCE&G ROW

-------------------------------------------------------------------------------------------------
         Name: L-B011P1            From Node: N-B011            Length(ft): 156.00
        Group: RR                    To Node: N-B010                 Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                              Flow: Both
     Span(in): 48.00          48.00                    Entrance Loss Coef: 0.50
     Rise(in): 48.00          48.00                        Exit Loss Coef: 0.00
   Invert(ft): 0.920          0.450                        Bend Loss Coef: 0.00
  Manning's N: 0.013000       0.013000                  Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                       Inlet Ctrl Spec: Use dc
 Bot Clip(in): 0.000          0.000                    Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Added per Traffic Circle road plans only.  JPI  5/18/15

-------------------------------------------------------------------------------------------------
         Name: L-B012P1            From Node: N-B012            Length(ft): 853.00
        Group: HH                    To Node: N-B011                 Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Automatic
     Geometry: Circular       Circular                              Flow: Both
     Span(in): 36.00          36.00                    Entrance Loss Coef: 0.60
     Rise(in): 36.00          36.00                        Exit Loss Coef: 0.00
   Invert(ft): 4.470          1.920                        Bend Loss Coef: 0.00
  Manning's N: 0.013000       0.013000                  Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                       Inlet Ctrl Spec: Use dc
 Bot Clip(in): 0.000          0.000                    Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Added per Traffic Circle.  JPI 5/19/15

-------------------------------------------------------------------------------------------------
         Name: L-B013P1            From Node: N-B013            Length(ft): 116.00
        Group: HH                    To Node: N-B012                 Count: 1
                                                          Friction Equation: Automatic
```

```
              UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular      Circular                                Flow: Both
     Span(in): 24.00         24.00                   Entrance Loss Coef: 0.60
     Rise(in): 24.00         24.00                       Exit Loss Coef: 0.00
   Invert(ft): 5.400         4.470                       Bend Loss Coef: 0.00
  Manning's N: 0.013000      0.013000                  Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000         0.000                      Inlet Ctrl Spec: Use dc
 Bot Clip(in): 0.000         0.000                   Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Added per Traffic Circle.  JPI 5/19/15

-------------------------------------------------------------------------------------------------
         Name: L-B014P1            From Node: N-B014            Length(ft): 180.00
        Group: HH                    To Node: N-B013                 Count: 1
                                                          Friction Equation: Average Conveyance
              UPSTREAM       DOWNSTREAM                Solution Algorithm: Always Inlet
     Geometry: Circular      Circular                                Flow: Both
     Span(in): 18.00         18.00                   Entrance Loss Coef: 0.50
     Rise(in): 18.00         18.00                       Exit Loss Coef: 0.00
   Invert(ft): 9.080         5.400                       Bend Loss Coef: 0.00
  Manning's N: 0.013000      0.013000                  Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000         0.000                      Inlet Ctrl Spec: Use dc
 Bot Clip(in): 0.000         0.000                   Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Added per Traffic Circle.  JPI 5/19/15

-------------------------------------------------------------------------------------------------
         Name: L-B014P2            From Node: N-B014            Length(ft): 264.00
        Group: HH                    To Node: N-B013                 Count: 1
                                                          Friction Equation: Automatic
              UPSTREAM       DOWNSTREAM                Solution Algorithm: Always Inlet
     Geometry: Circular      Circular                                Flow: Both
     Span(in): 18.00         18.00                   Entrance Loss Coef: 0.50
     Rise(in): 18.00         18.00                       Exit Loss Coef: 0.00
   Invert(ft): 10.040        6.650                       Bend Loss Coef: 0.00
  Manning's N: 0.013000      0.013000                  Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000         0.000                      Inlet Ctrl Spec: Use dc
 Bot Clip(in): 0.000         0.000                   Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Added per Traffic Circle.  JPI 5/19/15

-------------------------------------------------------------------------------------------------
         Name: L-B015P1            From Node: N-B015            Length(ft): 72.00
        Group: HH                    To Node: N-B011                 Count: 1
                                                          Friction Equation: Automatic
              UPSTREAM       DOWNSTREAM                Solution Algorithm: Always Inlet
     Geometry: Circular      Circular                                Flow: Both
     Span(in): 36.00         36.00                   Entrance Loss Coef: 0.20
     Rise(in): 36.00         36.00                       Exit Loss Coef: 0.00
   Invert(ft): 3.780         1.920                       Bend Loss Coef: 0.00
  Manning's N: 0.013000      0.013000                  Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000         0.000                      Inlet Ctrl Spec: Use dc
```

```
 Bot Clip(in): 0.000          0.000                      Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Added per Traffic Circle road plans only.  JPI  5/18/15

-------------------------------------------------------------------------------------------------
         Name: L-B016P1            From Node: N-B016             Length(ft): 1024.00
        Group: HH                    To Node: N-B015                  Count: 1
                                                            Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                 Solution Algorithm: Always Outlet
     Geometry: Circular       Circular                          Flow: Both
     Span(in): 36.00          36.00                      Entrance Loss Coef: 0.20
     Rise(in): 36.00          36.00                          Exit Loss Coef: 1.00
   Invert(ft): 6.860          3.780                          Bend Loss Coef: 0.00
  Manning's N: 0.013000       0.013000                    Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dc
 Bot Clip(in): 0.000          0.000                      Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Added per Traffic Circle.  JPI 5/19/15

-------------------------------------------------------------------------------------------------
         Name: L-B020P2            From Node: N-G020             Length(ft): 118.50
        Group: BL                    To Node: N-G010                  Count: 1
                                                            Friction Equation: Average Conveyance
               UPSTREAM       DOWNSTREAM                 Solution Algorithm: Automatic
     Geometry: Rectangular    Rectangular                       Flow: Both
     Span(in): 72.00          72.00                      Entrance Loss Coef: 0.20
     Rise(in): 60.00          60.00                          Exit Loss Coef: 0.20
   Invert(ft): 3.510          3.100                          Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                    Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dc
 Bot Clip(in): 0.000          0.000                      Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Rectangular Box: 30° to 75° wingwall flares

Downstream FHWA Inlet Edge Description:
Rectangular Box: 30° to 75° wingwall flares

updated per Bees Ferry widening.  JPI 7/6/15

-------------------------------------------------------------------------------------------------
         Name: L-B060P1            From Node: N-B060             Length(ft): 68.00
        Group: HH                    To Node: N-B050                  Count: 1
                                                            Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                 Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                          Flow: Both
     Span(in): 24.00          24.00                      Entrance Loss Coef: 0.20
     Rise(in): 24.00          24.00                          Exit Loss Coef: 0.20
   Invert(ft): 2.250          1.740                          Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                    Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                      Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall
```

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Name:	L-B071P1	From Node: N-B071	Length(ft): 220.00
Group:	HH	To Node: N-B016	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 0.00
Invert(ft):	8.020	6.150	Bend Loss Coef: 0.00
Manning's N:	0.013000	0.013000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dc
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

This link was previously a drop structure. An additional pipe was added to the structure as the inlet so the dr

---

Name:	L-B073P1	From Node: N-B073	Length(ft): 116.00
Group:	HH	To Node: N-B072	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Automatic
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 1.00
Invert(ft):	8.420	8.020	Bend Loss Coef: 0.00
Manning's N:	0.013000	0.013000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dc
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Added per Traffic Circle. JPI 5/19/15

Name:	L-B075P1	From Node: N-B075	Length(ft): 160.00
Group:	HH	To Node: N-B072	Count: 2
			Friction Equation: Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	24.00	24.00	Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00	Exit Loss Coef: 1.00
Invert(ft):	9.600	9.600	Bend Loss Coef: 0.00
Manning's N:	0.013000	0.013000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dc
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Added per Traffic Circle. JPI 5/19/15

Name:	L-B075P2	From Node: N-B075	Length(ft): 148.00

```
       Group: HH                  To Node: N-B072               Count: 1
                                                     Friction Equation: Automatic
              UPSTREAM       DOWNSTREAM           Solution Algorithm: Automatic
    Geometry: Circular       Circular                        Flow: Both
    Span(in): 30.00          30.00                Entrance Loss Coef: 0.20
    Rise(in): 30.00          30.00                    Exit Loss Coef: 0.00
  Invert(ft): 10.060         9.650                    Bend Loss Coef: 0.00
 Manning's N: 0.012000       0.012000               Outlet Ctrl Spec: Use dc or tw
Top Clip(in): 0.000          0.000                   Inlet Ctrl Spec: Use dc
Bot Clip(in): 0.000          0.000                Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Added per Traffic Circle.  JPI 5/19/15

-------------------------------------------------------------------------------------------------
        Name: L-B230P1           From Node: N-B230           Length(ft): 40.00
       Group: HH                   To Node: N-B220               Count: 1
                                                     Friction Equation: Average Conveyance
              UPSTREAM       DOWNSTREAM           Solution Algorithm: Always Inlet
    Geometry: Circular       Circular                        Flow: Both
    Span(in): 24.00          24.00                Entrance Loss Coef: 0.20
    Rise(in): 24.00          24.00                    Exit Loss Coef: 0.20
  Invert(ft): 9.000          4.600                    Bend Loss Coef: 0.00
 Manning's N: 0.012000       0.012000               Outlet Ctrl Spec: Use dc or tw
Top Clip(in): 0.000          0.000                   Inlet Ctrl Spec: Use dn
Bot Clip(in): 0.000          0.000                Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting


-------------------------------------------------------------------------------------------------
        Name: L-C050P1           From Node: N-C050           Length(ft): 66.00
       Group: SM1                  To Node: N-C040               Count: 1
                                                     Friction Equation: Automatic
              UPSTREAM       DOWNSTREAM           Solution Algorithm: Most Restrictive
    Geometry: Circular       Circular                        Flow: Both
    Span(in): 36.00          36.00                Entrance Loss Coef: 0.20
    Rise(in): 36.00          36.00                    Exit Loss Coef: 0.20
  Invert(ft): 3.630          3.700                    Bend Loss Coef: 0.00
 Manning's N: 0.012000       0.012000               Outlet Ctrl Spec: Use dc or tw
Top Clip(in): 0.000          0.000                   Inlet Ctrl Spec: Use dn
Bot Clip(in): 0.000          0.000                Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting


-------------------------------------------------------------------------------------------------
        Name: L-C050P2           From Node: N-C050           Length(ft): 66.00
       Group: SM1                  To Node: N-C040               Count: 1
                                                     Friction Equation: Automatic
              UPSTREAM       DOWNSTREAM           Solution Algorithm: Most Restrictive
    Geometry: Circular       Circular                        Flow: Both
    Span(in): 36.00          36.00                Entrance Loss Coef: 0.20
    Rise(in): 36.00          36.00                    Exit Loss Coef: 0.20
  Invert(ft): 3.940          3.880                    Bend Loss Coef: 0.00
```

Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Name:	L-C060P1	From Node: N-C060	Length(ft): 138.00
Group:	SM1	To Node: N-C020	Count: 2
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.20
Rise(in):	18.00	18.00	Exit Loss Coef: 0.20
Invert(ft):	5.480	4.700	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Pipes leaving curb inlet

Name:	L-C060P2	From Node: N-C060	Length(ft): 134.00
Group:	SM1	To Node: N-C030	Count: 2
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.20
Rise(in):	18.00	18.00	Exit Loss Coef: 0.20
Invert(ft):	4.780	3.860	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Pipes leaving curb inlet

Name:	L-C060P3	From Node: N-C060	Length(ft): 130.00
Group:	SM1	To Node: N-C040	Count: 2
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.20
Rise(in):	18.00	18.00	Exit Loss Coef: 0.20
Invert(ft):	6.150	5.410	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:

Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Pipes leaving curb inlet

Name:	L-C080P	From Node:	N-C080	Length(ft):	66.00
Group:	SM1	To Node:	N-C085	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Always Outlet
Geometry:	Rectangular	Rectangular		Flow:	Both
Span(in):	96.00	96.00		Entrance Loss Coef:	0.50
Rise(in):	48.00	48.00		Exit Loss Coef:	0.00
Invert(ft):	4.410	4.180		Bend Loss Coef:	0.00
Manning's N:	0.013000	0.013000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dc
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

Downstream FHWA Inlet Edge Description:
Rectangular Box: 0° wingwall flares

Added 4/8/09. Not surveyed. JP

Culvert surveyed and updated. 6/23/15. JPI

Name:	L-C080P1	From Node:	N-C080	Length(ft):	60.00
Group:	SM1	To Node:	N-C070	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	None
Span(in):	48.00	48.00		Entrance Loss Coef:	0.20
Rise(in):	48.00	48.00		Exit Loss Coef:	0.20
Invert(ft):	4.590	4.160		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Pipe #1 under BeesFerry

Name:	L-C080P2	From Node:	N-C080	Length(ft):	60.00
Group:	SM1	To Node:	N-C070	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	None
Span(in):	48.00	48.00		Entrance Loss Coef:	0.20
Rise(in):	48.00	48.00		Exit Loss Coef:	0.20
Invert(ft):	3.980	3.980		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Pipe#2 under BeesFerry

Name:	L-C086CP1	From Node:	N-C086C	Length(ft):	500.00
Group:	RR	To Node:	N-C086	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	24.00	24.00		Entrance Loss Coef:	0.20
Rise(in):	24.00	24.00		Exit Loss Coef:	0.00
Invert(ft):	6.110	3.620		Bend Loss Coef:	0.00
Manning's N:	0.011000	0.011000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dc
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Added per Bees Ferry Apts plans.

Name:	L-C100P1	From Node:	N-C100	Length(ft):	182.00
Group:	SM1	To Node:	N-C090	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	48.00	48.00		Entrance Loss Coef:	0.20
Rise(in):	48.00	48.00		Exit Loss Coef:	0.20
Invert(ft):	4.000	3.760		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular: Beveled ring, 45° bevels

Pipe #1 under BeesFerry

Updated per Bees Ferry Widening 5/5/15 JPI

Name:	L-C100P2	From Node:	N-C100	Length(ft):	182.00
Group:	SM1	To Node:	N-C090	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	48.00	48.00		Entrance Loss Coef:	0.20
Rise(in):	48.00	48.00		Exit Loss Coef:	0.20
Invert(ft):	3.870	3.760		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular: Beveled ring, 45° bevels

Pipe #2 under BeesFerry

Updated per Bees Ferry Widening 5/5/15 JPI

Name:	L-C140P1	From Node: N-C140	Length(ft): 28.00
Group:	SM1	To Node: N-C130	Count: 1
			Friction Equation: Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Always Inlet
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.20
Rise(in):	18.00	18.00	Exit Loss Coef: 0.20
Invert(ft):	9.500	9.000	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Name:	L-C206P1	From Node: N-C206	Length(ft): 17.00
Group:	MB	To Node: N-C310	Count: 1
			Friction Equation: Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Automatic
Geometry:	Circular	Circular	Flow: Both
Span(in):	15.00	15.00	Entrance Loss Coef: 0.20
Rise(in):	15.00	15.00	Exit Loss Coef: 1.00
Invert(ft):	5.590	3.220	Bend Loss Coef: 0.00
Manning's N:	0.010000	0.010000	Outlet Ctrl Spec: Use dn or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dc
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Part of Overflow channel. survey data. 4/21/09. JP

Name:	L-C210P1	From Node: N-C210	Length(ft): 20.00
Group:	SM1	To Node: N-I270	Count: 1
			Friction Equation: Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Automatic
Geometry:	Circular	Circular	Flow: Both
Span(in):	48.00	48.00	Entrance Loss Coef: 0.90
Rise(in):	48.00	48.00	Exit Loss Coef: 0.90
Invert(ft):	1.870	1.900	Bend Loss Coef: 0.00
Manning's N:	0.025000	0.025000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Updated per survey 4/9/09. Additional pipe was added so all inverts could be used. Connected to N-I270 since N

Name:	L-C210P2	From Node: N-C210	Length(ft): 20.00
Group:	SM1	To Node: N-I270	Count: 1
			Friction Equation: Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Automatic
Geometry:	Circular	Circular	Flow: Both
Span(in):	48.00	48.00	Entrance Loss Coef: 0.90
Rise(in):	48.00	48.00	Exit Loss Coef: 0.90

Invert(ft):	2.160	2.160	Bend Loss Coef: 0.00
Manning's N:	0.025000	0.025000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Updated per survey 4/9/09. Additional pipe was added so all inverts could be used. Connected to N-I270 since N

Name:	L-C230P1	From Node: N-C230	Length(ft): 64.00
Group:	SM1	To Node: N-C210	Count: 5
			Friction Equation: Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Automatic
Geometry:	Circular	Circular	Flow: Both
Span(in):	36.00	36.00	Entrance Loss Coef: 0.20
Rise(in):	36.00	36.00	Exit Loss Coef: 0.20
Invert(ft):	5.950	5.550	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Inverts are average of all 5 pipes

Pipe connected to N-C210 since N-C220 was eliminated. JP 4/21/09

Name:	L-C240P1	From Node: N-C240	Length(ft): 54.00
Group:	SM1	To Node: N-C230	Count: 5
			Friction Equation: Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Automatic
Geometry:	Circular	Circular	Flow: Both
Span(in):	36.00	36.00	Entrance Loss Coef: 0.20
Rise(in):	36.00	36.00	Exit Loss Coef: 0.20
Invert(ft):	6.200	6.200	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Name:	L-C245P1	From Node: N-C245	Length(ft): 20.00
Group:	SM1	To Node: N-C243	Count: 1
			Friction Equation: Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Automatic
Geometry:	Circular	Circular	Flow: Both
Span(in):	48.00	48.00	Entrance Loss Coef: 0.90
Rise(in):	48.00	48.00	Exit Loss Coef: 1.00
Invert(ft):	6.580	6.630	Bend Loss Coef: 0.00
Manning's N:	0.025000	0.025000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dc
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Added per request by FEMA (survey info). 4/20/11 JPI

Name:	L-C245P2	From Node:	N-C245	Length(ft):	20.00
Group:	SM1	To Node:	N-C243	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	48.00	48.00		Entrance Loss Coef:	0.90
Rise(in):	48.00	48.00		Exit Loss Coef:	1.00
Invert(ft):	6.160	6.110		Bend Loss Coef:	0.00
Manning's N:	0.025000	0.025000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dc
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Added per request by FEMA (survey info). 4/20/11 JPI

Name:	L-C290P1	From Node:	N-C290	Length(ft):	18.00
Group:	SM1	To Node:	N-C291	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Always Inlet
Geometry:	Circular	Circular		Flow:	Both
Span(in):	12.00	12.00		Entrance Loss Coef:	0.20
Rise(in):	12.00	12.00		Exit Loss Coef:	0.00
Invert(ft):	6.940	4.720		Bend Loss Coef:	0.00
Manning's N:	0.010000	0.010000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

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Updated per survey 4/9/09. JP

Name:	L-C291Pl	From Node:	N-C291	Length(ft):	186.00
Group:	SM1	To Node:	N-C292	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Always Inlet
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.20
Rise(in):	18.00	18.00		Exit Loss Coef:	0.00
Invert(ft):	4.720	4.010		Bend Loss Coef:	0.00
Manning's N:	0.010000	0.010000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dc
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Added per survey 4/9/09. JP

Name:	L-C292Pl	From Node:	N-C292	Length(ft):	45.00
Group:	SM1	To Node:	N-C293	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Always Outlet
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.20
Rise(in):	18.00	18.00		Exit Loss Coef:	0.00
Invert(ft):	3.760	3.820		Bend Loss Coef:	0.00
Manning's N:	0.010000	0.010000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dc
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Added per survey 4/9/09. JP

Name:	L-C293P1	From Node:	N-C293	Length(ft):	46.00
Group:	SM1	To Node:	N-C294	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Always Outlet
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.20
Rise(in):	18.00	18.00		Exit Loss Coef:	0.00
Invert(ft):	3.660	3.620		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dc
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Added per survey 4/9/09. JP

Name:	L-C294P1	From Node:	N-C294	Length(ft):	122.00
Group:	SM1	To Node:	N-C296	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Always Outlet
Geometry:	Circular	Circular		Flow:	Both
Span(in):	24.00	24.00		Entrance Loss Coef:	0.20
Rise(in):	24.00	24.00		Exit Loss Coef:	0.00
Invert(ft):	3.480	3.220		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dc
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Per survey 4/8/09. JP

Name:	L-C295P1	From Node:	N-C295	Length(ft):	240.00

```
       Group: SM1                  To Node: N-C290                Count: 1
                                                       Friction Equation: Average Conveyance
              UPSTREAM       DOWNSTREAM               Solution Algorithm: Always Outlet
    Geometry: Circular       Circular                           Flow: Both
    Span(in): 18.00          18.00                  Entrance Loss Coef: 0.20
    Rise(in): 18.00          18.00                      Exit Loss Coef: 0.20
  Invert(ft): 4.770          3.820                      Bend Loss Coef: 0.00
 Manning's N: 0.012000       0.012000                 Outlet Ctrl Spec: Use dc or tw
Top Clip(in): 0.000          0.000                     Inlet Ctrl Spec: Use dn
Bot Clip(in): 0.000          0.000                   Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting



-------------------------------------------------------------------------------------------------
        Name: L-C304P1           From Node: N-C304           Length(ft): 15.00
       Group: SM1                  To Node: N-C300                Count: 1
                                                       Friction Equation: Average Conveyance
              UPSTREAM       DOWNSTREAM               Solution Algorithm: Always Outlet
    Geometry: Circular       Circular                           Flow: Both
    Span(in): 18.00          18.00                  Entrance Loss Coef: 0.20
    Rise(in): 18.00          18.00                      Exit Loss Coef: 0.00
  Invert(ft): 5.770          4.990                      Bend Loss Coef: 0.00
 Manning's N: 0.010000       0.010000                 Outlet Ctrl Spec: Use dc or tw
Top Clip(in): 0.000          0.000                     Inlet Ctrl Spec: Use dc
Bot Clip(in): 0.000          0.000                   Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

pipe added for overflow channel. data from survey. 4/21/09  JP

-------------------------------------------------------------------------------------------------
        Name: L-C320P1           From Node: N-C320           Length(ft): 120.00
       Group: MB                   To Node: N-C330                Count: 1
                                                       Friction Equation: Average Conveyance
              UPSTREAM       DOWNSTREAM               Solution Algorithm: Automatic
    Geometry: Circular       Circular                           Flow: Both
    Span(in): 72.00          72.00                  Entrance Loss Coef: 0.20
    Rise(in): 72.00          72.00                      Exit Loss Coef: 1.00
  Invert(ft): 2.860          2.670                      Bend Loss Coef: 0.00
 Manning's N: 0.012000       0.012000                 Outlet Ctrl Spec: Use dc or tw
Top Clip(in): 0.000          0.000                     Inlet Ctrl Spec: Use dn
Bot Clip(in): 0.000          0.000                   Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end w/ headwall

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Updated per survey 4/9/09.  JP

-------------------------------------------------------------------------------------------------
        Name: L-G020P1           From Node: N-G020           Length(ft): 118.50
       Group: BL                   To Node: N-G010                Count: 1
                                                       Friction Equation: Average Conveyance
              UPSTREAM       DOWNSTREAM               Solution Algorithm: Always Outlet
    Geometry: Rectangular    Rectangular                        Flow: Both
    Span(in): 72.00          72.00                  Entrance Loss Coef: 0.20
```

Rise(in):	60.00	60.00	Exit Loss Coef:	0.20
Invert(ft):	3.510	3.100	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Rectangular Box: 30° to 75° wingwall flares

Downstream FHWA Inlet Edge Description:
Rectangular Box: 30° to 75° wingwall flares

updated per Bees Ferry widening. JPI 7/6/15

Name:	L-G023P1	From Node: N-G023	Length(ft):	93.00
Group:	BL	To Node: N-G022	Count:	1
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Always Outlet
Geometry:	Circular	Circular	Flow:	Both
Span(in):	30.00	30.00	Entrance Loss Coef:	0.20
Rise(in):	30.00	30.00	Exit Loss Coef:	0.00
Invert(ft):	8.080	7.810	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dc
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Added per Verdier Apts. 6/2/15. JPI

Name:	L-G025CP1	From Node: N-G025C	Length(ft):	120.00
Group:	BL	To Node: N-G025B	Count:	1
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Always Outlet
Geometry:	Circular	Circular	Flow:	Both
Span(in):	36.00	36.00	Entrance Loss Coef:	0.20
Rise(in):	36.00	36.00	Exit Loss Coef:	1.00
Invert(ft):	8.220	7.800	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dc
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Added per Verdier Apts. Pipe between Pond 1 and 2. JPI 6/2/15

Name:	L-G028BP1	From Node: N-G028B	Length(ft):	89.00
Group:	BL	To Node: N-G025B	Count:	1
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	36.00	36.00	Entrance Loss Coef:	0.20
Rise(in):	36.00	36.00	Exit Loss Coef:	1.00
Invert(ft):	7.770	7.940	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dc
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Added per Verdier Apts. Connects Pond 1 and 3. JPI 6/2/15

Name:	L-G040P1	From Node: N-G040	Length(ft):	24.00
Group:	BL	To Node: N-G030	Count:	1
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Always Outlet
Geometry:	Circular	Circular	Flow:	Both
Span(in):	36.00	36.00	Entrance Loss Coef:	0.90
Rise(in):	36.00	36.00	Exit Loss Coef:	0.90
Invert(ft):	6.000	6.000	Bend Loss Coef:	0.00
Manning's N:	0.025000	0.025000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	6.000	6.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	6.000	6.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	L-G043P1	From Node: N-G043	Length(ft):	140.00
Group:	BL	To Node: N-G042	Count:	2
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Rectangular	Rectangular	Flow:	Both
Span(in):	72.00	72.00	Entrance Loss Coef:	0.20
Rise(in):	48.00	48.00	Exit Loss Coef:	0.20
Invert(ft):	3.300	3.200	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Rectangular Box: 30° to 75° wingwall flares

Downstream FHWA Inlet Edge Description:
Rectangular Box: 30° to 75° wingwall flares

Added per Faison Apt. JPI 6/1/15

Name:	L-G045CP1	From Node: N-G045C	Length(ft):	287.00
Group:	BL	To Node: N-G045B	Count:	1
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	36.00	36.00	Entrance Loss Coef:	0.20
Rise(in):	36.00	36.00	Exit Loss Coef:	1.00
Invert(ft):	4.950	4.960	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dc
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Added per Faison Apts. Pipe between Pond 1 and 2. JPI 6/2/15.

Name:	L-G060P1	From Node: N-G060	Length(ft):	42.00
Group:	BL	To Node: N-G050	Count:	1
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	8.00	8.00	Entrance Loss Coef:	0.50
Rise(in):	8.00	8.00	Exit Loss Coef:	0.50
Invert(ft):	9.500	9.250	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

PS L-I1

Name:	L-G070P1	From Node: N-G070	Length(ft):	32.00
Group:	BL	To Node: N-G050	Count:	1
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	15.00	15.00	Entrance Loss Coef:	0.50
Rise(in):	15.00	15.00	Exit Loss Coef:	0.00
Invert(ft):	9.500	9.450	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

PS L-H1

Name:	L-G080P1	From Node: N-G080	Length(ft):	106.00
Group:	BL	To Node: N-G070	Count:	2
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Arch	Arch	Flow:	Both
Span(in):	38.00	38.00	Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00	Exit Loss Coef:	0.50
Invert(ft):	8.650	8.650	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Pipe Arch 18" Corner Radius CM: 90° headwall

Downstream FHWA Inlet Edge Description:
Pipe Arch 18" Corner Radius CM: 90° headwall

PS L-G1

Name:	L-G090P1	From Node: N-G090	Length(ft):	104.00
Group:	BL	To Node: N-G080	Count:	1
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic

Geometry:	Circular	Circular	Flow:	Both
Span(in):	30.00	30.00	Entrance Loss Coef:	0.50
Rise(in):	30.00	30.00	Exit Loss Coef:	0.50
Invert(ft):	12.000	6.500	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

PS L-F1

Name:	L-G110P1	From Node: N-G110	Length(ft):	381.00
Group:	BL	To Node: N-G100	Count:	2
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	36.00	36.00	Entrance Loss Coef:	0.50
Rise(in):	36.00	36.00	Exit Loss Coef:	0.50
Invert(ft):	9.000	8.500	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

PS L-D1

Name:	L-G120P1	From Node: N-G120	Length(ft):	104.00
Group:	BL	To Node: N-G110	Count:	3
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	42.00	42.00	Entrance Loss Coef:	0.50
Rise(in):	42.00	42.00	Exit Loss Coef:	0.50
Invert(ft):	4.500	4.500	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

PS L-C1

Name:	L-G130P1	From Node: N-G130	Length(ft):	186.00
Group:	BL	To Node: N-G120	Count:	2
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	36.00	36.00	Entrance Loss Coef:	0.50
Rise(in):	36.00	36.00	Exit Loss Coef:	0.50
Invert(ft):	10.500	6.500	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

PS L-B1

Name:	L-G140P1	From Node: N-G140	Length(ft): 370.00
Group:	BL	To Node: N-G130	Count: 2
			Friction Equation: Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Automatic
Geometry:	Circular	Circular	Flow: Both
Span(in):	36.00	36.00	Entrance Loss Coef: 0.50
Rise(in):	36.00	36.00	Exit Loss Coef: 0.50
Invert(ft):	7.000	7.000	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

PS L-A1

Name:	L-G150P1	From Node: N-G150	Length(ft): 282.00
Group:	BL	To Node: N-G140	Count: 2
			Friction Equation: Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Automatic
Geometry:	Circular	Circular	Flow: Both
Span(in):	36.00	36.00	Entrance Loss Coef: 0.50
Rise(in):	36.00	36.00	Exit Loss Coef: 0.50
Invert(ft):	10.750	10.500	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

PS L-OFF

Name:	L-G160P1	From Node: N-G160	Length(ft): 38.00
Group:	BL	To Node: N-G100	Count: 1
			Friction Equation: Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Automatic
Geometry:	Circular	Circular	Flow: Both
Span(in):	8.00	8.00	Entrance Loss Coef: 0.50
Rise(in):	8.00	8.00	Exit Loss Coef: 0.50
Invert(ft):	11.000	10.800	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:

Circular Concrete: Groove end projecting

PS L-E1

Name:	L-G170AP1	From Node:	N-G170A	Length(ft): 60.00
Group:	BL	To Node:	N-G100	Count: 1
				Friction Equation: Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Automatic
Geometry:	Rectangular	Rectangular		Flow: Both
Span(in):	72.00	72.00		Entrance Loss Coef: 0.20
Rise(in):	36.00	36.00		Exit Loss Coef: 0.00
Invert(ft):	9.000	9.000		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Rectangular Box: 30° to 75° wingwall flares

Downstream FHWA Inlet Edge Description:
Rectangular Box: 30° to 75° wingwall flares

New pipe - SWA L-100A

Name:	L-G170AP2	From Node:	N-G170A	Length(ft): 60.00
Group:	BL	To Node:	N-G100	Count: 1
				Friction Equation: Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Automatic
Geometry:	Rectangular	Rectangular		Flow: Both
Span(in):	24.00	24.00		Entrance Loss Coef: 0.20
Rise(in):	36.00	36.00		Exit Loss Coef: 0.00
Invert(ft):	6.000	6.000		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Rectangular Box: 30° to 75° wingwall flares

Downstream FHWA Inlet Edge Description:
Rectangular Box: 30° to 75° wingwall flares

New pipe - SWA L-100B

Name:	L-G170AP3	From Node:	N-G170A	Length(ft): 60.00
Group:	BL	To Node:	N-G100	Count: 2
				Friction Equation: Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Automatic
Geometry:	Rectangular	Rectangular		Flow: Both
Span(in):	72.00	72.00		Entrance Loss Coef: 0.20
Rise(in):	36.00	36.00		Exit Loss Coef: 0.00
Invert(ft):	9.000	9.000		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Rectangular Box: 30° to 75° wingwall flares

Downstream FHWA Inlet Edge Description:
Rectangular Box: 30° to 75° wingwall flares

New pipe - SWA L-100C

Name:	L-G170P1	From Node:	N-G170	Length(ft): 60.00
Group:	BL	To Node:	N-G100	Count: 4

```
                                                  Friction Equation: Average Conveyance
              UPSTREAM       DOWNSTREAM           Solution Algorithm: Automatic
    Geometry: Circular       Circular                       Flow: Both
    Span(in): 18.00          18.00                Entrance Loss Coef: 0.00
    Rise(in): 18.00          18.00                    Exit Loss Coef: 0.00
   Invert(ft): 10.000        10.000                   Bend Loss Coef: 0.00
  Manning's N: 0.012000      0.012000               Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000         0.000                   Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000         0.000                Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

New pipes - SWA L-100D

-------------------------------------------------------------------------------------------------------
         Name: L-G180P1           From Node: N-G180            Length(ft): 56.00
        Group: BL                   To Node: N-G170                 Count: 1
                                                  Friction Equation: Average Conveyance
              UPSTREAM       DOWNSTREAM           Solution Algorithm: Always Outlet
    Geometry: Circular       Circular                       Flow: Both
    Span(in): 24.00          24.00                Entrance Loss Coef: 0.90
    Rise(in): 24.00          24.00                    Exit Loss Coef: 0.90
   Invert(ft): 6.000         5.720                    Bend Loss Coef: 0.00
  Manning's N: 0.012000      0.012000               Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000         0.000                   Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000         0.000                Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

This pipe not in SWA model, perhaps out of surveyed corridor

-------------------------------------------------------------------------------------------------------
         Name: L-G180P2           From Node: N-G180            Length(ft): 56.00
        Group: BL                   To Node: N-G170                 Count: 1
                                                  Friction Equation: Average Conveyance
              UPSTREAM       DOWNSTREAM           Solution Algorithm: Automatic
    Geometry: Circular       Circular                       Flow: None
    Span(in): 36.00          36.00                Entrance Loss Coef: 0.90
    Rise(in): 36.00          36.00                    Exit Loss Coef: 0.90
   Invert(ft): 6.000         5.720                    Bend Loss Coef: 0.00
  Manning's N: 0.012000      0.012000               Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000         0.000                   Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000         0.000                Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Inputs for 36" pipe per Woolpert model

-------------------------------------------------------------------------------------------------------
         Name: L-G180P3           From Node: N-G180            Length(ft): 28.00
        Group: BL                   To Node: N-G170                 Count: 1
                                                  Friction Equation: Average Conveyance
              UPSTREAM       DOWNSTREAM           Solution Algorithm: Automatic
    Geometry: Circular       Circular                       Flow: Both
    Span(in): 36.00          36.00                Entrance Loss Coef: 0.50
    Rise(in): 36.00          36.00                    Exit Loss Coef: 0.00
   Invert(ft): 5.700         5.700                    Bend Loss Coef: 0.00
  Manning's N: 0.022000      0.022000               Outlet Ctrl Spec: Use dc or tw
```

Top Clip(in):	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

SWA - L-180 (AGB Model)
SWA - L-15 (Hamilton Grove Model)
Many differences from L-G180P2 in Woolpert model, but was probably surveyed like the weir so should be better da

---

Name:	L-G200P1	From Node:	N-G200	Length(ft):	36.00
Group:	BL	To Node:	N-G170	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	15.00	15.00		Entrance Loss Coef:	0.50
Rise(in):	15.00	15.00		Exit Loss Coef:	0.00
Invert(ft):	11.000	10.800		Bend Loss Coef:	1.25
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

SWA - L-23

Name:	L-G220P1	From Node:	N-G220	Length(ft):	280.00
Group:	BL	To Node:	N-G210	Count:	1
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	42.00	42.00		Entrance Loss Coef:	0.50
Rise(in):	42.00	42.00		Exit Loss Coef:	0.00
Invert(ft):	10.500	6.000		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	L-G230P1	From Node:	N-G230	Length(ft):	174.00
Group:	BL	To Node:	N-G220	Count:	2
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	42.00	42.00		Entrance Loss Coef:	0.50
Rise(in):	42.00	42.00		Exit Loss Coef:	1.00
Invert(ft):	7.000	7.000		Bend Loss Coef:	0.70
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	L-G240P1	From Node: N-G240	Length(ft):	52.00
Group:	BL	To Node: N-G220	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	42.00	42.00	Entrance Loss Coef:	0.20
Rise(in):	42.00	42.00	Exit Loss Coef:	1.00
Invert(ft):	7.540	6.000	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	L-G250P1	From Node: N-G250	Length(ft):	850.00
Group:	BL	To Node: N-G240	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	36.00	36.00	Entrance Loss Coef:	0.20
Rise(in):	36.00	36.00	Exit Loss Coef:	0.00
Invert(ft):	9.240	7.540	Bend Loss Coef:	1.40
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	L-G260P1	From Node: N-G260	Length(ft):	112.00
Group:	BL	To Node: N-G250	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	30.00	30.00	Entrance Loss Coef:	0.20
Rise(in):	30.00	30.00	Exit Loss Coef:	0.00
Invert(ft):	10.500	9.740	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

```
         Name: L-G270P1            From Node: N-G270            Length(ft): 282.00
        Group: BL                    To Node: N-G210                 Count: 1
                                                          Friction Equation: Average Conveyance
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                            Flow: Both
     Span(in): 48.00          48.00                    Entrance Loss Coef: 0.20
     Rise(in): 48.00          48.00                        Exit Loss Coef: 1.00
   Invert(ft): 4.810          4.250                        Bend Loss Coef: 0.72
  Manning's N: 0.012000       0.012000                  Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                       Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                    Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall
```

```
         Name: L-G280P1            From Node: N-G280            Length(ft): 290.00
        Group: BL                    To Node: N-G270                 Count: 1
                                                          Friction Equation: Average Conveyance
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Always Outlet
     Geometry: Circular       Circular                            Flow: Both
     Span(in): 42.00          42.00                    Entrance Loss Coef: 0.20
     Rise(in): 42.00          42.00                        Exit Loss Coef: 0.00
   Invert(ft): 8.320          5.310                        Bend Loss Coef: 0.72
  Manning's N: 0.012000       0.012000                  Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                       Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                    Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall
```

```
         Name: L-G290P1            From Node: N-G290            Length(ft): 364.00
        Group: BL                    To Node: N-G280                 Count: 1
                                                          Friction Equation: Average Conveyance
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Automatic
     Geometry: Circular       Circular                            Flow: Both
     Span(in): 36.00          36.00                    Entrance Loss Coef: 0.20
     Rise(in): 36.00          36.00                        Exit Loss Coef: 0.00
   Invert(ft): 11.000         8.820                        Bend Loss Coef: 0.72
  Manning's N: 0.012000       0.012000                  Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                       Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                    Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall
```

```
         Name: L-G300P1            From Node: N-G300            Length(ft): 174.00
        Group: BL                    To Node: N-G290                 Count: 1
                                                          Friction Equation: Average Conveyance
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Always Outlet
     Geometry: Circular       Circular                            Flow: Both
```

Span(in):	36.00	36.00	Entrance Loss Coef:	0.20
Rise(in):	36.00	36.00	Exit Loss Coef:	1.00
Invert(ft):	7.990	7.000	Bend Loss Coef:	0.38
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	L-G310P1	From Node: N-G310	Length(ft):	238.00
Group:	BL	To Node: N-G300	Count:	1
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Always Outlet
Geometry:	Circular	Circular	Flow:	Both
Span(in):	30.00	30.00	Entrance Loss Coef:	0.20
Rise(in):	30.00	30.00	Exit Loss Coef:	0.00
Invert(ft):	8.940	8.490	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	L-G320P1	From Node: N-G320	Length(ft):	172.00
Group:	BL	To Node: N-G310	Count:	1
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Always Outlet
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	0.20
Rise(in):	24.00	24.00	Exit Loss Coef:	0.00
Invert(ft):	9.310	8.940	Bend Loss Coef:	0.70
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	L-G330P1	From Node: N-G330	Length(ft):	16.00
Group:	BL	To Node: N-G320	Count:	1
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	15.00	18.00	Entrance Loss Coef:	0.00
Rise(in):	15.00	18.00	Exit Loss Coef:	0.00
Invert(ft):	13.000	9.310	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	L-G340P1	From Node:	N-G340	Length(ft):	60.00
Group:	BL	To Node:	N-G210	Count:	2
				Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Rectangular	Rectangular		Flow:	Both
Span(in):	84.00	84.00		Entrance Loss Coef:	0.50
Rise(in):	36.00	36.00		Exit Loss Coef:	0.00
Invert(ft):	9.750	9.750		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Rectangular Box: 30° to 75° wingwall flares

Downstream FHWA Inlet Edge Description:
Rectangular Box: 30° to 75° wingwall flares

Name:	L-G350P1	From Node:	N-G350	Length(ft):	160.00
Group:	BL	To Node:	N-G340	Count:	2
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	48.00	48.00		Entrance Loss Coef:	0.50
Rise(in):	48.00	48.00		Exit Loss Coef:	0.00
Invert(ft):	10.000	5.000		Bend Loss Coef:	3.25
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	L-G360P1	From Node:	N-G360	Length(ft):	645.00
Group:	BL	To Node:	N-G350	Count:	2
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	48.00	48.00		Entrance Loss Coef:	0.50
Rise(in):	48.00	48.00		Exit Loss Coef:	0.00
Invert(ft):	10.500	5.000		Bend Loss Coef:	2.40
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

```
-------------------------------------------------------------------------------------------------
         Name: L-G400P1            From Node: N-G400            Length(ft): 56.00
        Group: BL                    To Node: N-G180                 Count: 2
                                                          Friction Equation: Average Conveyance
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Automatic
     Geometry: Circular       Circular                         Flow: Both
     Span(in): 36.00          36.00                    Entrance Loss Coef: 0.50
     Rise(in): 36.00          36.00                        Exit Loss Coef: 0.00
   Invert(ft): 6.000          5.720                        Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                  Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                      Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                    Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

SWA - L-10A

-------------------------------------------------------------------------------------------------
         Name: L-G410P1            From Node: N-G410            Length(ft): 458.00
        Group: BL                    To Node: N-G400                 Count: 2
                                                          Friction Equation: Average Conveyance
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Always Inlet
     Geometry: Circular       Circular                         Flow: Both
     Span(in): 30.00          30.00                    Entrance Loss Coef: 0.50
     Rise(in): 30.00          30.00                        Exit Loss Coef: 0.00
   Invert(ft): 8.000          4.000                        Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                  Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                      Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                    Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

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         Name: L-G420P1            From Node: N-G420            Length(ft): 154.00
        Group: BL                    To Node: N-G400                 Count: 3
                                                          Friction Equation: Average Conveyance
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Automatic
     Geometry: Circular       Circular                         Flow: Both
     Span(in): 48.00          48.00                    Entrance Loss Coef: 0.50
     Rise(in): 48.00          48.00                        Exit Loss Coef: 0.00
   Invert(ft): 3.000          3.000                        Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                  Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                      Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                    Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

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-------------------------------------------------------------------------------------------------
         Name: L-G430P1            From Node: N-G430            Length(ft): 446.00
        Group: BL                    To Node: N-G420                 Count: 2
                                                          Friction Equation: Automatic
```

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	48.00	48.00	Flow:	Both
Rise(in):	48.00	48.00	Entrance Loss Coef:	0.50
Invert(ft):	8.000	2.500	Exit Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	L-G440P1	From Node: N-G440	Length(ft): 432.00
Group:	BL	To Node: N-G420	Count: 2
			Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	36.00	36.00	Flow:	Both
Rise(in):	36.00	36.00	Entrance Loss Coef:	0.50
Invert(ft):	9.000	6.000	Exit Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	L-G460P1	From Node: N-G460	Length(ft): 402.00
Group:	BL	To Node: N-G450	Count: 2
			Friction Equation: Average Conveyance

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Automatic
Span(in):	36.00	36.00	Flow:	Both
Rise(in):	36.00	36.00	Entrance Loss Coef:	0.50
Invert(ft):	6.500	6.500	Exit Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	L-G470P1	From Node: N-G470	Length(ft): 508.00
Group:	BL	To Node: N-G400	Count: 2
			Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	36.00	36.00	Flow:	Both
Rise(in):	36.00	36.00	Entrance Loss Coef:	0.50
Invert(ft):	9.000	6.000	Exit Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
			Inlet Ctrl Spec:	Use dn

```
 Bot Clip(in): 0.000          0.000                      Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

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-------------------------------------------------------------------------------------------------
         Name: L-G490P1            From Node: N-G490            Length(ft): 200.00
        Group: BL                    To Node: N-G470                 Count: 2
                                                          Friction Equation: Average Conveyance
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Always Inlet
     Geometry: Circular       Circular                         Flow: Both
     Span(in): 36.00          36.00                     Entrance Loss Coef: 0.50
     Rise(in): 36.00          36.00                         Exit Loss Coef: 0.00
   Invert(ft): 11.500         9.000                         Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                       Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                      Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

SWA L-7


-------------------------------------------------------------------------------------------------
         Name: L-G510P1            From Node: N-G510            Length(ft): 40.00
        Group: BL                    To Node: N-G170                 Count: 1
                                                          Friction Equation: Average Conveyance
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Automatic
     Geometry: Circular       Circular                         Flow: Both
     Span(in): 8.00           8.00                      Entrance Loss Coef: 0.50
     Rise(in): 8.00           8.00                          Exit Loss Coef: 0.00
   Invert(ft): 11.000         10.800                        Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                       Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                      Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

SWA - L-12

-------------------------------------------------------------------------------------------------
         Name: L-H100P1            From Node: N-H100            Length(ft): 46.00
        Group: WAL                   To Node: N-A150                 Count: 1
                                                          Friction Equation: Average Conveyance
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Automatic
     Geometry: Circular       Circular                         Flow: None
     Span(in): 48.00          48.00                     Entrance Loss Coef: 0.50
     Rise(in): 48.00          48.00                         Exit Loss Coef: 1.00
   Invert(ft): 9.000          8.000                         Bend Loss Coef: 0.00
  Manning's N: 0.013000       0.013000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                       Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                      Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall
```

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

HW A-2 to HW A-1
Original HG&A Design assuming dry pond - Inputs per construction plans, not report

---

Name:	L-H110P1	From Node: N-H110	Length(ft):	55.00
Group:	WAL	To Node: N-A160	Count:	2
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	None
Span(in):	48.00	48.00	Entrance Loss Coef:	0.50
Rise(in):	48.00	48.00	Exit Loss Coef:	1.00
Invert(ft):	9.000	8.500	Bend Loss Coef:	0.00
Manning's N:	0.013000	0.013000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Pond #2 - HW H-2 to HW H-1
Original HG&A Design assuming dry pond

Name:	L-H120P1	From Node: N-H120	Length(ft):	370.00
Group:	WAL	To Node: N-H110	Count:	1
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Always Outlet
Geometry:	Circular	Circular	Flow:	Both
Span(in):	42.00	42.00	Entrance Loss Coef:	0.50
Rise(in):	42.00	42.00	Exit Loss Coef:	1.00
Invert(ft):	7.000	6.000	Bend Loss Coef:	0.00
Manning's N:	0.013000	0.013000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Line "K"

Name:	L-H130P1	From Node: N-H130	Length(ft):	145.00
Group:	WAL	To Node: N-H120	Count:	1
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	36.00	36.00	Entrance Loss Coef:	0.50
Rise(in):	36.00	36.00	Exit Loss Coef:	1.00
Invert(ft):	9.500	9.500	Bend Loss Coef:	0.00
Manning's N:	0.013000	0.013000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:

Circular Concrete: Square edge w/ headwall

Line "Q"

Name:	L-I040P1	From Node:	N-I040
Group:	MB	To Node:	N-I042
	UPSTREAM	DOWNSTREAM	
Geometry:	Circular	Circular	
Span(in):	18.00	18.00	
Rise(in):	18.00	18.00	
Invert(ft):	8.880	8.260	
Manning's N:	0.012000	0.012000	
Top Clip(in):	0.000	0.000	
Bot Clip(in):	0.000	0.000	

Length(ft):	28.00
Count:	1
Friction Equation:	Average Conveyance
Solution Algorithm:	Automatic
Flow:	None
Entrance Loss Coef:	0.20
Exit Loss Coef:	0.35
Bend Loss Coef:	0.20
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end w/ headwall

Plans - Page 11 (structure 71)

CONNORS REPORT

Name:	L-I042P1	From Node:	N-I042
Group:	MB	To Node:	N-B320
	UPSTREAM	DOWNSTREAM	
Geometry:	Circular	Circular	
Span(in):	24.00	24.00	
Rise(in):	24.00	24.00	
Invert(ft):	7.760	7.600	
Manning's N:	0.012000	0.012000	
Top Clip(in):	0.000	0.000	
Bot Clip(in):	0.000	0.000	

Length(ft):	40.00
Count:	1
Friction Equation:	Average Conveyance
Solution Algorithm:	Always Outlet
Flow:	Both
Entrance Loss Coef:	0.25
Exit Loss Coef:	1.00
Bend Loss Coef:	0.00
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Plans - Page 11 (structure 69)

Name:	L-I080P1	From Node:	N-I080
Group:	MB	To Node:	N-I060
	UPSTREAM	DOWNSTREAM	
Geometry:	Circular	Circular	
Span(in):	18.00	18.00	
Rise(in):	18.00	18.00	
Invert(ft):	7.300	6.650	
Manning's N:	0.010000	0.010000	
Top Clip(in):	0.000	0.000	
Bot Clip(in):	0.000	0.000	

Length(ft):	28.00
Count:	1
Friction Equation:	Average Conveyance
Solution Algorithm:	Most Restrictive
Flow:	Both
Entrance Loss Coef:	0.20
Exit Loss Coef:	1.00
Bend Loss Coef:	0.00
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Plans - Page 12 (structure 74)

Updated per survey 4/9/09. Pipe size was 36". JP

```
---------------------------------------------------------------------------------------------------
         Name: L-I090P1            From Node: N-I090             Length(ft): 43.00
        Group: MB                    To Node: N-I060                  Count: 1
                                                          Friction Equation: Average Conveyance
               UPSTREAM       DOWNSTREAM                 Solution Algorithm: Automatic
     Geometry: Circular       Circular                                Flow: Both
     Span(in): 18.00          18.00                      Entrance Loss Coef: 0.20
     Rise(in): 18.00          18.00                          Exit Loss Coef: 1.00
   Invert(ft): 4.340          4.950                          Bend Loss Coef: 0.00
  Manning's N: 0.010000       0.010000                     Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                          Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                       Stabilizer Option: None
```

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Plans - Page 12 (structure 88)

10/18/05 Notes
Report - Post Development Map Pond #6

Details for structure #88 found on page 22 of villa plans.
30'-18" HDPE (.010); In 5.5, Out 5.2
The link is twin pipes.

Converted to two pipes so all inverts could be shown. Updated per survey 4/9/09. JP

```
---------------------------------------------------------------------------------------------------
         Name: L-I090P2            From Node: N-I090             Length(ft): 42.00
        Group: MB                    To Node: N-I060                  Count: 1
                                                          Friction Equation: Average Conveyance
               UPSTREAM       DOWNSTREAM                 Solution Algorithm: Always Outlet
     Geometry: Circular       Circular                                Flow: Both
     Span(in): 18.00          18.00                      Entrance Loss Coef: 0.20
     Rise(in): 18.00          18.00                          Exit Loss Coef: 1.00
   Invert(ft): 4.520          4.950                          Bend Loss Coef: 0.00
  Manning's N: 0.010000       0.010000                     Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                          Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                       Stabilizer Option: None
```

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Plans - Page 12 (structure 88)

10/18/05 Notes
Report - Post Development Map Pond #6

Details for structure #88 found on page 22 of villa plans.
30'-18" HDPE (.010); In 5.5, Out 5.2
The link is twin pipes.

Converted to 2 pipes to show all inverts. Updated per survey 4/9/09 JP

```
---------------------------------------------------------------------------------------------------
         Name: L-I098P1            From Node: N-I098             Length(ft): 170.00
        Group: MB                    To Node: N-D130                  Count: 2
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                 Solution Algorithm: Always Outlet
     Geometry: Circular       Circular                                Flow: Both
     Span(in): 24.00          24.00                      Entrance Loss Coef: 0.00
     Rise(in): 24.00          24.00                          Exit Loss Coef: 1.00
   Invert(ft): 5.870          5.150                          Bend Loss Coef: 0.00
  Manning's N: 0.013000       0.013000                     Outlet Ctrl Spec: Use dn or tw
```

Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dc
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Added per survey 4/9/09. JP

Name:	L-I099P1	From Node: N-I099	Length(ft): 96.00
Group:	MB	To Node: N-I098	Count: 2
			Friction Equation: Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Always Inlet
Geometry:	Circular	Circular	Flow: Both
Span(in):	24.00	24.00	Entrance Loss Coef: 0.20
Rise(in):	24.00	24.00	Exit Loss Coef: 0.00
Invert(ft):	6.430	5.870	Bend Loss Coef: 0.00
Manning's N:	0.013000	0.013000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dc
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Added per survey 4/9/09. JP

Name:	L-I100P1	From Node: N-I100	Length(ft): 114.00
Group:	MB	To Node: N-I099	Count: 2
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Always Outlet
Geometry:	Circular	Circular	Flow: Both
Span(in):	24.00	24.00	Entrance Loss Coef: 0.20
Rise(in):	24.00	24.00	Exit Loss Coef: 0.00
Invert(ft):	6.310	6.460	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Updated per survey 4/9/09. JP

Name:	L-I101P1	From Node: N-I101	Length(ft): 68.00
Group:	MB	To Node: N-I100	Count: 1
			Friction Equation: Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Always Outlet
Geometry:	Circular	Circular	Flow: Both
Span(in):	15.00	15.00	Entrance Loss Coef: 0.20
Rise(in):	15.00	15.00	Exit Loss Coef: 0.00
Invert(ft):	6.780	6.410	Bend Loss Coef: 0.00
Manning's N:	0.013000	0.013000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dc
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Overflow link. Added 4/21/09. JP

Name:	L-I150P1	From Node:	N-I150	Length(ft):	230.00
Group:	MB	To Node:	N-I152	Count:	2
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Always Outlet
Geometry:	Circular	Circular		Flow:	Both
Span(in):	15.00	15.00		Entrance Loss Coef:	0.20
Rise(in):	15.00	15.00		Exit Loss Coef:	0.20
Invert(ft):	7.730	6.680		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

TWIN PIPES

Updated per survey 4/9/09. JP

Name:	L-I152P1	From Node:	N-I152	Length(ft):	68.00
Group:	MB	To Node:	N-I153	Count:	2
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Always Outlet
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.20
Rise(in):	18.00	18.00		Exit Loss Coef:	1.00
Invert(ft):	6.640	6.590		Bend Loss Coef:	0.20
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dn or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end w/ headwall

TWIN PIPES

Added per survey 4/9/09. JP

Name:	L-I153	From Node:	N-I153	Length(ft):	30.00
Group:	MB	To Node:	N-D055	Count:	2
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Always Outlet
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.20
Rise(in):	18.00	18.00		Exit Loss Coef:	1.00
Invert(ft):	6.540	6.590		Bend Loss Coef:	0.00
Manning's N:	0.010000	0.010000		Outlet Ctrl Spec:	Use dn or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dc
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Added per survey 4/9/09. JP

Name: L-I154P1		From Node: N-I150	Length(ft): 28.00	
Group: MB		To Node: N-D130	Count: 1	
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Always Inlet
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.10
Rise(in):	18.00	18.00	Exit Loss Coef:	1.00
Invert(ft):	6.350	6.240	Bend Loss Coef:	0.00
Manning's N:	0.010000	0.010000	Outlet Ctrl Spec:	Use dn or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dc
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Added per survey 4/9/09. JP

Name: L-I170Pl		From Node: N-I170	Length(ft): 118.00	
Group: MB		To Node: N-I100	Count: 1	
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Always Outlet
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.20
Rise(in):	18.00	18.00	Exit Loss Coef:	0.20
Invert(ft):	6.680	6.410	Bend Loss Coef:	0.00
Manning's N:	0.020000	0.020000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dc
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Added per survey 4/09/09. JP

Name: L-I230P1		From Node: N-I230	Length(ft): 176.00	
Group: MB		To Node: N-I240	Count: 1	
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	0.20
Rise(in):	24.00	24.00	Exit Loss Coef:	1.00
Invert(ft):	6.900	6.400	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end w/ headwall

Name: L-I240P1		From Node: N-I240	Length(ft): 30.00	
Group: MB		To Node: N-D100	Count: 1	
			Friction Equation:	Average Conveyance

	UPSTREAM	DOWNSTREAM		
			Solution Algorithm:	Always Inlet
Geometry:	Circular	Circular	Flow:	Both
Span(in):	15.00	15.00	Entrance Loss Coef:	0.20
Rise(in):	15.00	15.00	Exit Loss Coef:	1.00
Invert(ft):	8.000	7.000	Bend Loss Coef:	0.00
Manning's N:	0.010000	0.010000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end w/ headwall

Plans - Page 11 (structure 71)

Details for structure #54 found on page 22 of villa plans.
30'-15" HDPE (.010); In 8.0, Out 7.0
not twin pipes.

Name:	L-I250P1	From Node:	N-I250
Group:	MB	To Node:	N-I252

Length(ft):	26.00			
Count:	1			
Friction Equation:	Average Conveyance			
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	36.00	36.00	Entrance Loss Coef:	0.20
Rise(in):	36.00	36.00	Exit Loss Coef:	0.00
Invert(ft):	7.380	8.570	Bend Loss Coef:	0.00
Manning's N:	0.020000	0.020000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Plans - Page 10 (structure 32, 30, & 28)

Updated per survey 4/9/09. JP

Name:	L-I252P1	From Node:	N-I252
Group:	MB	To Node:	N-I255

Length(ft):	31.00			
Count:	1			
Friction Equation:	Average Conveyance			
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	30.00	30.00	Entrance Loss Coef:	0.20
Rise(in):	30.00	30.00	Exit Loss Coef:	0.00
Invert(ft):	8.570	8.380	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Plans - Page 10 (structure 32, 30, & 28)

Updated per survey 4/9/09. JP

Name:	L-I255Pl	From Node:	N-I255

Length(ft):	200.00

```
       Group: MB                  To Node: N-I260               Count: 1
                                                     Friction Equation: Average Conveyance
              UPSTREAM       DOWNSTREAM            Solution Algorithm: Always Outlet
    Geometry: Circular       Circular                        Flow: Both
    Span(in): 30.00          30.00                 Entrance Loss Coef: 0.20
    Rise(in): 30.00          30.00                     Exit Loss Coef: 1.00
   Invert(ft): 8.500         7.660                     Bend Loss Coef: 0.00
  Manning's N: 0.020000      0.020000               Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000         0.000                    Inlet Ctrl Spec: Use dc
 Bot Clip(in): 0.000         0.000                  Stabilizer Option: None
```

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Added per survey 4/9/09. JP

```
        Name: L-I260P1           From Node: N-I260           Length(ft): 177.00
       Group: MB                   To Node: N-I265               Count: 1
                                                     Friction Equation: Average Conveyance
              UPSTREAM       DOWNSTREAM            Solution Algorithm: Automatic
    Geometry: Circular       Circular                        Flow: Both
    Span(in): 36.00          36.00                 Entrance Loss Coef: 0.20
    Rise(in): 36.00          36.00                     Exit Loss Coef: 0.00
   Invert(ft): 7.630         7.300                     Bend Loss Coef: 0.00
  Manning's N: 0.010000      0.010000               Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000         0.000                    Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000         0.000                  Stabilizer Option: None
```

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Plans - Page 10 (structure 20 & 22)

Updated per survey 4/9/09. JP

```
        Name: L-I265Pl           From Node: N-I265           Length(ft): 82.00
       Group: MB                   To Node: N-B164               Count: 1
                                                     Friction Equation: Automatic
              UPSTREAM       DOWNSTREAM            Solution Algorithm: Automatic
    Geometry: Circular       Circular                        Flow: Both
    Span(in): 42.00          42.00                 Entrance Loss Coef: 0.20
    Rise(in): 42.00          42.00                     Exit Loss Coef: 1.00
   Invert(ft): 7.380         7.310                     Bend Loss Coef: 0.00
  Manning's N: 0.012000      0.012000               Outlet Ctrl Spec: Use dn or tw
 Top Clip(in): 0.000         0.000                    Inlet Ctrl Spec: Use dc
 Bot Clip(in): 0.000         0.000                  Stabilizer Option: None
```

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Updated per survey 4/9/09. JP

```
        Name: L-I270P1           From Node: N-I270           Length(ft): 100.00
       Group: MB                   To Node: N-B200               Count: 1
                                                     Friction Equation: Automatic
              UPSTREAM       DOWNSTREAM            Solution Algorithm: Most Restrictive
    Geometry: Circular       Circular                        Flow: Both
    Span(in): 72.00          72.00                 Entrance Loss Coef: 0.20
```

Rise(in):	72.00	72.00	Exit Loss Coef:	1.00
Invert(ft):	4.760	4.130	Bend Loss Coef:	0.00
Manning's N:	0.010000	0.010000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Headwall

Plans - Page 9 (structure 15)

Updated per survey 4/9/09. JP

Name:	L-I280P1	From Node: N-I280	Length(ft):	120.00
Group:	MB	To Node: N-B380	Count:	1
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	0.20
Rise(in):	24.00	24.00	Exit Loss Coef:	1.00
Invert(ft):	9.460	8.810	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Plans - Page 9 (structure 10)

Updated per survey 4/9/09. JP

Name:	N-B073P2	From Node: N-B073	Length(ft):	132.00
Group:	HH	To Node: N-B072	Count:	1
			Friction Equation:	Average Conveyance
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.00
Invert(ft):	12.660	11.900	Bend Loss Coef:	0.00
Manning's N:	0.013000	0.013000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dc
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Added per Traffic Circle. JPI 5/19/15

Name:	N-C296P1	From Node: N-C296	Length(ft):	28.00
Group:	SM1	To Node: N-B220	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	0.20
Rise(in):	24.00	24.00	Exit Loss Coef:	1.00
Invert(ft):	3.210	2.460	Bend Loss Coef:	0.00
Manning's N:	0.020000	0.020000	Outlet Ctrl Spec:	Use dn or tw

```
 Top Clip(in): 0.000          0.000                      Inlet Ctrl Spec: Use dc
 Bot Clip(in): 0.000          0.000                   Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Added per survey 4/9/09.  JP
```

Updated Model
Channel Input

```
         Name: L-A015C1            From Node: N-A015            Length(ft): 3000.00
        Group: RR                    To Node: N-A010                 Count: 1

               UPSTREAM       DOWNSTREAM                Friction Equation: Average Conveyance
     Geometry: Irregular      Irregular                 Solution Algorithm: Automatic
   Invert(ft): -4.200         -4.200                               Flow: Both
TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.300
  Manning's N:                                             Expansion Coef: 0.500
 Top Clip(ft):                                          Entrance Loss Coef: 0.000
 Bot Clip(ft):                                              Exit Loss Coef: 0.000
    Main XSec: X-A020-1        X-A020-1                  Outlet Ctrl Spec: Use dc or tw
 AuxElev1(ft): 0.000           0.000                      Inlet Ctrl Spec: Use dn
    Aux XSec1:                                          Stabilizer Option: None
 AuxElev2(ft): 0.000           0.000
    Aux XSec2:
Top Width(ft):
    Depth(ft):
Bot Width(ft):
 LtSdSlp(h/v):
 RtSdSlp(h/v):


--------------------------------------------------------------------------------------------------
         Name: L-A020C1            From Node: N-A020            Length(ft): 700.00
        Group: RR                    To Node: N-A015                 Count: 1

               UPSTREAM       DOWNSTREAM                Friction Equation: Average Conveyance
     Geometry: Irregular      Irregular                 Solution Algorithm: Automatic
   Invert(ft): -4.200         -4.200                               Flow: Both
TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.300
  Manning's N:                                             Expansion Coef: 0.500
 Top Clip(ft):                                          Entrance Loss Coef: 0.000
 Bot Clip(ft):                                              Exit Loss Coef: 0.000
    Main XSec: X-A020-1        X-A020-1                  Outlet Ctrl Spec: Use dc or tw
 AuxElev1(ft): 0.000           0.000                      Inlet Ctrl Spec: Use dn
    Aux XSec1:                                          Stabilizer Option: None
 AuxElev2(ft): 0.000           0.000
    Aux XSec2:
Top Width(ft):
    Depth(ft):
Bot Width(ft):
 LtSdSlp(h/v):
 RtSdSlp(h/v):


--------------------------------------------------------------------------------------------------
         Name: L-A040C1            From Node: N-A040            Length(ft): 6000.00
        Group: RR                    To Node: N-A030                 Count: 1

               UPSTREAM       DOWNSTREAM                Friction Equation: Average Conveyance
     Geometry: Irregular      Irregular                 Solution Algorithm: Automatic
   Invert(ft): -1.000         -4.200                               Flow: Both
TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.100
  Manning's N:                                             Expansion Coef: 0.300
 Top Clip(ft):                                          Entrance Loss Coef: 0.000
 Bot Clip(ft):                                              Exit Loss Coef: 0.000
    Main XSec: X-A040-1        X-A040-2                  Outlet Ctrl Spec: Use dc or tw
 AuxElev1(ft): 0.000           0.000                      Inlet Ctrl Spec: Use dn
    Aux XSec1:                                          Stabilizer Option: None
 AuxElev2(ft): 0.000           0.000
    Aux XSec2:
Top Width(ft):
    Depth(ft):
Bot Width(ft):
 LtSdSlp(h/v):
 RtSdSlp(h/v):


--------------------------------------------------------------------------------------------------
         Name: L-A050C1            From Node: N-A050            Length(ft): 1300.00
        Group: RR                    To Node: N-A040                 Count: 1

               UPSTREAM       DOWNSTREAM                Friction Equation: Average Conveyance
```

```
     Geometry: Irregular      Irregular                 Solution Algorithm: Automatic
    Invert(ft): 1.000         -1.000                                 Flow: Both
 TClpInitZ(ft): 9999.000      9999.000                 Contraction Coef: 0.100
   Manning's N:                                          Expansion Coef: 0.300
  Top Clip(ft):                                      Entrance Loss Coef: 0.000
  Bot Clip(ft):                                          Exit Loss Coef: 0.000
     Main XSec: X-A050-1      X-A050-1                 Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000         0.000                     Inlet Ctrl Spec: Use dn
     Aux XSec1:                                       Stabilizer Option: None
  AuxElev2(ft): 0.000         0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):



-------------------------------------------------------------------------------------------------
          Name: L-A070C1           From Node: N-A070           Length(ft): 450.00
         Group: RR                   To Node: N-A060                Count: 1

                UPSTREAM       DOWNSTREAM                Friction Equation: Average Conveyance
     Geometry: Irregular      Irregular                 Solution Algorithm: Automatic
    Invert(ft): 3.100         3.000                                  Flow: Both
 TClpInitZ(ft): 9999.000      9999.000                 Contraction Coef: 0.100
   Manning's N:                                          Expansion Coef: 0.300
  Top Clip(ft):                                      Entrance Loss Coef: 0.000
  Bot Clip(ft):                                          Exit Loss Coef: 0.000
     Main XSec: X-A075-1      X-A075-1                 Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000         0.000                     Inlet Ctrl Spec: Use dn
     Aux XSec1:                                       Stabilizer Option: None
  AuxElev2(ft): 0.000         0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):



-------------------------------------------------------------------------------------------------
          Name: L-A075C1           From Node: N-A075           Length(ft): 1220.00
         Group: RR                   To Node: N-A070                Count: 1

                UPSTREAM       DOWNSTREAM                Friction Equation: Average Conveyance
     Geometry: Irregular      Irregular                 Solution Algorithm: Automatic
    Invert(ft): 4.000         3.100                                  Flow: Both
 TClpInitZ(ft): 9999.000      9999.000                 Contraction Coef: 0.100
   Manning's N:                                          Expansion Coef: 0.300
  Top Clip(ft):                                      Entrance Loss Coef: 0.000
  Bot Clip(ft):                                          Exit Loss Coef: 0.000
     Main XSec: X-A075-1      X-A075-1                 Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000         0.000                     Inlet Ctrl Spec: Use dn
     Aux XSec1:                                       Stabilizer Option: None
  AuxElev2(ft): 0.000         0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):



-------------------------------------------------------------------------------------------------
          Name: L-A083AC1          From Node: N-A083A          Length(ft): 500.00
         Group: RR                   To Node: N-A083                Count: 1

                UPSTREAM       DOWNSTREAM                Friction Equation: Automatic
     Geometry: Trapezoidal    Trapezoidal               Solution Algorithm: Automatic
    Invert(ft): 9.000         7.000                                  Flow: Both
 TClpInitZ(ft): 9999.000      9999.000                 Contraction Coef: 0.100
   Manning's N: 0.080000      0.080000                   Expansion Coef: 0.300
```

Top Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Bot Clip(ft):	0.000	0.000	Exit Loss Coef:	0.000
Main XSec:			Outlet Ctrl Spec:	Use dc or tw
AuxElev1(ft):			Inlet Ctrl Spec:	Use dc
Aux XSec1:			Stabilizer Option:	None
AuxElev2(ft):				
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):	10.000	10.000		
LtSdSlp(h/v):	3.00	3.00		
RtSdSlp(h/v):	3.00	3.00		

This channel is in the wetlands and not well defined. JPI 6/25/15

Name:	L-A083C1	From Node: N-A083	Length(ft):	1350.00
Group:	RR	To Node: N-A100	Count:	1

	UPSTREAM	DOWNSTREAM		
			Friction Equation:	Average Conveyance
Geometry:	Trapezoidal	Trapezoidal	Solution Algorithm:	Automatic
Invert(ft):	4.100	3.970	Flow:	Both
TClpInitZ(ft):	9999.000	9999.000	Contraction Coef:	0.100
Manning's N:	0.055000	0.055000	Expansion Coef:	0.300
Top Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Bot Clip(ft):	0.000	0.000	Exit Loss Coef:	0.000
Main XSec:			Outlet Ctrl Spec:	Use dc or tw
AuxElev1(ft):			Inlet Ctrl Spec:	Use dc
Aux XSec1:			Stabilizer Option:	None
AuxElev2(ft):				
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):	8.000	8.000		
LtSdSlp(h/v):	2.50	2.50		
RtSdSlp(h/v):	2.50	2.50		

Added per Lowcountry Development plan (Bees Ferry Apts). JPI 6/23/15

Name:	L-A090C1	From Node: N-A090	Length(ft):	200.00
Group:	RR	To Node: N-A080	Count:	1

	UPSTREAM	DOWNSTREAM		
			Friction Equation:	Average Conveyance
Geometry:	Irregular	Irregular	Solution Algorithm:	Automatic
Invert(ft):	3.960	3.920	Flow:	Both
TClpInitZ(ft):	9999.000	9999.000	Contraction Coef:	0.100
Manning's N:			Expansion Coef:	0.300
Top Clip(ft):			Entrance Loss Coef:	0.000
Bot Clip(ft):			Exit Loss Coef:	0.000
Main XSec:	X-A090-1	X-A090-1	Outlet Ctrl Spec:	Use dc or tw
AuxElev1(ft):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Aux XSec1:			Stabilizer Option:	None
AuxElev2(ft):	0.000	0.000		
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

Name:	L-A101C1	From Node: N-A101	Length(ft):	230.00
Group:	RR	To Node: N-A100	Count:	1

	UPSTREAM	DOWNSTREAM		
			Friction Equation:	Automatic
Geometry:	Trapezoidal	Trapezoidal	Solution Algorithm:	Automatic
Invert(ft):	7.800	7.000	Flow:	Both
TClpInitZ(ft):	9999.000	9999.000	Contraction Coef:	0.100
Manning's N:	0.080000	0.080000	Expansion Coef:	0.300
Top Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Bot Clip(ft):	0.000	0.000	Exit Loss Coef:	0.000
Main XSec:			Outlet Ctrl Spec:	Use dc or tw
AuxElev1(ft):			Inlet Ctrl Spec:	Use dc

```
    Aux XSec1:                                          Stabilizer Option: None
 AuxElev2(ft):
    Aux XSec2:
Top Width(ft):
    Depth(ft):
Bot Width(ft): 10.000         10.000
 LtSdSlp(h/v): 3.00           3.00
 RtSdSlp(h/v): 3.00           3.00

This area is a wetland.  Channel approximated to canal.  JPI 6/23/15

-------------------------------------------------------------------------------------------------
         Name: L-A110C1           From Node: N-A110            Length(ft): 5100.00
        Group: RR                   To Node: N-A040                 Count: 1

               UPSTREAM       DOWNSTREAM                Friction Equation: Average Conveyance
     Geometry: Irregular      Irregular                 Solution Algorithm: Automatic
   Invert(ft): 0.000          -1.000                                 Flow: Both
TClpInitZ(ft): 9999.000       9999.000                 Contraction Coef: 0.100
  Manning's N:                                           Expansion Coef: 0.300
 Top Clip(ft):                                        Entrance Loss Coef: 0.000
 Bot Clip(ft):                                            Exit Loss Coef: 0.000
    Main XSec: X-A110-1       X-A110-2                 Outlet Ctrl Spec: Use dc or tw
 AuxElev1(ft): 0.000          0.000                     Inlet Ctrl Spec: Use dn
    Aux XSec1:                                         Stabilizer Option: None
 AuxElev2(ft): 0.000          0.000
    Aux XSec2:
Top Width(ft):
    Depth(ft):
Bot Width(ft):
 LtSdSlp(h/v):
 RtSdSlp(h/v):



-------------------------------------------------------------------------------------------------
         Name: L-A130C1           From Node: N-A130            Length(ft): 1100.00
        Group: RR                   To Node: N-A110                 Count: 1

               UPSTREAM       DOWNSTREAM                Friction Equation: Average Conveyance
     Geometry: Irregular      Irregular                 Solution Algorithm: Automatic
   Invert(ft): 3.000          1.000                                  Flow: Both
TClpInitZ(ft): 9999.000       9999.000                 Contraction Coef: 0.100
  Manning's N:                                           Expansion Coef: 0.300
 Top Clip(ft):                                        Entrance Loss Coef: 0.000
 Bot Clip(ft):                                            Exit Loss Coef: 0.000
    Main XSec: X-A130-1       X-A130-1                 Outlet Ctrl Spec: Use dc or tw
 AuxElev1(ft): 0.000          0.000                     Inlet Ctrl Spec: Use dn
    Aux XSec1:                                         Stabilizer Option: None
 AuxElev2(ft): 0.000          0.000
    Aux XSec2:
Top Width(ft):
    Depth(ft):
Bot Width(ft):
 LtSdSlp(h/v):
 RtSdSlp(h/v):



-------------------------------------------------------------------------------------------------
         Name: L-A140C1           From Node: N-A140            Length(ft): 1100.00
        Group: RR                   To Node: N-A120                 Count: 1

               UPSTREAM       DOWNSTREAM                Friction Equation: Average Conveyance
     Geometry: Irregular      Irregular                 Solution Algorithm: Automatic
   Invert(ft): 1.000          1.000                                  Flow: Both
TClpInitZ(ft): 9999.000       9999.000                 Contraction Coef: 0.100
  Manning's N:                                           Expansion Coef: 0.300
 Top Clip(ft):                                        Entrance Loss Coef: 0.000
 Bot Clip(ft):                                            Exit Loss Coef: 0.000
    Main XSec: X-A140-1       X-A140-1                 Outlet Ctrl Spec: Use dc or tw
 AuxElev1(ft): 0.000          0.000                     Inlet Ctrl Spec: Use dn
    Aux XSec1:                                         Stabilizer Option: None
 AuxElev2(ft): 0.000          0.000
    Aux XSec2:
Top Width(ft):
```

```
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):



-------------------------------------------------------------------------------------------------
          Name: L-A141C1            From Node: N-A141            Length(ft): 900.00
         Group: RR                    To Node: N-A140                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Automatic
      Geometry: Trapezoidal    Trapezoidal              Solution Algorithm: Automatic
    Invert(ft): 8.000          1.130                               Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                  Contraction Coef: 0.100
   Manning's N: 0.040000       0.040000                    Expansion Coef: 0.300
  Top Clip(ft): 0.000          0.000                  Entrance Loss Coef: 0.000
  Bot Clip(ft): 0.000          0.000                      Exit Loss Coef: 0.000
     Main XSec:                                        Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft):                                         Inlet Ctrl Spec: Use dn
     Aux XSec1:                                       Stabilizer Option: None
  AuxElev2(ft):
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft): 3.000          3.000
  LtSdSlp(h/v): 2.00           2.00
  RtSdSlp(h/v): 2.00           2.00

Added per Traffic Circle.  D&F link L-A150C1.  JPI 5/21/15.

-------------------------------------------------------------------------------------------------
          Name: L-A145C1            From Node: N-A145            Length(ft): 340.00
         Group: RR                    To Node: N-A140                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
      Geometry: Irregular      Irregular                Solution Algorithm: Automatic
    Invert(ft): 1.130          1.000                               Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                  Contraction Coef: 0.100
   Manning's N:                                           Expansion Coef: 0.300
  Top Clip(ft):                                     Entrance Loss Coef: 0.000
  Bot Clip(ft):                                         Exit Loss Coef: 0.000
     Main XSec: X-G010-1        X-G010-2                 Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000           0.000                     Inlet Ctrl Spec: Use dn
     Aux XSec1:                                       Stabilizer Option: None
  AuxElev2(ft): 0.000           0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):

Added per West Ashley Circle.  D&F link name is L-A160C1.

-------------------------------------------------------------------------------------------------
          Name: L-A150C1            From Node: N-A150            Length(ft): 2030.00
         Group: RR                    To Node: N-A145                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
      Geometry: Irregular      Irregular                Solution Algorithm: Automatic
    Invert(ft): 1.700          1.130                               Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                  Contraction Coef: 0.100
   Manning's N:                                           Expansion Coef: 0.300
  Top Clip(ft):                                     Entrance Loss Coef: 0.000
  Bot Clip(ft):                                         Exit Loss Coef: 0.000
     Main XSec: X-G010-1        X-G010-2                 Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000           0.000                     Inlet Ctrl Spec: Use dn
     Aux XSec1:                                       Stabilizer Option: None
  AuxElev2(ft): 0.000           0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):
```

Added per Traffic Circle. D&F node L-A170C1. JPI 5/21/15

```
---------------------------------------------------------------------------------------------------
          Name: L-A160C1            From Node: N-A160            Length(ft): 1200.00
         Group: RR                    To Node: N-A150                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
      Geometry: Irregular      Irregular                 Solution Algorithm: Automatic
    Invert(ft): 2.540          2.080                                  Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                 Contraction Coef: 0.100
   Manning's N:                                            Expansion Coef: 0.300
  Top Clip(ft):                                         Entrance Loss Coef: 0.000
  Bot Clip(ft):                                             Exit Loss Coef: 0.000
     Main XSec: X-G010-1       X-G010-2                 Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000          0.000                     Inlet Ctrl Spec: Use dn
     Aux XSec1:                                         Stabilizer Option: None
  AuxElev2(ft): 0.000          0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):



---------------------------------------------------------------------------------------------------
          Name: L-A161C1            From Node: N-A161            Length(ft): 900.00
         Group: RR                    To Node: N-A145                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
      Geometry: Trapezoidal    Trapezoidal               Solution Algorithm: Automatic
    Invert(ft): 9.500          1.130                                  Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                 Contraction Coef: 0.100
   Manning's N: 0.065000       0.065000                    Expansion Coef: 0.300
  Top Clip(ft): 0.000          0.000                    Entrance Loss Coef: 0.000
  Bot Clip(ft): 0.000          0.000                        Exit Loss Coef: 0.000
     Main XSec:                                         Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft):                                          Inlet Ctrl Spec: Use dn
     Aux XSec1:                                         Stabilizer Option: None
  AuxElev2(ft):
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft): 2.000          2.000
  LtSdSlp(h/v): 2.00           2.00
  RtSdSlp(h/v): 2.00           2.00

Added per Traffic Circle.  5/21/15  JPI

---------------------------------------------------------------------------------------------------
          Name: L-A210C1            From Node: N-A210            Length(ft): 600.00
         Group: RR                    To Node: N-A200                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
      Geometry: Trapezoidal    Trapezoidal               Solution Algorithm: Always Outlet
    Invert(ft): 7.000          5.810                                  Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                 Contraction Coef: 0.100
   Manning's N: 0.045000       0.045000                    Expansion Coef: 0.300
  Top Clip(ft): 0.000          0.000                    Entrance Loss Coef: 0.000
  Bot Clip(ft): 0.000          0.000                        Exit Loss Coef: 0.000
     Main XSec:                                         Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft):                                          Inlet Ctrl Spec: Use dn
     Aux XSec1:                                         Stabilizer Option: None
  AuxElev2(ft):
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft): 4.000          4.000
  LtSdSlp(h/v): 6.00           6.00
  RtSdSlp(h/v): 6.00           6.00



---------------------------------------------------------------------------------------------------
```

```
          Name: L-A310C1            From Node: N-A310            Length(ft): 175.00
         Group: RR                    To Node: N-A300                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
      Geometry: Trapezoidal    Trapezoidal               Solution Algorithm: Automatic
    Invert(ft): 1.920          5.500                                Flow: None
 TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.100
   Manning's N: 0.045000       0.045000                     Expansion Coef: 0.300
  Top Clip(ft): 0.000          0.000                    Entrance Loss Coef: 0.000
  Bot Clip(ft): 0.000          0.000                        Exit Loss Coef: 0.000
     Main XSec:                                         Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft):                                          Inlet Ctrl Spec: Use dn
     Aux XSec1:                                        Stabilizer Option: None
  AuxElev2(ft):
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft): 8.000          20.000
  LtSdSlp(h/v): 1.00           12.00
  RtSdSlp(h/v): 1.00           3.00

EXISTING DITCH WITH SEDIMENTATION

-------------------------------------------------------------------------------------------------
          Name: L-A310C2            From Node: N-A310            Length(ft): 175.00
         Group: RR                    To Node: N-A300                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
      Geometry: Trapezoidal    Trapezoidal               Solution Algorithm: Automatic
    Invert(ft): 1.920          2.000                                Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.100
   Manning's N: 0.045000       0.045000                     Expansion Coef: 0.300
  Top Clip(ft): 0.000          0.000                    Entrance Loss Coef: 0.000
  Bot Clip(ft): 0.000          0.000                        Exit Loss Coef: 0.000
     Main XSec:                                         Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft):                                          Inlet Ctrl Spec: Use dn
     Aux XSec1:                                        Stabilizer Option: None
  AuxElev2(ft):
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft): 8.000          8.000
  LtSdSlp(h/v): 1.00           1.00
  RtSdSlp(h/v): 1.00           1.00

PROPOSED DITCH AFTER CLEANED OUT

-------------------------------------------------------------------------------------------------
          Name: L-B010C1            From Node: N-B010            Length(ft): 1500.00
         Group: HH                    To Node: N-A120                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
      Geometry: Irregular      Irregular                 Solution Algorithm: Automatic
    Invert(ft): 1.500          1.000                                Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.100
   Manning's N:                                           Expansion Coef: 0.300
  Top Clip(ft):                                        Entrance Loss Coef: 0.000
  Bot Clip(ft):                                            Exit Loss Coef: 0.000
     Main XSec: X-B010-1        X-B010-1                 Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000           0.000                     Inlet Ctrl Spec: Use dn
     Aux XSec1:                                        Stabilizer Option: None
  AuxElev2(ft): 0.000           0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):



-------------------------------------------------------------------------------------------------
          Name: L-B030C1            From Node: N-B125            Length(ft): 790.00
         Group: HH                    To Node: N-B320                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
```

```
      Geometry: Irregular      Irregular                 Solution Algorithm: Automatic
    Invert(ft): 2.000          2.000                                Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.100
   Manning's N:                                            Expansion Coef: 0.300
  Top Clip(ft):                                         Entrance Loss Coef: 0.000
  Bot Clip(ft):                                             Exit Loss Coef: 0.000
     Main XSec: X-B200-1        X-B200-1                  Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000           0.000                      Inlet Ctrl Spec: Use dn
     Aux XSec1:                                          Stabilizer Option: None
  AuxElev2(ft): 0.000           0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):



-------------------------------------------------------------------------------------------------
          Name: L-B050C1            From Node: N-B050            Length(ft): 200.00
         Group: HH                    To Node: N-B020                 Count: 1

                UPSTREAM        DOWNSTREAM                 Friction Equation: Average Conveyance
      Geometry: Irregular       Irregular                 Solution Algorithm: Automatic
    Invert(ft): 1.700           1.500                                Flow: Both
 TClpInitZ(ft): 9999.000        9999.000                   Contraction Coef: 0.100
   Manning's N:                                            Expansion Coef: 0.300
  Top Clip(ft):                                         Entrance Loss Coef: 0.000
  Bot Clip(ft):                                             Exit Loss Coef: 0.000
     Main XSec: X-B050-1        X-B050-1                  Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000           0.000                      Inlet Ctrl Spec: Use dn
     Aux XSec1:                                          Stabilizer Option: None
  AuxElev2(ft): 0.000           0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):



-------------------------------------------------------------------------------------------------
          Name: L-B070C1            From Node: N-B070            Length(ft): 550.00
         Group: HH                    To Node: N-B060                 Count: 1

                UPSTREAM        DOWNSTREAM                 Friction Equation: Average Conveyance
      Geometry: Irregular       Irregular                 Solution Algorithm: Always Outlet
    Invert(ft): 2.500           2.000                                Flow: Both
 TClpInitZ(ft): 9999.000        9999.000                   Contraction Coef: 0.100
   Manning's N:                                            Expansion Coef: 0.300
  Top Clip(ft):                                         Entrance Loss Coef: 0.000
  Bot Clip(ft):                                             Exit Loss Coef: 0.000
     Main XSec: X-B070-1        X-B070-2                  Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000           0.000                      Inlet Ctrl Spec: Use dn
     Aux XSec1:                                          Stabilizer Option: None
  AuxElev2(ft): 0.000           0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):

Added per traffic circle.  JPI 5/21/15

-------------------------------------------------------------------------------------------------
          Name: L-B072C1            From Node: N-B072            Length(ft): 1350.00
         Group: HH                    To Node: N-B071                 Count: 1

                UPSTREAM        DOWNSTREAM                 Friction Equation: Average Conveyance
      Geometry: Trapezoidal     Trapezoidal               Solution Algorithm: Automatic
    Invert(ft): 10.000          8.360                                Flow: Both
 TClpInitZ(ft): 9999.000        9999.000                   Contraction Coef: 0.100
   Manning's N: 0.100000        0.100000                     Expansion Coef: 0.300
```

```
  Top Clip(ft): 0.000          0.000                    Entrance Loss Coef: 0.000
  Bot Clip(ft): 0.000          0.000                        Exit Loss Coef: 0.000
     Main XSec:                                        Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft):                                          Inlet Ctrl Spec: Use dn
     Aux XSec1:                                       Stabilizer Option: None
  AuxElev2(ft):
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft): 3.000          3.000
  LtSdSlp(h/v): 2.00           2.00
  RtSdSlp(h/v): 2.00           2.00

Added per Traffic Circle.  JPI 5/19/15

-------------------------------------------------------------------------------------------------
          Name: L-B080C1            From Node: N-B080            Length(ft): 950.00
         Group: HH                    To Node: N-B020                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
      Geometry: Irregular      Irregular                  Solution Algorithm: Automatic
    Invert(ft): 1.500          1.500                                 Flow: Both
 TClpInitZ(ft): 9999.000       99999.000                    Contraction Coef: 0.100
   Manning's N:                                              Expansion Coef: 0.300
  Top Clip(ft):                                          Entrance Loss Coef: 0.000
  Bot Clip(ft):                                              Exit Loss Coef: 0.000
     Main XSec: X-B080-1       X-B080-1                    Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000          0.000                        Inlet Ctrl Spec: Use dn
     Aux XSec1:                                         Stabilizer Option: None
  AuxElev2(ft): 0.000          0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):



-------------------------------------------------------------------------------------------------
          Name: L-B090C1            From Node: N-B090            Length(ft): 260.00
         Group: HH                    To Node: N-B080                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Automatic
      Geometry: Irregular      Irregular                  Solution Algorithm: Always Outlet
    Invert(ft): 2.000          1.500                                 Flow: Both
 TClpInitZ(ft): 9999.000       99999.000                    Contraction Coef: 0.100
   Manning's N:                                              Expansion Coef: 0.300
  Top Clip(ft):                                          Entrance Loss Coef: 0.000
  Bot Clip(ft):                                              Exit Loss Coef: 0.000
     Main XSec: X-B090-1       X-B090-1                    Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000          0.000                        Inlet Ctrl Spec: Use dn
     Aux XSec1:                                         Stabilizer Option: None
  AuxElev2(ft): 0.000          0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):



-------------------------------------------------------------------------------------------------
          Name: L-B110C1            From Node: N-B110            Length(ft): 900.00
         Group: HH                    To Node: N-B100                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
      Geometry: Irregular      Irregular                  Solution Algorithm: Automatic
    Invert(ft): 4.000          3.500                                 Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                     Contraction Coef: 0.100
   Manning's N:                                              Expansion Coef: 0.300
  Top Clip(ft):                                          Entrance Loss Coef: 0.000
  Bot Clip(ft):                                              Exit Loss Coef: 0.000
     Main XSec: X-B110-1       X-B110-2                    Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000          0.000                        Inlet Ctrl Spec: Use dn
```

```
    Aux XSec1:                                          Stabilizer Option: None
 AuxElev2(ft): 0.000          0.000
    Aux XSec2:
Top Width(ft):
    Depth(ft):
Bot Width(ft):
 LtSdSlp(h/v):
 RtSdSlp(h/v):



-------------------------------------------------------------------------------------------------
         Name: L-B120C1            From Node: N-B120            Length(ft): 960.00
        Group: HH                    To Node: N-B080                 Count: 1

               UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
     Geometry: Irregular      Irregular                 Solution Algorithm: Automatic
   Invert(ft): 1.500          1.500                                Flow: Both
TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.100
  Manning's N:                                            Expansion Coef: 0.300
 Top Clip(ft):                                         Entrance Loss Coef: 0.000
 Bot Clip(ft):                                             Exit Loss Coef: 0.000
    Main XSec: X-B120-1       X-B120-1                   Outlet Ctrl Spec: Use dc or tw
 AuxElev1(ft): 0.000          0.000                       Inlet Ctrl Spec: Use dn
    Aux XSec1:                                          Stabilizer Option: None
 AuxElev2(ft): 0.000          0.000
    Aux XSec2:
Top Width(ft):
    Depth(ft):
Bot Width(ft):
 LtSdSlp(h/v):
 RtSdSlp(h/v):

Length changed to match new node locations.  3/16/11  JPI

-------------------------------------------------------------------------------------------------
         Name: L-B130C1            From Node: N-B130            Length(ft): 260.00
        Group: HH                    To Node: N-B120                 Count: 1

               UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
     Geometry: Irregular      Irregular                 Solution Algorithm: Automatic
   Invert(ft): 2.000          2.000                                Flow: Both
TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.100
  Manning's N:                                            Expansion Coef: 0.300
 Top Clip(ft):                                         Entrance Loss Coef: 0.000
 Bot Clip(ft):                                             Exit Loss Coef: 0.000
    Main XSec: X-B130-1       X-B130-1                   Outlet Ctrl Spec: Use dc or tw
 AuxElev1(ft): 0.000          0.000                       Inlet Ctrl Spec: Use dn
    Aux XSec1:                                          Stabilizer Option: None
 AuxElev2(ft): 0.000          0.000
    Aux XSec2:
Top Width(ft):
    Depth(ft):
Bot Width(ft):
 LtSdSlp(h/v):
 RtSdSlp(h/v):



-------------------------------------------------------------------------------------------------
         Name: L-B150C1            From Node: N-B150            Length(ft): 1200.00
        Group: HH                    To Node: N-B140                 Count: 1

               UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
     Geometry: Irregular      Irregular                 Solution Algorithm: Automatic
   Invert(ft): 1.500          1.500                                Flow: Both
TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.100
  Manning's N:                                            Expansion Coef: 0.300
 Top Clip(ft):                                         Entrance Loss Coef: 0.000
 Bot Clip(ft):                                             Exit Loss Coef: 0.000
    Main XSec: X-B150-1       X-B150-2                   Outlet Ctrl Spec: Use dc or tw
 AuxElev1(ft): 0.000          0.000                       Inlet Ctrl Spec: Use dn
    Aux XSec1:                                          Stabilizer Option: None
 AuxElev2(ft): 0.000          0.000
    Aux XSec2:
Top Width(ft):
```

```
    Depth(ft):
Bot Width(ft):
 LtSdSlp(h/v):
 RtSdSlp(h/v):



-------------------------------------------------------------------------------------------------
         Name: L-B160C1            From Node: N-B160            Length(ft): 1400.00
        Group: HH                    To Node: N-B120                 Count: 1

               UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
     Geometry: Irregular      Irregular                 Solution Algorithm: Automatic
   Invert(ft): 2.000          2.000                                Flow: Both
TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.100
  Manning's N:                                            Expansion Coef: 0.300
 Top Clip(ft):                                         Entrance Loss Coef: 0.000
 Bot Clip(ft):                                             Exit Loss Coef: 0.000
    Main XSec: X-B160-1       X-B160-1                   Outlet Ctrl Spec: Use dc or tw
 AuxElev1(ft): 0.000          0.000                       Inlet Ctrl Spec: Use dn
    Aux XSec1:                                          Stabilizer Option: None
 AuxElev2(ft): 0.000          0.000
    Aux XSec2:
Top Width(ft):
    Depth(ft):
Bot Width(ft):
 LtSdSlp(h/v):
 RtSdSlp(h/v):



-------------------------------------------------------------------------------------------------
         Name: L-B164C1            From Node: N-B164            Length(ft): 1070.00
        Group: HH                    To Node: N-B125                 Count: 1

               UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
     Geometry: Irregular      Irregular                 Solution Algorithm: Automatic
   Invert(ft): 2.000          2.000                                Flow: Both
TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.100
  Manning's N:                                            Expansion Coef: 0.300
 Top Clip(ft):                                         Entrance Loss Coef: 0.000
 Bot Clip(ft):                                             Exit Loss Coef: 0.000
    Main XSec: X-B200-1       X-B200-1                   Outlet Ctrl Spec: Use dc or tw
 AuxElev1(ft): 0.000          0.000                       Inlet Ctrl Spec: Use dn
    Aux XSec1:                                          Stabilizer Option: None
 AuxElev2(ft): 0.000          0.000
    Aux XSec2:
Top Width(ft):
    Depth(ft):
Bot Width(ft):
 LtSdSlp(h/v):
 RtSdSlp(h/v):



-------------------------------------------------------------------------------------------------
         Name: L-B180C1            From Node: N-B180            Length(ft): 425.00
        Group: HH                    To Node: N-B160                 Count: 1

               UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
     Geometry: Irregular      Irregular                 Solution Algorithm: Automatic
   Invert(ft): 2.000          2.000                                Flow: Both
TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.100
  Manning's N:                                            Expansion Coef: 0.300
 Top Clip(ft):                                         Entrance Loss Coef: 0.000
 Bot Clip(ft):                                             Exit Loss Coef: 0.000
    Main XSec: X-B180-1       X-B180-1                   Outlet Ctrl Spec: Use dc or tw
 AuxElev1(ft): 0.000          0.000                       Inlet Ctrl Spec: Use dn
    Aux XSec1:                                          Stabilizer Option: None
 AuxElev2(ft): 0.000          0.000
    Aux XSec2:
Top Width(ft):
    Depth(ft):
Bot Width(ft):
 LtSdSlp(h/v):
 RtSdSlp(h/v):
```

Length changed to match node relocations counted area. 3/16/11 JPI

```
-------------------------------------------------------------------------------------------------
          Name: L-B200C1            From Node: N-B200            Length(ft): 635.00
         Group: HH                    To Node: N-B164                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Automatic
      Geometry: Irregular      Irregular                Solution Algorithm: Automatic
    Invert(ft): 2.000          2.000                              Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                 Contraction Coef: 0.100
   Manning's N:                                             Expansion Coef: 0.300
  Top Clip(ft):                                        Entrance Loss Coef: 0.000
  Bot Clip(ft):                                            Exit Loss Coef: 0.000
     Main XSec: X-B200-1        X-B200-1                 Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000           0.000                     Inlet Ctrl Spec: Use dn
     Aux XSec1:                                          Stabilizer Option: None
  AuxElev2(ft): 0.000           0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):
```

Length changed to match node locations. 3/16/11 JPI

```
-------------------------------------------------------------------------------------------------
          Name: L-B220C1            From Node: N-B220            Length(ft): 576.00
         Group: HH                    To Node: N-C330                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Automatic
      Geometry: Irregular      Irregular                Solution Algorithm: Automatic
    Invert(ft): 2.000          2.000                              Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                 Contraction Coef: 0.100
   Manning's N:                                             Expansion Coef: 0.300
  Top Clip(ft):                                        Entrance Loss Coef: 0.000
  Bot Clip(ft):                                            Exit Loss Coef: 0.000
     Main XSec: X-B210-1        X-B210-1                 Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000           0.000                     Inlet Ctrl Spec: Use dn
     Aux XSec1:                                          Stabilizer Option: None
  AuxElev2(ft): 0.000           0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):
```

Length changed to remove double counted area. 3/16/11 JPI

```
-------------------------------------------------------------------------------------------------
          Name: L-B320C1            From Node: N-B320            Length(ft): 132.00
         Group: HH                    To Node: N-B180                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
      Geometry: Irregular      Irregular                Solution Algorithm: Automatic
    Invert(ft): 2.000          2.000                              Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                 Contraction Coef: 0.100
   Manning's N:                                             Expansion Coef: 0.300
  Top Clip(ft):                                        Entrance Loss Coef: 0.000
  Bot Clip(ft):                                            Exit Loss Coef: 0.000
     Main XSec: X-B200-1        X-B200-1                 Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000           0.000                     Inlet Ctrl Spec: Use dn
     Aux XSec1:                                          Stabilizer Option: None
  AuxElev2(ft): 0.000           0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):
```

Length changed to remove double counted area. 3/16/11 JPI

```
-------------------------------------------------------------------------------------------------
```

```
          Name: L-B330C1            From Node: N-C330            Length(ft): 315.00
         Group: SM1                   To Node: N-B380                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Automatic
      Geometry: Irregular      Irregular                 Solution Algorithm: Automatic
    Invert(ft): 2.000          2.000                                Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.100
   Manning's N:                                            Expansion Coef: 0.300
  Top Clip(ft):                                         Entrance Loss Coef: 0.000
  Bot Clip(ft):                                             Exit Loss Coef: 0.000
     Main XSec: X-B210-1        X-B210-1                  Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000           0.000                      Inlet Ctrl Spec: Use dn
     Aux XSec1:                                          Stabilizer Option: None
  AuxElev2(ft): 0.000           0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):

Continued channel profile diagramed previously.

Length changed to remove double counted area.  3/16/11  JPI

-------------------------------------------------------------------------------------------------
          Name: L-C010C1            From Node: N-C010            Length(ft): 410.00
         Group: SM1                   To Node: N-C300                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Automatic
      Geometry: Trapezoidal    Trapezoidal               Solution Algorithm: Always Outlet
    Invert(ft): 3.000          3.000                                Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.100
   Manning's N: 0.045000       0.045000                   Expansion Coef: 0.300
  Top Clip(ft): 0.000          0.000                     Entrance Loss Coef: 0.000
  Bot Clip(ft): 0.000          0.000                         Exit Loss Coef: 0.000
     Main XSec:                                          Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft):                                           Inlet Ctrl Spec: Use dn
     Aux XSec1:                                          Stabilizer Option: None
  AuxElev2(ft):
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft): 7.500          7.500
  LtSdSlp(h/v): 6.00           6.00
  RtSdSlp(h/v): 6.00           6.00

Swale Info

-------------------------------------------------------------------------------------------------
          Name: L-C020C1            From Node: N-C020            Length(ft): 300.00
         Group: SM1                   To Node: N-C010                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Automatic
      Geometry: Irregular      Irregular                 Solution Algorithm: Always Outlet
    Invert(ft): 3.200          3.000                                Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.100
   Manning's N:                                            Expansion Coef: 0.300
  Top Clip(ft):                                         Entrance Loss Coef: 0.000
  Bot Clip(ft):                                             Exit Loss Coef: 0.000
     Main XSec: X-C020-1        X-C020-2                  Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000           0.000                      Inlet Ctrl Spec: Use dn
     Aux XSec1:                                          Stabilizer Option: None
  AuxElev2(ft): 0.000           0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):



-------------------------------------------------------------------------------------------------
          Name: L-C030C1            From Node: N-C030            Length(ft): 325.00
         Group: SM1                   To Node: N-C020                 Count: 1
```

```
               UPSTREAM       DOWNSTREAM                 Friction Equation: Automatic
     Geometry: Irregular      Irregular                Solution Algorithm: Always Outlet
   Invert(ft): 3.400          3.200                                 Flow: Both
TClpInitZ(ft): 9999.000       9999.000                 Contraction Coef: 0.100
  Manning's N:                                            Expansion Coef: 0.300
 Top Clip(ft):                                        Entrance Loss Coef: 0.000
 Bot Clip(ft):                                            Exit Loss Coef: 0.000
    Main XSec: X-C030-1       X-C030-1                 Outlet Ctrl Spec: Use dc or tw
 AuxElev1(ft): 0.000          0.000                     Inlet Ctrl Spec: Use dn
    Aux XSec1:                                         Stabilizer Option: None
 AuxElev2(ft): 0.000          0.000
    Aux XSec2:
Top Width(ft):
    Depth(ft):
Bot Width(ft):
 LtSdSlp(h/v):
 RtSdSlp(h/v):


--------------------------------------------------------------------------------------------------
         Name: L-C040C1            From Node: N-C040            Length(ft): 525.00
        Group: SM1                   To Node: N-C030                 Count: 1

               UPSTREAM       DOWNSTREAM                 Friction Equation: Automatic
     Geometry: Irregular      Irregular                Solution Algorithm: Always Outlet
   Invert(ft): 3.600          3.400                                 Flow: Both
TClpInitZ(ft): 9999.000       9999.000                 Contraction Coef: 0.100
  Manning's N:                                            Expansion Coef: 0.300
 Top Clip(ft):                                        Entrance Loss Coef: 0.000
 Bot Clip(ft):                                            Exit Loss Coef: 0.000
    Main XSec: X-C040-1       X-C040-1                 Outlet Ctrl Spec: Use dc or tw
 AuxElev1(ft): 0.000          0.000                     Inlet Ctrl Spec: Use dn
    Aux XSec1:                                         Stabilizer Option: None
 AuxElev2(ft): 0.000          0.000
    Aux XSec2:
Top Width(ft):
    Depth(ft):
Bot Width(ft):
 LtSdSlp(h/v):
 RtSdSlp(h/v):


--------------------------------------------------------------------------------------------------
         Name: L-C070C1            From Node: N-C070            Length(ft): 325.00
        Group: SM1                   To Node: N-C050                 Count: 1

               UPSTREAM       DOWNSTREAM                 Friction Equation: Automatic
     Geometry: Irregular      Irregular                Solution Algorithm: Automatic
   Invert(ft): 3.600          3.600                                 Flow: Both
TClpInitZ(ft): 9999.000       9999.000                 Contraction Coef: 0.100
  Manning's N:                                            Expansion Coef: 0.300
 Top Clip(ft):                                        Entrance Loss Coef: 0.000
 Bot Clip(ft):                                            Exit Loss Coef: 0.000
    Main XSec: X-C070-1       X-C070-2                 Outlet Ctrl Spec: Use dc or tw
 AuxElev1(ft): 0.000          0.000                     Inlet Ctrl Spec: Use dn
    Aux XSec1:                                         Stabilizer Option: None
 AuxElev2(ft): 0.000          0.000
    Aux XSec2:
Top Width(ft):
    Depth(ft):
Bot Width(ft):
 LtSdSlp(h/v):
 RtSdSlp(h/v):


--------------------------------------------------------------------------------------------------
         Name: L-C085C1            From Node: N-C085            Length(ft): 450.00
        Group: SM1                   To Node: N-A083                 Count: 1

               UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
     Geometry: Trapezoidal    Trapezoidal              Solution Algorithm: Automatic
   Invert(ft): 4.180          4.100                                 Flow: Both
```

```
 TClpInitZ(ft): 9999.000       999.000                    Contraction Coef: 0.100
   Manning's N: 0.055000       0.055000                     Expansion Coef: 0.300
  Top Clip(ft): 0.000          0.000                    Entrance Loss Coef: 0.000
  Bot Clip(ft): 0.000          0.000                        Exit Loss Coef: 0.000
     Main XSec:                                         Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft):                                          Inlet Ctrl Spec: Use dn
     Aux XSec1:                                       Stabilizer Option: None
  AuxElev2(ft):
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft): 8.000          8.000
  LtSdSlp(h/v): 2.50           2.50
  RtSdSlp(h/v): 2.50           2.50

NEW DITCH ALONG BEES FERRY - ALT#2C - JAMES

Length shortened to incorporate new segment downstream.  JPI 6/23/15

-------------------------------------------------------------------------------------------------
          Name: L-C086AC1           From Node: N-C086A            Length(ft): 66.00
         Group: RR                    To Node: N-C086                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Automatic
      Geometry: Trapezoidal    Trapezoidal              Solution Algorithm: Always Inlet
    Invert(ft): 7.020          4.000                              Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.100
   Manning's N: 0.050000       0.050000                     Expansion Coef: 0.300
  Top Clip(ft): 0.000          0.000                    Entrance Loss Coef: 0.000
  Bot Clip(ft): 0.000          0.000                        Exit Loss Coef: 0.000
     Main XSec:                                         Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft):                                          Inlet Ctrl Spec: Use dc
     Aux XSec1:                                       Stabilizer Option: None
  AuxElev2(ft):
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft): 4.000          4.000
  LtSdSlp(h/v): 3.00           3.00
  RtSdSlp(h/v): 3.00           3.00

Added per McAlisters Funeral.  JPI 6/25/15.

-------------------------------------------------------------------------------------------------
          Name: L-C086C1            From Node: N-C086             Length(ft): 420.00
         Group: RR                    To Node: N-C080                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Automatic
      Geometry: Trapezoidal    Trapezoidal              Solution Algorithm: Automatic
    Invert(ft): 4.000          4.410                              Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.100
   Manning's N: 0.035000       0.035000                     Expansion Coef: 0.300
  Top Clip(ft): 0.000          0.000                    Entrance Loss Coef: 0.000
  Bot Clip(ft): 0.000          0.000                        Exit Loss Coef: 0.000
     Main XSec:                                         Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft):                                          Inlet Ctrl Spec: Use dc
     Aux XSec1:                                       Stabilizer Option: None
  AuxElev2(ft):
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft): 8.000          8.000
  LtSdSlp(h/v): 3.00           3.00
  RtSdSlp(h/v): 3.00           3.00

Channel in front of McAlisters.  JPI 6/25/15

-------------------------------------------------------------------------------------------------
          Name: L-C090C1            From Node: N-C090             Length(ft): 400.00
         Group: SM1                   To Node: N-C086                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Automatic
      Geometry: Irregular      Irregular                Solution Algorithm: Automatic
    Invert(ft): 3.760          4.000                              Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.100
   Manning's N:                                           Expansion Coef: 0.300
```

```
  Top Clip(ft):                                          Entrance Loss Coef: 0.000
  Bot Clip(ft):                                              Exit Loss Coef: 0.000
     Main XSec: X-C090-1       X-C090-1                    Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000          0.000                         Inlet Ctrl Spec: Use dn
     Aux XSec1:                                           Stabilizer Option: None
  AuxElev2(ft): 0.000          0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):

Updated US IE per Bees Ferry Widening 5/5/15 JPI

Updated per model revisions.  JPI 6/25/15

-------------------------------------------------------------------------------------------------
          Name: L-C120C1            From Node: N-C120            Length(ft): 475.00
         Group: SM1                   To Node: N-C110                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
      Geometry: Irregular      Irregular                  Solution Algorithm: Automatic
    Invert(ft): 3.500          3.500                                 Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                    Contraction Coef: 0.100
   Manning's N:                                             Expansion Coef: 0.300
  Top Clip(ft):                                          Entrance Loss Coef: 0.000
  Bot Clip(ft):                                              Exit Loss Coef: 0.000
     Main XSec: X-C120-1       X-C120-1                    Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000          0.000                         Inlet Ctrl Spec: Use dn
     Aux XSec1:                                           Stabilizer Option: None
  AuxElev2(ft): 0.000          0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):



-------------------------------------------------------------------------------------------------
          Name: L-C120C2            From Node: N-C120            Length(ft): 500.00
         Group: SM1                   To Node: N-C260                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
      Geometry: Irregular      Irregular                  Solution Algorithm: Automatic
    Invert(ft): 3.500          3.500                                 Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                    Contraction Coef: 0.100
   Manning's N:                                             Expansion Coef: 0.300
  Top Clip(ft):                                          Entrance Loss Coef: 0.000
  Bot Clip(ft):                                              Exit Loss Coef: 0.000
     Main XSec: X-C120-2       X-C120-2                    Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000          0.000                         Inlet Ctrl Spec: Use dn
     Aux XSec1:                                           Stabilizer Option: None
  AuxElev2(ft): 0.000          0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):



-------------------------------------------------------------------------------------------------
          Name: L-C130C1            From Node: N-C130            Length(ft): 1400.00
         Group: SM1                   To Node: N-C120                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
      Geometry: Irregular      Irregular                  Solution Algorithm: Automatic
    Invert(ft): 3.500          3.500                                 Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                    Contraction Coef: 0.100
   Manning's N:                                             Expansion Coef: 0.300
  Top Clip(ft):                                          Entrance Loss Coef: 0.000
  Bot Clip(ft):                                              Exit Loss Coef: 0.000
```

```
    Main XSec: X-C130-1       X-C130-2                  Outlet Ctrl Spec: Use dc or tw
 AuxElev1(ft): 0.000          0.000                       Inlet Ctrl Spec: Use dn
    Aux XSec1:                                         Stabilizer Option: None
 AuxElev2(ft): 0.000          0.000
    Aux XSec2:
Top Width(ft):
    Depth(ft):
Bot Width(ft):
 LtSdSlp(h/v):
 RtSdSlp(h/v):



-------------------------------------------------------------------------------------------------
         Name: L-C150C1            From Node: N-C150            Length(ft): 1200.00
        Group: SM1                   To Node: N-C130                 Count: 1

               UPSTREAM       DOWNSTREAM                Friction Equation: Average Conveyance
     Geometry: Irregular      Irregular                 Solution Algorithm: Automatic
   Invert(ft): 3.500          3.500                                Flow: Both
TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.100
  Manning's N:                                            Expansion Coef: 0.300
 Top Clip(ft):                                         Entrance Loss Coef: 0.000
 Bot Clip(ft):                                             Exit Loss Coef: 0.000
    Main XSec: X-C150-1       X-C150-2                  Outlet Ctrl Spec: Use dc or tw
 AuxElev1(ft): 0.000          0.000                       Inlet Ctrl Spec: Use dn
    Aux XSec1:                                         Stabilizer Option: None
 AuxElev2(ft): 0.000          0.000
    Aux XSec2:
Top Width(ft):
    Depth(ft):
Bot Width(ft):
 LtSdSlp(h/v):
 RtSdSlp(h/v):



-------------------------------------------------------------------------------------------------
         Name: L-C160C1            From Node: N-C160            Length(ft): 550.00
        Group: SM1                   To Node: N-C130                 Count: 1

               UPSTREAM       DOWNSTREAM                Friction Equation: Average Conveyance
     Geometry: Irregular      Irregular                 Solution Algorithm: Automatic
   Invert(ft): 3.500          3.500                                Flow: Both
TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.100
  Manning's N:                                            Expansion Coef: 0.300
 Top Clip(ft):                                         Entrance Loss Coef: 0.000
 Bot Clip(ft):                                             Exit Loss Coef: 0.000
    Main XSec: X-C160-1       X-C160-1                  Outlet Ctrl Spec: Use dc or tw
 AuxElev1(ft): 0.000          0.000                       Inlet Ctrl Spec: Use dn
    Aux XSec1:                                         Stabilizer Option: None
 AuxElev2(ft): 0.000          0.000
    Aux XSec2:
Top Width(ft):
    Depth(ft):
Bot Width(ft):
 LtSdSlp(h/v):
 RtSdSlp(h/v):



-------------------------------------------------------------------------------------------------
         Name: L-C180C1            From Node: N-C180            Length(ft): 995.00
        Group: SM1                   To Node: N-C170                 Count: 1

               UPSTREAM       DOWNSTREAM                Friction Equation: Average Conveyance
     Geometry: Irregular      Irregular                 Solution Algorithm: Automatic
   Invert(ft): 4.000          4.000                                Flow: Both
TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.100
  Manning's N:                                            Expansion Coef: 0.300
 Top Clip(ft):                                         Entrance Loss Coef: 0.000
 Bot Clip(ft):                                             Exit Loss Coef: 0.000
    Main XSec: X-C180-1       X-C180-1                  Outlet Ctrl Spec: Use dc or tw
 AuxElev1(ft): 0.000          0.000                       Inlet Ctrl Spec: Use dn
    Aux XSec1:                                         Stabilizer Option: None
 AuxElev2(ft): 0.000          0.000
```

```
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):



-------------------------------------------------------------------------------------------------
          Name: L-C202C1            From Node: N-C203            Length(ft): 422.00
         Group: MB                    To Node: N-I270                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
      Geometry: Irregular      Irregular                 Solution Algorithm: Automatic
    Invert(ft): 8.100          5.300                                Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.100
   Manning's N:                                            Expansion Coef: 0.300
  Top Clip(ft):                                         Entrance Loss Coef: 0.000
  Bot Clip(ft):                                             Exit Loss Coef: 0.000
     Main XSec: X-C203C1       X-C203C1                   Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000          0.000                       Inlet Ctrl Spec: Use dc
     Aux XSec1:                                          Stabilizer Option: None
  AuxElev2(ft): 0.000          0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):

part of overflow system from lidar.  4/21/09.  JP

-------------------------------------------------------------------------------------------------
          Name: L-C203C1            From Node: N-C203            Length(ft): 118.00
         Group: MB                    To Node: N-C205                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Automatic
      Geometry: Irregular      Irregular                 Solution Algorithm: Automatic
    Invert(ft): 8.100          7.700                                Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.100
   Manning's N:                                            Expansion Coef: 0.300
  Top Clip(ft):                                         Entrance Loss Coef: 0.000
  Bot Clip(ft):                                             Exit Loss Coef: 0.000
     Main XSec: X-C203C1       X-C203C1                   Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000          0.000                       Inlet Ctrl Spec: Use dc
     Aux XSec1:                                          Stabilizer Option: None
  AuxElev2(ft): 0.000          0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):

overflow system from lidar.  4/21/09.  JP

-------------------------------------------------------------------------------------------------
          Name: L-C205C1            From Node: N-C205            Length(ft): 220.00
         Group: MB                    To Node: N-C206                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
      Geometry: Irregular      Irregular                 Solution Algorithm: Automatic
    Invert(ft): 7.700          5.590                                Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.100
   Manning's N:                                            Expansion Coef: 0.300
  Top Clip(ft):                                         Entrance Loss Coef: 0.000
  Bot Clip(ft):                                             Exit Loss Coef: 0.000
     Main XSec: X-C203C1       X-C203C1                   Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000          0.000                       Inlet Ctrl Spec: Use dc
     Aux XSec1:                                          Stabilizer Option: None
  AuxElev2(ft): 0.000          0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
```

```
  LtSdSlp(h/v):
  RtSdSlp(h/v):

overflow channel from lidar.  4/21/09.  JP

-------------------------------------------------------------------------------------------------
          Name: L-C211C1            From Node: N-C210            Length(ft): 881.00
         Group: SM1                   To Node: N-C020                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
      Geometry: Irregular      Irregular                 Solution Algorithm: Always Outlet
    Invert(ft): 5.900          6.100                                Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.100
   Manning's N:                                             Expansion Coef: 0.300
  Top Clip(ft):                                          Entrance Loss Coef: 0.000
  Bot Clip(ft):                                             Exit Loss Coef: 0.000
     Main XSec: X-C211C1       X-C211C1                   Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000          0.000                       Inlet Ctrl Spec: Use dc
     Aux XSec1:                                           Stabilizer Option: None
  AuxElev2(ft): 0.000          0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):

overflow channel from lidar.  4/21/09.  JP

-------------------------------------------------------------------------------------------------
          Name: L-C243              From Node: N-C243            Length(ft): 240.00
         Group: SM1                   To Node: N-C240                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Automatic
      Geometry: Irregular      Irregular                 Solution Algorithm: Automatic
    Invert(ft): 6.100          6.200                                Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.100
   Manning's N:                                             Expansion Coef: 0.300
  Top Clip(ft):                                          Entrance Loss Coef: 0.000
  Bot Clip(ft):                                             Exit Loss Coef: 0.000
     Main XSec: X-C250-2       X-C250-2                   Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000          0.000                       Inlet Ctrl Spec: Use dc
     Aux XSec1:                                           Stabilizer Option: None
  AuxElev2(ft): 0.000          0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):

Added per FEMA comment.  3/16/11 JPI

-------------------------------------------------------------------------------------------------
          Name: L-C250C1            From Node: N-C250            Length(ft): 230.00
         Group: SM1                   To Node: N-C245                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
      Geometry: Irregular      Irregular                 Solution Algorithm: Always Outlet
    Invert(ft): 7.500          6.200                                Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.100
   Manning's N:                                             Expansion Coef: 0.300
  Top Clip(ft):                                          Entrance Loss Coef: 0.000
  Bot Clip(ft):                                             Exit Loss Coef: 0.000
     Main XSec: X-C250-1       X-C250-1                   Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000          0.000                       Inlet Ctrl Spec: Use dn
     Aux XSec1:                                           Stabilizer Option: None
  AuxElev2(ft): 0.000          0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):

Length Updated per addition of nodes.  3/16/11 JPI
```

Invert updated per survey. 4/20/11 JPI

Name:	L-C255C1	From Node: N-C255	Length(ft):	330.00
Group:	SM1	To Node: N-C100	Count:	1

	UPSTREAM	DOWNSTREAM		
			Friction Equation:	Automatic
Geometry:	Irregular	Irregular	Solution Algorithm:	Automatic
Invert(ft):	6.800	3.870	Flow:	Both
TClpInitZ(ft):	9999.000	9999.000	Contraction Coef:	0.100
Manning's N:			Expansion Coef:	0.300
Top Clip(ft):			Entrance Loss Coef:	0.000
Bot Clip(ft):			Exit Loss Coef:	0.000
Main XSec:	X-C255-1	X-C255-2	Outlet Ctrl Spec:	Use dc or tw
AuxElev1(ft):	0.000	0.000	Inlet Ctrl Spec:	Use dc
Aux XSec1:			Stabilizer Option:	None
AuxElev2(ft):	0.000	0.000		
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

Added to break channel into 2 parts to better show channel overtopping area. JPI 4/21/11

Updated DS IE per Bees Ferry Widening 5/5/15 JPI

Name:	L-C260C1	From Node: N-C260	Length(ft):	315.00
Group:	SM1	To Node: N-C255	Count:	1

	UPSTREAM	DOWNSTREAM		
			Friction Equation:	Average Conveyance
Geometry:	Irregular	Irregular	Solution Algorithm:	Automatic
Invert(ft):	8.300	6.800	Flow:	Both
TClpInitZ(ft):	9999.000	999.000	Contraction Coef:	0.100
Manning's N:			Expansion Coef:	0.300
Top Clip(ft):			Entrance Loss Coef:	0.000
Bot Clip(ft):			Exit Loss Coef:	0.000
Main XSec:	X-C260-1	X-C260-1	Outlet Ctrl Spec:	Use dc or tw
AuxElev1(ft):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Aux XSec1:			Stabilizer Option:	None
AuxElev2(ft):	0.000	0.000		
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

Name:	L-C300C1	From Node: N-C300	Length(ft):	175.00
Group:	MB	To Node: N-C310	Count:	1

	UPSTREAM	DOWNSTREAM		
			Friction Equation:	Average Conveyance
Geometry:	Trapezoidal	Trapezoidal	Solution Algorithm:	Always Outlet
Invert(ft):	3.200	3.400	Flow:	Both
TClpInitZ(ft):	9999.000	9999.000	Contraction Coef:	0.100
Manning's N:	0.045000	0.045000	Expansion Coef:	0.300
Top Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Bot Clip(ft):	0.000	0.000	Exit Loss Coef:	0.000
Main XSec:			Outlet Ctrl Spec:	Use dc or tw
AuxElev1(ft):			Inlet Ctrl Spec:	Use dn
Aux XSec1:			Stabilizer Option:	None
AuxElev2(ft):				
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):	13.000	10.000		
LtSdSlp(h/v):	2.00	2.00		
RtSdSlp(h/v):	2.00	2.00		

Updated per survey 4/9/09. JP

```
---------------------------------------------------------------------------------------------------
          Name: L-C301C1            From Node: N-C305            Length(ft): 204.00
         Group: SM1                   To Node: N-C304                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
      Geometry: Irregular      Irregular                Solution Algorithm: Always Outlet
    Invert(ft): 7.500          5.770                                 Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                Contraction Coef: 0.100
   Manning's N:                                            Expansion Coef: 0.300
  Top Clip(ft):                                       Entrance Loss Coef: 0.000
  Bot Clip(ft):                                           Exit Loss Coef: 0.000
     Main XSec: X-C305C1         X-C305C1              Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000            0.000                  Inlet Ctrl Spec: Use dc
     Aux XSec1:                                        Stabilizer Option: None
  AuxElev2(ft): 0.000            0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):

Overflow channel from lidar.  4/21/09.  JP

---------------------------------------------------------------------------------------------------
          Name: L-C310C1            From Node: N-C310            Length(ft): 40.00
         Group: MB                    To Node: N-C320                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
      Geometry: Trapezoidal    Trapezoidal              Solution Algorithm: Always Outlet
    Invert(ft): 3.200          2.860                                 Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                Contraction Coef: 0.100
   Manning's N: 0.045000       0.045000                  Expansion Coef: 0.300
  Top Clip(ft): 0.000          0.000                 Entrance Loss Coef: 0.000
  Bot Clip(ft): 0.000          0.000                     Exit Loss Coef: 0.000
     Main XSec:                                        Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft):                                         Inlet Ctrl Spec: Use dn
     Aux XSec1:                                        Stabilizer Option: None
  AuxElev2(ft):
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft): 13.000          7.000
  LtSdSlp(h/v): 2.00            2.00
  RtSdSlp(h/v): 2.00            2.00

Updated per survey 4/9/09.  JP

---------------------------------------------------------------------------------------------------
          Name: L-C380C1            From Node: N-B380            Length(ft): 460.00
         Group: HH                    To Node: N-B200                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Automatic
      Geometry: Irregular      Irregular                Solution Algorithm: Automatic
    Invert(ft): 2.000          2.000                                 Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                Contraction Coef: 0.100
   Manning's N:                                            Expansion Coef: 0.300
  Top Clip(ft):                                       Entrance Loss Coef: 0.000
  Bot Clip(ft):                                           Exit Loss Coef: 0.000
     Main XSec: X-C180-1         X-C180-1              Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000            0.000                  Inlet Ctrl Spec: Use dn
     Aux XSec1:                                        Stabilizer Option: None
  AuxElev2(ft): 0.000            0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):

Length changed to remove double counted area.  3/16/11  JPI

---------------------------------------------------------------------------------------------------
          Name: L-G010Cl            From Node: N-G010            Length(ft): 2500.00
         Group: RR                    To Node: N-A160                 Count: 1
```

```
                UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
      Geometry: Irregular      Irregular                 Solution Algorithm: Automatic
    Invert(ft): 3.100          2.540                                Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.100
   Manning's N:                                            Expansion Coef: 0.300
  Top Clip(ft):                                         Entrance Loss Coef: 0.000
  Bot Clip(ft):                                             Exit Loss Coef: 0.000
     Main XSec: X-G010-1       X-G010-1                   Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000          0.000                       Inlet Ctrl Spec: Use dn
     Aux XSec1:                                          Stabilizer Option: None
  AuxElev2(ft): 0.000          0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):

US IE updated per Bees Ferry Rd Widening 5/5/15 JPI

-------------------------------------------------------------------------------------------------
          Name: L-G021C1            From Node: N-G021            Length(ft): 480.00
         Group: BL                    To Node: N-G020                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Automatic
      Geometry: Irregular      Irregular                 Solution Algorithm: Always Outlet
    Invert(ft): 4.000          3.510                                Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.100
   Manning's N:                                            Expansion Coef: 0.300
  Top Clip(ft):                                         Entrance Loss Coef: 0.000
  Bot Clip(ft):                                             Exit Loss Coef: 0.000
     Main XSec: X-G030-1       X-G030-1                   Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000          0.000                       Inlet Ctrl Spec: Use dc
     Aux XSec1:                                          Stabilizer Option: None
  AuxElev2(ft): 0.000          0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):

Added per Verdier Apts.  6/2/15  JPI

-------------------------------------------------------------------------------------------------
          Name: L-G022C1            From Node: N-G022            Length(ft): 75.00
         Group: BL                    To Node: N-G021                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
      Geometry: Trapezoidal    Trapezoidal               Solution Algorithm: Always Inlet
    Invert(ft): 7.810          4.000                                Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.100
   Manning's N: 0.040000       0.040000                    Expansion Coef: 0.300
  Top Clip(ft): 0.000          0.000                     Entrance Loss Coef: 0.000
  Bot Clip(ft): 0.000          0.000                         Exit Loss Coef: 0.000
     Main XSec:                                          Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft):                                           Inlet Ctrl Spec: Use dc
     Aux XSec1:                                          Stabilizer Option: None
  AuxElev2(ft):
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft): 2.000          2.000
  LtSdSlp(h/v): 3.00           3.00
  RtSdSlp(h/v): 3.00           3.00

Added per Verdier Apts.  JPI 6/2/15

-------------------------------------------------------------------------------------------------
          Name: L-G025AC1           From Node: N-G025A           Length(ft): 166.00
         Group: BL                    To Node: N-G025                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Automatic
      Geometry: Trapezoidal    Trapezoidal               Solution Algorithm: Always Inlet
    Invert(ft): 7.730          4.500                                Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.100
```

```
   Manning's N: 0.040000       0.040000                    Expansion Coef: 0.300
  Top Clip(ft): 0.000          0.000                    Entrance Loss Coef: 0.000
  Bot Clip(ft): 0.000          0.000                        Exit Loss Coef: 0.000
     Main XSec:                                         Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft):                                          Inlet Ctrl Spec: Use dc
     Aux XSec1:                                       Stabilizer Option: None
  AuxElev2(ft):
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft): 2.000          2.000
  LtSdSlp(h/v): 3.00           2.00
  RtSdSlp(h/v): 3.00           2.00

Added per Verdier Apts.  JPI 6/2/15

-------------------------------------------------------------------------------------------------
          Name: L-G025C1            From Node: N-G025            Length(ft): 220.00
         Group: BL                    To Node: N-G021                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
      Geometry: Irregular      Irregular                Solution Algorithm: Always Outlet
    Invert(ft): 4.500          4.000                                 Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.100
   Manning's N:                                            Expansion Coef: 0.300
  Top Clip(ft):                                         Entrance Loss Coef: 0.000
  Bot Clip(ft):                                             Exit Loss Coef: 0.000
     Main XSec: X-G030-1       X-G030-1                   Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000          0.000                       Inlet Ctrl Spec: Use dc
     Aux XSec1:                                       Stabilizer Option: None
  AuxElev2(ft): 0.000          0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):

Added per Verdier Apts.  JPI 6/2/15

-------------------------------------------------------------------------------------------------
          Name: L-G028AC1           From Node: N-G028            Length(ft): 380.00
         Group: BL                    To Node: N-G025                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
      Geometry: Irregular      Irregular                Solution Algorithm: Always Outlet
    Invert(ft): 5.000          4.500                                 Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.100
   Manning's N:                                            Expansion Coef: 0.300
  Top Clip(ft):                                         Entrance Loss Coef: 0.000
  Bot Clip(ft):                                             Exit Loss Coef: 0.000
     Main XSec: X-G030-1       X-G030-1                   Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000          0.000                       Inlet Ctrl Spec: Use dc
     Aux XSec1:                                       Stabilizer Option: None
  AuxElev2(ft): 0.000          0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):

Added per Verdier Apts.  JPI 6/2/15

-------------------------------------------------------------------------------------------------
          Name: L-G028C1            From Node: N-G028A           Length(ft): 110.00
         Group: BL                    To Node: N-G028                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
      Geometry: Trapezoidal    Trapezoidal              Solution Algorithm: Automatic
    Invert(ft): 7.780          5.000                                 Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.100
   Manning's N: 0.012000       0.012000                   Expansion Coef: 0.300
  Top Clip(ft): 0.000          0.000                    Entrance Loss Coef: 0.000
  Bot Clip(ft): 0.000          0.000                        Exit Loss Coef: 0.000
     Main XSec:                                         Outlet Ctrl Spec: Use dc or tw
```

```
  AuxElev1(ft):                                          Inlet Ctrl Spec: Use dc
     Aux XSec1:                                       Stabilizer Option: None
  AuxElev2(ft):
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft): 2.000          2.000
  LtSdSlp(h/v): 3.00           3.00
  RtSdSlp(h/v): 3.00           3.00

Added per Verdier Apts.  JPI 6/2/15

-------------------------------------------------------------------------------------------------
          Name: L-G030C1            From Node: N-G030            Length(ft): 2220.00
         Group: BL                    To Node: N-G028                 Count: 1

                UPSTREAM       DOWNSTREAM                Friction Equation: Average Conveyance
      Geometry: Irregular      Irregular                Solution Algorithm: Always Outlet
    Invert(ft): 6.000          5.000                              Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                 Contraction Coef: 0.100
   Manning's N:                                          Expansion Coef: 0.300
  Top Clip(ft):                                        Entrance Loss Coef: 0.000
  Bot Clip(ft):                                            Exit Loss Coef: 0.000
     Main XSec: X-G030-1       X-G030-1                 Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000          0.000                     Inlet Ctrl Spec: Use dn
     Aux XSec1:                                        Stabilizer Option: None
  AuxElev2(ft): 0.000          0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):

DS IE updated per Bees Ferry Rd Widening 5/5/15 JPI

Updated length and DS IE per Verdier apts.  JPI  6/2/15

-------------------------------------------------------------------------------------------------
          Name: L-G042C1            From Node: N-G042            Length(ft): 980.00
         Group: BL                    To Node: N-G020                 Count: 1

                UPSTREAM       DOWNSTREAM                Friction Equation: Average Conveyance
      Geometry: Irregular      Irregular                Solution Algorithm: Automatic
    Invert(ft): 3.200          3.510                              Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                 Contraction Coef: 0.100
   Manning's N:                                          Expansion Coef: 0.300
  Top Clip(ft):                                        Entrance Loss Coef: 0.000
  Bot Clip(ft):                                            Exit Loss Coef: 0.000
     Main XSec: X-G050-2       X-G050-2                 Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000          0.000                     Inlet Ctrl Spec: Use dn
     Aux XSec1:                                        Stabilizer Option: None
  AuxElev2(ft): 0.000          0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):

Added per Faison Apt.  JPI 6/1/15.

-------------------------------------------------------------------------------------------------
          Name: L-G044AC1           From Node: N-G044A           Length(ft): 115.00
         Group: BL                    To Node: N-G044                 Count: 1

                UPSTREAM       DOWNSTREAM                Friction Equation: Average Conveyance
      Geometry: Trapezoidal    Trapezoidal              Solution Algorithm: Automatic
    Invert(ft): 11.500         3.700                              Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                 Contraction Coef: 0.100
   Manning's N: 0.040000       0.040000                  Expansion Coef: 0.300
  Top Clip(ft): 0.000          0.000                    Entrance Loss Coef: 0.000
  Bot Clip(ft): 0.000          0.000                        Exit Loss Coef: 0.000
     Main XSec:                                        Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft):                                          Inlet Ctrl Spec: Use dc
     Aux XSec1:                                        Stabilizer Option: None
```

```
  AuxElev2(ft):
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft): 2.000          2.000
  LtSdSlp(h/v): 3.00           3.00
  RtSdSlp(h/v): 3.00           3.00

Added per Blue Water Gas Station.  Channel thru wetland from underground detention outfall to channel.  JPI 6/4/

-------------------------------------------------------------------------------------------------
          Name: L-G044C1            From Node: N-G044             Length(ft): 560.00
         Group: BL                    To Node: N-G043                  Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
      Geometry: Irregular      Irregular                 Solution Algorithm: Automatic
    Invert(ft): 3.700          3.300                                Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.100
   Manning's N:                                            Expansion Coef: 0.300
  Top Clip(ft):                                         Entrance Loss Coef: 0.000
  Bot Clip(ft):                                             Exit Loss Coef: 0.000
     Main XSec: X-G050-1        X-G050-1                  Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000           0.000                      Inlet Ctrl Spec: Use dc
     Aux XSec1:                                          Stabilizer Option: None
  AuxElev2(ft): 0.000           0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):

Added per Faison and Blue Water Gas Station.  JPI 6/4/15.

-------------------------------------------------------------------------------------------------
          Name: L-G045AC1           From Node: N-G045A            Length(ft): 80.00
         Group: BL                    To Node: N-G045                  Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Automatic
      Geometry: Trapezoidal    Trapezoidal               Solution Algorithm: Always Inlet
    Invert(ft): 6.650          4.000                                Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.100
   Manning's N: 0.040000       0.040000                     Expansion Coef: 0.300
  Top Clip(ft): 0.000          0.000                     Entrance Loss Coef: 0.000
  Bot Clip(ft): 0.000          0.000                         Exit Loss Coef: 0.000
     Main XSec:                                          Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft):                                           Inlet Ctrl Spec: Use dn
     Aux XSec1:                                          Stabilizer Option: None
  AuxElev2(ft):
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft): 2.000          2.000
  LtSdSlp(h/v): 3.00           3.00
  RtSdSlp(h/v): 3.00           3.00

Added per Faison Apts.  JPI 6/1/15.

-------------------------------------------------------------------------------------------------
          Name: L-G045C1            From Node: N-G045             Length(ft): 395.00
         Group: BL                    To Node: N-G044                  Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Automatic
      Geometry: Irregular      Irregular                 Solution Algorithm: Automatic
    Invert(ft): 4.000          3.700                                Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                   Contraction Coef: 0.100
   Manning's N:                                            Expansion Coef: 0.300
  Top Clip(ft):                                         Entrance Loss Coef: 0.000
  Bot Clip(ft):                                             Exit Loss Coef: 0.000
     Main XSec: X-G050-1        X-G050-1                  Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000           0.000                      Inlet Ctrl Spec: Use dn
     Aux XSec1:                                          Stabilizer Option: None
  AuxElev2(ft): 0.000           0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
```

```
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):

Added per Faison Apartments and Blue Water Gas Station.  JPI 6/4/15.

-------------------------------------------------------------------------------------------------
          Name: L-G050C1            From Node: N-G050            Length(ft): 725.00
         Group: BL                    To Node: N-G045                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
      Geometry: Irregular      Irregular                Solution Algorithm: Automatic
    Invert(ft): 4.300          4.000                                 Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                Contraction Coef: 0.100
   Manning's N:                                           Expansion Coef: 0.300
  Top Clip(ft):                                       Entrance Loss Coef: 0.000
  Bot Clip(ft):                                           Exit Loss Coef: 0.000
     Main XSec: X-G050-1       X-G050-1                 Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000          0.000                     Inlet Ctrl Spec: Use dn
     Aux XSec1:                                         Stabilizer Option: None
  AuxElev2(ft): 0.000          0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):

DS IE updated per Bees Ferry Rd Widening 5/5/15 JPI

Length, DS IE and DS X-Sect revised to add Faison Apartments.  JPI 6/1/15.

-------------------------------------------------------------------------------------------------
          Name: L-G100C1            From Node: N-G100            Length(ft): 2600.00
         Group: BL                    To Node: N-G050                 Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
      Geometry: Irregular      Irregular                Solution Algorithm: Automatic
    Invert(ft): 4.600          4.300                                 Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                Contraction Coef: 0.100
   Manning's N:                                           Expansion Coef: 0.300
  Top Clip(ft):                                       Entrance Loss Coef: 0.000
  Bot Clip(ft):                                           Exit Loss Coef: 0.000
     Main XSec: X-G100-1       X-G100-1                 Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000          0.000                     Inlet Ctrl Spec: Use dn
     Aux XSec1:                                         Stabilizer Option: None
  AuxElev2(ft): 0.000          0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
  RtSdSlp(h/v):



-------------------------------------------------------------------------------------------------
          Name: L-G170C1            From Node: N-G170            Length(ft): 825.00
         Group: BL                    To Node: N-G170A                Count: 1

                UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
      Geometry: Irregular      Irregular                Solution Algorithm: Automatic
    Invert(ft): 5.700          4.600                                 Flow: Both
 TClpInitZ(ft): 9999.000       9999.000                Contraction Coef: 0.100
   Manning's N:                                           Expansion Coef: 0.300
  Top Clip(ft):                                       Entrance Loss Coef: 0.000
  Bot Clip(ft):                                           Exit Loss Coef: 0.000
     Main XSec: X-G170-1       X-G170-1                 Outlet Ctrl Spec: Use dc or tw
  AuxElev1(ft): 0.000          0.000                     Inlet Ctrl Spec: Use dn
     Aux XSec1:                                         Stabilizer Option: None
  AuxElev2(ft): 0.000          0.000
     Aux XSec2:
 Top Width(ft):
     Depth(ft):
 Bot Width(ft):
  LtSdSlp(h/v):
```

RtSdSlp(h/v):

Revised length of culvert per SWA only

Name:	L-G180C1	From Node: N-G180	Length(ft):	573.00
Group:	BL	To Node: N-G170	Count:	1

	UPSTREAM	DOWNSTREAM		
Geometry:	Trapezoidal	Trapezoidal	Friction Equation:	Average Conveyance
Invert(ft):	6.000	5.700	Solution Algorithm:	Automatic
TClpInitZ(ft):	9999.000	9999.000	Flow:	None
Manning's N:	0.040000	0.040000	Contraction Coef:	0.100
Top Clip(ft):	0.000	0.000	Expansion Coef:	0.300
Bot Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Main XSec:			Exit Loss Coef:	0.000
AuxElev1(ft):			Outlet Ctrl Spec:	Use dc or tw
Aux XSec1:			Inlet Ctrl Spec:	Use dn
AuxElev2(ft):			Stabilizer Option:	None
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):	8.000	9.000		
LtSdSlp(h/v):	1.50	1.50		
RtSdSlp(h/v):	1.50	1.50		

SWA - C-15
Appears to misrepresent conveyance through the existing dirt road crossing

---

Name:	L-I175C1	From Node: N-I180	Length(ft):	260.00
Group:	MB	To Node: N-I170	Count:	1

	UPSTREAM	DOWNSTREAM		
Geometry:	Irregular	Irregular	Friction Equation:	Average Conveyance
Invert(ft):	11.000	9.000	Solution Algorithm:	Automatic
TClpInitZ(ft):	9999.000	9999.000	Flow:	Both
Manning's N:			Contraction Coef:	0.100
Top Clip(ft):			Expansion Coef:	0.300
Bot Clip(ft):			Entrance Loss Coef:	0.000
Main XSec:	X-I175C1	X-I175C1	Exit Loss Coef:	0.000
AuxElev1(ft):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Aux XSec1:			Inlet Ctrl Spec:	Use dc
AuxElev2(ft):	0.000	0.000	Stabilizer Option:	None
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):				
LtSdSlp(h/v):				
RtSdSlp(h/v):				

Overflow link. Added 4/21/09. JP

Name:	L-I290C1	From Node: N-I290	Length(ft):	70.00
Group:	MB	To Node: N-C290	Count:	1

	UPSTREAM	DOWNSTREAM		
Geometry:	Trapezoidal	Trapezoidal	Friction Equation:	Average Conveyance
Invert(ft):	7.400	6.940	Solution Algorithm:	Always Outlet
TClpInitZ(ft):	9999.000	9999.000	Flow:	Both
Manning's N:	0.120000	0.120000	Contraction Coef:	0.100
Top Clip(ft):	0.000	0.000	Expansion Coef:	0.300
Bot Clip(ft):	0.000	0.000	Entrance Loss Coef:	0.000
Main XSec:			Exit Loss Coef:	0.000
AuxElev1(ft):			Outlet Ctrl Spec:	Use dc or tw
Aux XSec1:			Inlet Ctrl Spec:	Use dn
AuxElev2(ft):			Stabilizer Option:	None
Aux XSec2:				
Top Width(ft):				
Depth(ft):				
Bot Width(ft):	3.000	3.000		
LtSdSlp(h/v):	3.00	2.50		
RtSdSlp(h/v):	1.50	1.50		

Updated per survey 4/9/09. JP

Updated Model
Drop Structure Input

```
         Name: L-A083BD1           From Node: N-A083B            Length(ft): 48.00
        Group: RR                    To Node: N-A083A                 Count: 1

               UPSTREAM       DOWNSTREAM                Friction Equation: Average Conveyance
     Geometry: Circular       Circular                 Solution Algorithm: Automatic
     Span(in): 12.00          12.00                                  Flow: Both
     Rise(in): 12.00          12.00                    Entrance Loss Coef: 0.500
   Invert(ft): 10.570         9.000                        Exit Loss Coef: 0.000
  Manning's N: 0.011000       0.011000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                       Inlet Ctrl Spec: Use dc
 Bot Clip(in): 0.000          0.000

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Added per survey on Bees Ferry Apts (Shadowmoss Pointe).  Orfice is actually at elevation 5.3 (underwater).  Out
*** Weir 1 of 2 for Drop Structure L-A083BD1 ***
                                                                                  TABLE
                  Count: 1                     Bottom Clip(in): 0.000
                   Type: Vertical: Mavis          Top Clip(in): 0.000
                   Flow: Both                   Weir Disc Coef: 3.200
               Geometry: Circular             Orifice Disc Coef: 0.600

               Span(in): 2.00                       Invert(ft): 10.570
               Rise(in): 2.00                 Control Elev(ft): 10.570

*** Weir 2 of 2 for Drop Structure L-A083BD1 ***
                                                                                  TABLE
                  Count: 1                     Bottom Clip(in): 0.000
                   Type: Horizontal               Top Clip(in): 0.000
                   Flow: Both                   Weir Disc Coef: 3.200
               Geometry: Rectangular          Orifice Disc Coef: 0.600

               Span(in): 72.00                      Invert(ft): 11.920
               Rise(in): 72.00                Control Elev(ft): 11.920


----------------------------------------------------------------------------------------------------
         Name: L-A102D1            From Node: N-A102             Length(ft): 30.00
        Group: RR                    To Node: N-A101                  Count: 1

               UPSTREAM       DOWNSTREAM                Friction Equation: Automatic
     Geometry: Circular       Circular                 Solution Algorithm: Automatic
     Span(in): 12.00          12.00                                  Flow: Both
     Rise(in): 12.00          12.00                    Entrance Loss Coef: 0.200
   Invert(ft): 7.950          7.800                        Exit Loss Coef: 0.000
  Manning's N: 0.011000       0.011000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                       Inlet Ctrl Spec: Use dc
 Bot Clip(in): 0.000          0.000

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Pond 3 outfall structure.  Survey.  I set both weirs to elevation 7.95 to remove ICPR warnings.  The outfall pip
*** Weir 1 of 3 for Drop Structure L-A102D1 ***
                                                                                  TABLE
                  Count: 1                     Bottom Clip(in): 0.000
                   Type: Vertical: Mavis          Top Clip(in): 0.000
                   Flow: Both                   Weir Disc Coef: 3.200
               Geometry: Circular             Orifice Disc Coef: 0.600

               Span(in): 24.00                      Invert(ft): 7.950
               Rise(in): 24.00                Control Elev(ft): 7.950

*** Weir 2 of 3 for Drop Structure L-A102D1 ***
                                                                                  TABLE
                  Count: 1                     Bottom Clip(in): 0.000
                   Type: Vertical: Mavis          Top Clip(in): 0.000
                   Flow: Both                   Weir Disc Coef: 3.200
               Geometry: Circular             Orifice Disc Coef: 0.600
```

```
              Span(in): 3.00                      Invert(ft): 7.950
              Rise(in): 3.00                  Control Elev(ft): 7.950

*** Weir 3 of 3 for Drop Structure L-A102D1 ***
                                                                                TABLE
                 Count: 1                     Bottom Clip(in): 0.000
                  Type: Horizontal               Top Clip(in): 0.000
                  Flow: Both                   Weir Disc Coef: 3.200
              Geometry: Circular             Orifice Disc Coef: 0.600

              Span(in): 72.00                     Invert(ft): 10.950
              Rise(in): 72.00                 Control Elev(ft): 10.950


-------------------------------------------------------------------------------------------------------
         Name: L-B040D1           From Node: N-B040            Length(ft): 40.00
        Group: HH                   To Node: N-B030                 Count: 1

               UPSTREAM       DOWNSTREAM                Friction Equation: Average Conveyance
     Geometry: Circular       Circular                  Solution Algorithm: Automatic
     Span(in): 30.00          30.00                                Flow: Both
     Rise(in): 30.00          30.00                     Entrance Loss Coef: 0.500
   Invert(ft): 2.100          2.100                         Exit Loss Coef: 0.000
  Manning's N: 0.025000       0.025000                    Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Headwall

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting


*** Weir 1 of 1 for Drop Structure L-B040D1 ***
                                                                                TABLE
                 Count: 1                     Bottom Clip(in): 15.000
                  Type: Horizontal               Top Clip(in): 0.000
                  Flow: Both                   Weir Disc Coef: 3.300
              Geometry: Circular             Orifice Disc Coef: 0.600

              Span(in): 30.00                     Invert(ft): 8.000
              Rise(in): 30.00                 Control Elev(ft): 8.000


-------------------------------------------------------------------------------------------------------
         Name: L-B100D1           From Node: N-B100            Length(ft): 70.00
        Group: HH                   To Node: N-B090                 Count: 1

               UPSTREAM       DOWNSTREAM                Friction Equation: Average Conveyance
     Geometry: Circular       Circular                  Solution Algorithm: Automatic
     Span(in): 36.00          36.00                                Flow: Both
     Rise(in): 36.00          36.00                     Entrance Loss Coef: 0.200
   Invert(ft): 3.510          2.870                         Exit Loss Coef: 1.000
  Manning's N: 0.012000       0.012000                    Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting


*** Weir 1 of 2 for Drop Structure L-B100D1 ***
                                                                                TABLE
                 Count: 1                     Bottom Clip(in): 0.000
                  Type: Horizontal               Top Clip(in): 0.000
                  Flow: Both                   Weir Disc Coef: 3.300
              Geometry: Rectangular          Orifice Disc Coef: 0.600

              Span(in): 48.00                     Invert(ft): 6.500
              Rise(in): 42.00                 Control Elev(ft): 6.500
```

```
*** Weir 2 of 2 for Drop Structure L-B100D1 ***
                                                                                TABLE
                  Count: 1                       Bottom Clip(in): 0.000
                   Type: Vertical: Mavis            Top Clip(in): 0.000
                   Flow: Both                    Weir Disc Coef: 3.300
               Geometry: Rectangular           Orifice Disc Coef: 0.600

               Span(in): 32.00                       Invert(ft): 6.250
               Rise(in): 3.00                 Control Elev(ft): 6.250


-------------------------------------------------------------------------------------------------
        Name: L-B140D1           From Node: N-B140            Length(ft): 65.00
       Group: HH                   To Node: N-B130                 Count: 3

              UPSTREAM       DOWNSTREAM                Friction Equation: Average Conveyance
    Geometry: Circular       Circular                 Solution Algorithm: Automatic
    Span(in): 36.00          36.00                                Flow: Both
    Rise(in): 36.00          36.00                    Entrance Loss Coef: 0.200
   Invert(ft): 1.500         2.300                        Exit Loss Coef: 1.000
  Manning's N: 0.012000      0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000         0.000                       Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000         0.000

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting


*** Weir 1 of 1 for Drop Structure L-B140D1 ***
                                                                                TABLE
                  Count: 1                       Bottom Clip(in): 0.000
                   Type: Vertical: Mavis            Top Clip(in): 0.000
                   Flow: Both                    Weir Disc Coef: 3.300
               Geometry: Rectangular           Orifice Disc Coef: 0.600

               Span(in): 178.00                      Invert(ft): 4.000
               Rise(in): 1000.00              Control Elev(ft): 4.000


-------------------------------------------------------------------------------------------------
        Name: L-B230D1           From Node: N-B230            Length(ft): 40.00
       Group: HH                   To Node: N-B220                 Count: 1

              UPSTREAM       DOWNSTREAM                Friction Equation: Average Conveyance
    Geometry: Circular       Circular                 Solution Algorithm: Automatic
    Span(in): 30.00          30.00                                Flow: Both
    Rise(in): 30.00          30.00                    Entrance Loss Coef: 0.000
   Invert(ft): 4.700         4.600                        Exit Loss Coef: 0.000
  Manning's N: 0.025000      0.025000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000         0.000                       Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000         0.000

Upstream FHWA Inlet Edge Description:
Circular CMP: Headwall

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting


*** Weir 1 of 1 for Drop Structure L-B230D1 ***
                                                                                TABLE
                  Count: 1                       Bottom Clip(in): 24.000
                   Type: Horizontal                 Top Clip(in): 0.000
                   Flow: Both                    Weir Disc Coef: 3.300
               Geometry: Circular              Orifice Disc Coef: 0.600

               Span(in): 48.00                       Invert(ft): 9.000
               Rise(in): 48.00                Control Elev(ft): 9.000


-------------------------------------------------------------------------------------------------
        Name: L-C086BD1          From Node: N-C086B           Length(ft): 30.00
       Group: RR                   To Node: N-C086A                Count: 1
```

```
              UPSTREAM       DOWNSTREAM                Friction Equation: Automatic
     Geometry: Circular       Circular                Solution Algorithm: Always Outlet
     Span(in): 24.00          24.00                                Flow: Both
     Rise(in): 24.00          24.00                   Entrance Loss Coef: 0.500
   Invert(ft): 6.890          7.020                       Exit Loss Coef: 0.000
  Manning's N: 0.011000       0.011000                  Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                      Inlet Ctrl Spec: Use dc
 Bot Clip(in): 0.000          0.000

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Added per McAlisters.  6/25/15  JPI
*** Weir 1 of 2 for Drop Structure L-C086BD1 ***
                                                                                    TABLE
                  Count: 3                       Bottom Clip(in): 0.000
                   Type: Vertical: Mavis            Top Clip(in): 0.000
                   Flow: Both                    Weir Disc Coef: 3.200
              Geometry: Rectangular           Orifice Disc Coef: 0.600

              Span(in): 36.00                       Invert(ft): 10.640
              Rise(in): 6.50                   Control Elev(ft): 10.640

*** Weir 2 of 2 for Drop Structure L-C086BD1 ***
                                                                                    TABLE
                  Count: 1                       Bottom Clip(in): 0.000
                   Type: Vertical: Mavis            Top Clip(in): 0.000
                   Flow: Both                    Weir Disc Coef: 3.200
              Geometry: Rectangular           Orifice Disc Coef: 0.600

              Span(in): 3.00                        Invert(ft): 8.180
              Rise(in): 36.00                  Control Elev(ft): 8.180


-------------------------------------------------------------------------------------------------
         Name: L-G025BD1           From Node: N-G025B            Length(ft): 90.00
        Group: BL                    To Node: N-G025A                 Count: 1

              UPSTREAM       DOWNSTREAM                Friction Equation: Average Conveyance
     Geometry: Circular       Circular                Solution Algorithm: Automatic
     Span(in): 24.00          24.00                                Flow: Both
     Rise(in): 24.00          24.00                   Entrance Loss Coef: 0.500
   Invert(ft): 7.980          7.730                       Exit Loss Coef: 0.000
  Manning's N: 0.012000       0.012000                  Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                      Inlet Ctrl Spec: Use dc
 Bot Clip(in): 0.000          0.000

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

Added per Verdier Apts.  Outfall structure for Pond 1.  JPI 6/2/15
*** Weir 1 of 3 for Drop Structure L-G025BD1 ***
                                                                                    TABLE
                  Count: 1                       Bottom Clip(in): 0.000
                   Type: Vertical: Mavis            Top Clip(in): 0.000
                   Flow: Both                    Weir Disc Coef: 3.200
              Geometry: Circular              Orifice Disc Coef: 0.600

              Span(in): 6.00                        Invert(ft): 8.870
              Rise(in): 6.00                   Control Elev(ft): 8.870

*** Weir 2 of 3 for Drop Structure L-G025BD1 ***
                                                                                    TABLE
                  Count: 1                       Bottom Clip(in): 0.000
                   Type: Vertical: Mavis            Top Clip(in): 0.000
                   Flow: Both                    Weir Disc Coef: 3.200
              Geometry: Rectangular           Orifice Disc Coef: 0.600

              Span(in): 6.50                        Invert(ft): 9.200
```

```
              Rise(in): 12.00                 Control Elev(ft): 9.200

*** Weir 3 of 3 for Drop Structure L-G025BD1 ***
                                                                                TABLE
                 Count: 3                      Bottom Clip(in): 0.000
                  Type: Vertical: Mavis           Top Clip(in): 0.000
                  Flow: Both                   Weir Disc Coef: 3.200
              Geometry: Rectangular          Orifice Disc Coef: 0.600

              Span(in): 36.00                       Invert(ft): 10.650
              Rise(in): 12.00                 Control Elev(ft): 10.650


-------------------------------------------------------------------------------------------------
         Name: L-G028BD1          From Node: N-G028B           Length(ft): 50.00
        Group: BL                   To Node: N-G028A                Count: 1

               UPSTREAM       DOWNSTREAM                Friction Equation: Average Conveyance
     Geometry: Circular       Circular                 Solution Algorithm: Automatic
     Span(in): 24.00          24.00                                Flow: Both
     Rise(in): 24.00          24.00                    Entrance Loss Coef: 0.500
   Invert(ft): 7.980          7.780                        Exit Loss Coef: 0.000
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                       Inlet Ctrl Spec: Use dc
 Bot Clip(in): 0.000          0.000

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Added per Verdier Apts. Outfall for Pond 3 (asbuilts) JPI 6/2/15
*** Weir 1 of 2 for Drop Structure L-G028BD1 ***
                                                                                TABLE
                 Count: 1                      Bottom Clip(in): 0.000
                  Type: Vertical: Mavis           Top Clip(in): 0.000
                  Flow: Both                   Weir Disc Coef: 3.200
              Geometry: Circular             Orifice Disc Coef: 0.600

              Span(in): 8.00                        Invert(ft): 7.960
              Rise(in): 8.00                  Control Elev(ft): 7.960

*** Weir 2 of 2 for Drop Structure L-G028BD1 ***
                                                                                TABLE
                 Count: 3                      Bottom Clip(in): 0.000
                  Type: Vertical: Mavis           Top Clip(in): 0.000
                  Flow: Both                   Weir Disc Coef: 3.200
              Geometry: Circular             Orifice Disc Coef: 0.600

              Span(in): 36.00                       Invert(ft): 10.550
              Rise(in): 36.00                 Control Elev(ft): 10.550


-------------------------------------------------------------------------------------------------
         Name: L-G043AD1          From Node: N-G043A           Length(ft): 69.00
        Group: BL                   To Node: N-G043                 Count: 1

               UPSTREAM       DOWNSTREAM                Friction Equation: Average Conveyance
     Geometry: Circular       Circular                 Solution Algorithm: Automatic
     Span(in): 24.00          24.00                                Flow: Both
     Rise(in): 24.00          24.00                    Entrance Loss Coef: 0.500
   Invert(ft): 6.700          6.080                        Exit Loss Coef: 0.000
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                       Inlet Ctrl Spec: Use dc
 Bot Clip(in): 0.000          0.000

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Added per Faison Apts.  Pond 3 outfall.  JPI 6/2/15.
*** Weir 1 of 2 for Drop Structure L-G043AD1 ***
                                                                                TABLE
```

```
                  Count: 1                      Bottom Clip(in): 0.000
                   Type: Vertical: Mavis           Top Clip(in): 0.000
                   Flow: Both                   Weir Disc Coef: 3.200
               Geometry: Circular             Orifice Disc Coef: 0.600

               Span(in): 4.00                       Invert(ft): 6.700
               Rise(in): 4.00                 Control Elev(ft): 6.700

*** Weir 2 of 2 for Drop Structure L-G043AD1 ***
                                                                    TABLE
                  Count: 1                      Bottom Clip(in): 0.000
                   Type: Horizontal               Top Clip(in): 0.000
                   Flow: Both                   Weir Disc Coef: 3.200
               Geometry: Rectangular          Orifice Disc Coef: 0.600

               Span(in): 24.00                      Invert(ft): 8.640
               Rise(in): 12.00                Control Elev(ft): 8.640


-------------------------------------------------------------------------------------------------
         Name: L-G045BD1           From Node: N-G045B           Length(ft): 172.00
        Group: BL                    To Node: N-G045A                Count: 1

               UPSTREAM       DOWNSTREAM                Friction Equation: Automatic
     Geometry: Circular       Circular                 Solution Algorithm: Most Restrictive
     Span(in): 36.00          36.00                                Flow: Both
     Rise(in): 36.00          36.00                    Entrance Loss Coef: 0.000
   Invert(ft): 6.850          6.650                        Exit Loss Coef: 1.000
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                       Inlet Ctrl Spec: Use dc
 Bot Clip(in): 0.000          0.000

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Added per Faison Apt.  Pond 2 outfall from asbuilts.  JPI 6/1/15.
*** Weir 1 of 2 for Drop Structure L-G045BD1 ***
                                                                    TABLE
                  Count: 1                      Bottom Clip(in): 0.000
                   Type: Vertical: Mavis           Top Clip(in): 0.000
                   Flow: Both                   Weir Disc Coef: 3.200
               Geometry: Circular             Orifice Disc Coef: 0.600

               Span(in): 10.50                      Invert(ft): 6.780
               Rise(in): 10.50                Control Elev(ft): 6.780

*** Weir 2 of 2 for Drop Structure L-G045BD1 ***
                                                                    TABLE
                  Count: 3                      Bottom Clip(in): 0.000
                   Type: Horizontal               Top Clip(in): 0.000
                   Flow: Both                   Weir Disc Coef: 3.200
               Geometry: Rectangular          Orifice Disc Coef: 0.600

               Span(in): 36.00                      Invert(ft): 8.660
               Rise(in): 14.40                Control Elev(ft): 8.660


-------------------------------------------------------------------------------------------------
         Name: L-G110D1            From Node: N-G110            Length(ft): 381.00
        Group: BL                    To Node: N-G100                 Count: 1

               UPSTREAM       DOWNSTREAM                Friction Equation: Average Conveyance
     Geometry: Circular       Circular                 Solution Algorithm: Automatic
     Span(in): 36.00          36.00                                Flow: Both
     Rise(in): 36.00          36.00                    Entrance Loss Coef: 0.000
   Invert(ft): 9.000          8.500                        Exit Loss Coef: 0.000
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                       Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000

Upstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting
```

Downstream FHWA Inlet Edge Description:
Circular Concrete: Groove end projecting

PS L-D2
*** Weir 1 of 1 for Drop Structure L-G110D1 ***

TABLE

Count:	1	Bottom Clip(in):	0.000
Type:	Horizontal	Top Clip(in):	0.000
Flow:	Both	Weir Disc Coef:	3.200
Geometry:	Rectangular	Orifice Disc Coef:	0.600
Span(in):	36.00	Invert(ft):	11.000
Rise(in):	100.00	Control Elev(ft):	11.000

Name:	L-G400D1	From Node:	N-G400	Length(ft):	56.00
Group:	BL	To Node:	N-G180	Count:	1

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Friction Equation:	Average Conveyance
Span(in):	24.00	24.00	Solution Algorithm:	Automatic
Rise(in):	24.00	24.00	Flow:	Both
Invert(ft):	7.000	5.750	Entrance Loss Coef:	0.500
Manning's N:	0.012000	0.012000	Exit Loss Coef:	0.000
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

*** Weir 1 of 2 for Drop Structure L-G400D1 ***

TABLE

Count:	1	Bottom Clip(in):	0.000
Type:	Vertical: Mavis	Top Clip(in):	0.000
Flow:	Both	Weir Disc Coef:	3.200
Geometry:	Rectangular	Orifice Disc Coef:	0.600
Span(in):	18.00	Invert(ft):	7.000
Rise(in):	9999.00	Control Elev(ft):	7.000

*** Weir 2 of 2 for Drop Structure L-G400D1 ***

TABLE

Count:	1	Bottom Clip(in):	0.000
Type:	Horizontal	Top Clip(in):	0.000
Flow:	Both	Weir Disc Coef:	3.200
Geometry:	Rectangular	Orifice Disc Coef:	0.600
Span(in):	48.00	Invert(ft):	11.500
Rise(in):	48.00	Control Elev(ft):	11.500

Name:	L-G450D1	From Node:	N-G450	Length(ft):	1200.00
Group:	BL	To Node:	N-G440	Count:	1

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Friction Equation:	Average Conveyance
Span(in):	48.00	48.00	Solution Algorithm:	Automatic
Rise(in):	48.00	48.00	Flow:	Both
Invert(ft):	8.500	5.000	Entrance Loss Coef:	0.500
Manning's N:	0.012000	0.012000	Exit Loss Coef:	0.000
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

```
*** Weir 1 of 3 for Drop Structure L-G450D1 ***
                                                                                TABLE
                  Count: 1                      Bottom Clip(in): 0.000
                   Type: Horizontal                Top Clip(in): 0.000
                   Flow: Both                    Weir Disc Coef: 3.200
               Geometry: Rectangular           Orifice Disc Coef: 0.600

               Span(in): 54.00                       Invert(ft): 14.000
               Rise(in): 48.00                 Control Elev(ft): 14.000

*** Weir 2 of 3 for Drop Structure L-G450D1 ***
                                                                                TABLE
                  Count: 1                      Bottom Clip(in): 0.000
                   Type: Vertical: Mavis           Top Clip(in): 0.000
                   Flow: Both                    Weir Disc Coef: 3.200
               Geometry: Rectangular           Orifice Disc Coef: 0.600

               Span(in): 12.00                       Invert(ft): 10.000
               Rise(in): 9999.00               Control Elev(ft): 10.000

*** Weir 3 of 3 for Drop Structure L-G450D1 ***
                                                                                TABLE
                  Count: 1                      Bottom Clip(in): 0.000
                   Type: Vertical: Mavis           Top Clip(in): 0.000
                   Flow: Both                    Weir Disc Coef: 3.200
               Geometry: Rectangular           Orifice Disc Coef: 0.600

               Span(in): 36.00                       Invert(ft): 12.000
               Rise(in): 9999.00               Control Elev(ft): 12.000


----------------------------------------------------------------------------------------------------
         Name: L-G480D1            From Node: N-G480            Length(ft): 1330.00
        Group: BL                    To Node: N-G470                 Count: 1

               UPSTREAM       DOWNSTREAM              Friction Equation: Average Conveyance
     Geometry: Circular       Circular               Solution Algorithm: Automatic
     Span(in): 24.00          24.00                                Flow: Both
     Rise(in): 24.00          24.00                  Entrance Loss Coef: 0.500
   Invert(ft): 9.500          5.500                      Exit Loss Coef: 0.000
  Manning's N: 0.012000       0.012000                Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                    Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


*** Weir 1 of 3 for Drop Structure L-G480D1 ***
                                                                                TABLE
                  Count: 1                      Bottom Clip(in): 0.000
                   Type: Horizontal                Top Clip(in): 0.000
                   Flow: Both                    Weir Disc Coef: 3.200
               Geometry: Rectangular           Orifice Disc Coef: 0.600

               Span(in): 48.00                       Invert(ft): 16.000
               Rise(in): 48.00                 Control Elev(ft): 16.000

*** Weir 2 of 3 for Drop Structure L-G480D1 ***
                                                                                TABLE
                  Count: 1                      Bottom Clip(in): 0.000
                   Type: Vertical: Mavis           Top Clip(in): 0.000
                   Flow: Both                    Weir Disc Coef: 3.200
               Geometry: Circular              Orifice Disc Coef: 0.600

               Span(in): 3.00                        Invert(ft): 10.000
               Rise(in): 3.00                  Control Elev(ft): 10.000

*** Weir 3 of 3 for Drop Structure L-G480D1 ***
                                                                                TABLE
                  Count: 1                      Bottom Clip(in): 0.000
                   Type: Vertical: Mavis           Top Clip(in): 0.000
                   Flow: Both                    Weir Disc Coef: 3.200
```

```
              Geometry: Rectangular          Orifice Disc Coef: 0.600

              Span(in): 24.00                      Invert(ft): 12.500
              Rise(in): 99999.00             Control Elev(ft): 12.500


-------------------------------------------------------------------------------------------------
         Name: L-H100D1           From Node: N-H100            Length(ft): 55.00
        Group: WAL                  To Node: N-A150                 Count: 1

              UPSTREAM       DOWNSTREAM               Friction Equation: Average Conveyance
     Geometry: Circular       Circular                Solution Algorithm: Automatic
     Span(in): 48.00          48.00                                Flow: Both
     Rise(in): 48.00          48.00                   Entrance Loss Coef: 0.500
   Invert(ft): 5.500          5.230                       Exit Loss Coef: 0.889
  Manning's N: 0.012000       0.012000                  Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                      Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

HG&A Revised Design w/Drop Structure
Inv Out?
Length?

*** Weir 1 of 3 for Drop Structure L-H100D1 ***
                                                                                      TABLE
                 Count: 1                      Bottom Clip(in): 0.000
                  Type: Vertical: Mavis           Top Clip(in): 0.000
                  Flow: Both                   Weir Disc Coef: 3.200
              Geometry: Circular             Orifice Disc Coef: 0.600

              Span(in): 5.00                       Invert(ft): 5.500
              Rise(in): 5.00                 Control Elev(ft): 5.500

*** Weir 2 of 3 for Drop Structure L-H100D1 ***
                                                                                      TABLE
                 Count: 1                      Bottom Clip(in): 0.000
                  Type: Vertical: Mavis           Top Clip(in): 0.000
                  Flow: Both                   Weir Disc Coef: 3.200
              Geometry: Rectangular          Orifice Disc Coef: 0.600

              Span(in): 72.00                      Invert(ft): 9.000
              Rise(in): 24.00                Control Elev(ft): 9.000

*** Weir 3 of 3 for Drop Structure L-H100D1 ***
                                                                                      TABLE
                 Count: 1                      Bottom Clip(in): 0.000
                  Type: Horizontal                Top Clip(in): 0.000
                  Flow: Both                   Weir Disc Coef: 3.200
              Geometry: Rectangular          Orifice Disc Coef: 0.600

              Span(in): 72.00                      Invert(ft): 11.000
              Rise(in): 72.00                Control Elev(ft): 11.000


-------------------------------------------------------------------------------------------------
         Name: L-H110D1           From Node: N-H110            Length(ft): 70.00
        Group: WAL                  To Node: N-A160                 Count: 1

              UPSTREAM       DOWNSTREAM               Friction Equation: Average Conveyance
     Geometry: Circular       Circular                Solution Algorithm: Automatic
     Span(in): 48.00          48.00                                Flow: Both
     Rise(in): 48.00          48.00                   Entrance Loss Coef: 0.500
   Invert(ft): 6.000          5.650                       Exit Loss Coef: 0.889
  Manning's N: 0.012000       0.012000                  Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                      Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall
```

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

*** Weir 1 of 3 for Drop Structure L-H110D1 ***

TABLE

Count:	1	Bottom Clip(in):	0.000
Type:	Vertical: Mavis	Top Clip(in):	0.000
Flow:	Both	Weir Disc Coef:	3.200
Geometry:	Circular	Orifice Disc Coef:	0.600
Span(in):	5.00	Invert(ft):	6.000
Rise(in):	5.00	Control Elev(ft):	6.000

*** Weir 2 of 3 for Drop Structure L-H110D1 ***

TABLE

Count:	1	Bottom Clip(in):	0.000
Type:	Vertical: Mavis	Top Clip(in):	0.000
Flow:	Both	Weir Disc Coef:	3.200
Geometry:	Rectangular	Orifice Disc Coef:	0.600
Span(in):	72.00	Invert(ft):	9.000
Rise(in):	24.00	Control Elev(ft):	9.000

*** Weir 3 of 3 for Drop Structure L-H110D1 ***

TABLE

Count:	1	Bottom Clip(in):	0.000
Type:	Horizontal	Top Clip(in):	0.000
Flow:	Both	Weir Disc Coef:	3.200
Geometry:	Rectangular	Orifice Disc Coef:	0.600
Span(in):	72.00	Invert(ft):	11.000
Rise(in):	72.00	Control Elev(ft):	11.000

Name:	L-I180P1	From Node: N-I180	Length(ft): 258.00
Group:	MB	To Node: N-I170	Count: 1

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Friction Equation:	Average Conveyance
Span(in):	15.00	15.00	Solution Algorithm:	Automatic
Rise(in):	15.00	15.00	Flow:	Both
Invert(ft):	7.840	6.830	Entrance Loss Coef:	0.500
Manning's N:	0.010000	0.010000	Exit Loss Coef:	0.000
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dc

Upstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Downstream FHWA Inlet Edge Description:
Circular CMP: Projecting

Added per survey 4/9/09. JP
*** Weir 1 of 2 for Drop Structure L-I180P1 ***

TABLE

Count:	1	Bottom Clip(in):	0.000
Type:	Horizontal	Top Clip(in):	0.000
Flow:	Both	Weir Disc Coef:	3.200
Geometry:	Circular	Orifice Disc Coef:	0.600
Span(in):	8.00	Invert(ft):	7.840
Rise(in):	8.00	Control Elev(ft):	7.840

*** Weir 2 of 2 for Drop Structure L-I180P1 ***

TABLE

Count:	3	Bottom Clip(in):	0.000
Type:	Horizontal	Top Clip(in):	0.000
Flow:	Both	Weir Disc Coef:	3.200
Geometry:	Rectangular	Orifice Disc Coef:	0.600
Span(in):	33.60	Invert(ft):	10.090
Rise(in):	6.00	Control Elev(ft):	10.090

```
-------------------------------------------------------------------------------------------------
         Name: N-C086DD1           From Node: N-C086D           Length(ft): 280.00
        Group: RR                    To Node: N-C086C                Count: 1

               UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
     Geometry: Circular       Circular                  Solution Algorithm: Always Inlet
     Span(in): 24.00          24.00                                Flow: Both
     Rise(in): 24.00          24.00                     Entrance Loss Coef: 0.200
   Invert(ft): 7.620          6.110                         Exit Loss Coef: 0.000
  Manning's N: 0.011000       0.011000                    Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dc
 Bot Clip(in): 0.000          0.000

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Bees Ferry Apt Outfall Structure for Pond 1.    Model shows 4" orifce at 6.8'.
*** Weir 1 of 3 for Drop Structure N-C086DD1 ***
                                                                                        TABLE
                  Count: 1                       Bottom Clip(in): 0.000
                   Type: Horizontal                 Top Clip(in): 0.000
                   Flow: Both                    Weir Disc Coef: 3.200
               Geometry: Rectangular           Orifice Disc Coef: 0.600

               Span(in): 72.00                       Invert(ft): 14.120
               Rise(in): 72.00                  Control Elev(ft): 14.120

*** Weir 2 of 3 for Drop Structure N-C086DD1 ***
                                                                                        TABLE
                  Count: 1                       Bottom Clip(in): 0.000
                   Type: Vertical: Mavis            Top Clip(in): 0.000
                   Flow: Both                    Weir Disc Coef: 3.200
               Geometry: Circular              Orifice Disc Coef: 0.600

               Span(in): 4.00                        Invert(ft): 6.800
               Rise(in): 4.00                   Control Elev(ft): 6.800

*** Weir 3 of 3 for Drop Structure N-C086DD1 ***
                                                                                        TABLE
                  Count: 1                       Bottom Clip(in): 0.000
                   Type: Vertical: Mavis            Top Clip(in): 0.000
                   Flow: Both                    Weir Disc Coef: 3.200
               Geometry: Circular              Orifice Disc Coef: 0.600

               Span(in): 10.00                       Invert(ft): 10.020
               Rise(in): 10.00                  Control Elev(ft): 10.020


-------------------------------------------------------------------------------------------------
         Name: N-G044BD1           From Node: N-G044B           Length(ft): 72.00
        Group: BL                    To Node: N-G044A                Count: 1

               UPSTREAM       DOWNSTREAM                 Friction Equation: Average Conveyance
     Geometry: Circular       Circular                  Solution Algorithm: Automatic
     Span(in): 24.00          24.00                                Flow: Both
     Rise(in): 24.00          24.00                     Entrance Loss Coef: 0.500
   Invert(ft): 11.500         11.500                        Exit Loss Coef: 0.500
  Manning's N: 0.012000       0.012000                    Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dc
 Bot Clip(in): 0.000          0.000

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Added per Blue Water Gas Station.  Outfall structure for underground storage devices.  Outfalls into plunge pool
*** Weir 1 of 2 for Drop Structure N-G044BD1 ***
                                                                                        TABLE
                  Count: 1                       Bottom Clip(in): 0.000
                   Type: Vertical: Mavis            Top Clip(in): 0.000
                   Flow: Both                    Weir Disc Coef: 3.200
```

```
               Geometry: Circular             Orifice Disc Coef: 0.600

               Span(in): 6.00                        Invert(ft): 11.500
               Rise(in): 6.00                 Control Elev(ft): 11.500

*** Weir 2 of 2 for Drop Structure N-G044BD1 ***
                                                                      TABLE
                  Count: 1                      Bottom Clip(in): 0.000
                   Type: Vertical: Mavis           Top Clip(in): 0.000
                   Flow: Both                   Weir Disc Coef: 3.200
               Geometry: Rectangular          Orifice Disc Coef: 0.600

               Span(in): 36.00                       Invert(ft): 14.000
               Rise(in): 12.00                Control Elev(ft): 14.000
```

Base Model
Nodes Output

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
N-A010	002YR	4.800	0.000	0.0003	1359598	578.139	0.000
N-A010	010YR	4.800	0.000	0.0003	1359609	847.535	0.000
N-A010	025YR	4.800	0.000	0.0003	1360087	1005.481	0.000
N-A010	050YR	4.800	0.000	0.0003	1361086	1145.627	0.000
N-A010	100YR	4.800	0.000	0.0003	1362632	1353.531	0.000
N-A010	500YR	4.800	0.000	0.0003	1365135	1712.449	0.000
N-A015	002YR	4.762	0.000	0.0003	1771690	540.144	578.139
N-A015	010YR	5.222	0.000	0.0003	2172612	813.336	847.535
N-A015	025YR	5.440	0.000	0.0003	1890146	976.300	1005.481
N-A015	050YR	5.669	0.000	0.0003	1900456	1141.047	1145.627
N-A015	100YR	5.926	0.000	0.0003	1911452	1341.009	1353.531
N-A015	500YR	6.289	0.000	0.0003	1928306	1607.397	1712.449
N-A020	002YR	4.803	0.000	0.0004	350084	533.660	540.144
N-A020	010YR	5.331	0.000	0.0004	444806	807.511	813.336
N-A020	025YR	5.557	0.000	0.0004	447248	970.818	976.300
N-A020	050YR	5.783	0.000	0.0004	449704	1140.652	1141.047
N-A020	100YR	6.034	0.000	0.0004	452440	1339.726	1341.009
N-A020	500YR	6.382	0.000	0.0004	456647	1605.556	1607.397
N-A030	002YR	4.862	0.000	0.0008	1884295	504.504	533.660
N-A030	010YR	5.483	0.000	0.0008	2623487	838.172	807.511
N-A030	025YR	5.755	0.000	0.0008	2680356	1001.263	970.818
N-A030	050YR	6.016	0.000	0.0008	2725883	1183.479	1140.652
N-A030	100YR	6.290	0.000	0.0008	3113103	1387.479	1339.726
N-A030	500YR	6.638	0.000	0.0008	3666720	1596.479	1605.556
N-A040	002YR	5.182	0.000	0.0003	4331023	581.115	459.179
N-A040	010YR	5.999	0.000	0.0002	5060339	961.500	705.167
N-A040	025YR	6.327	0.000	0.0002	5225010	1125.825	856.000
N-A040	050YR	6.626	0.000	0.0002	5381938	1296.563	1013.565
N-A040	100YR	6.945	0.000	0.0002	5776165	1490.607	1182.693
N-A040	500YR	7.326	0.000	0.0003	6485432	1712.645	1403.068
N-A050	002YR	5.182	8.000	0.0003	426085	138.126	107.459
N-A050	010YR	5.999	8.000	0.0004	465399	240.270	189.232
N-A050	025YR	6.327	8.000	0.0004	480128	284.669	225.438
N-A050	050YR	6.626	8.000	0.0003	493884	329.841	270.259
N-A050	100YR	6.945	8.000	0.0003	519007	389.631	322.616
N-A050	500YR	7.327	8.000	0.0003	553423	456.777	377.382
N-A060	002YR	5.182	8.000	0.0003	47797	27.503	27.249
N-A060	010YR	5.999	8.000	0.0002	59442	89.128	89.336
N-A060	025YR	6.327	8.000	0.0002	64225	125.265	125.929
N-A060	050YR	6.627	8.000	0.0003	69666	172.406	172.606
N-A060	100YR	6.946	8.000	0.0003	73373	226.273	226.725
N-A060	500YR	7.442	8.000	0.0003	77496	278.242	279.331
N-A070	002YR	5.182	8.000	0.0005	143199	24.297	15.671
N-A070	010YR	5.999	8.000	0.0004	207576	79.129	73.773
N-A070	025YR	6.327	8.000	0.0002	224977	111.261	107.153
N-A070	050YR	6.627	8.000	0.0003	244585	154.580	151.500
N-A070	100YR	6.946	8.000	0.0003	261244	204.420	201.623
N-A070	500YR	7.483	8.000	0.0003	282388	246.445	247.775
N-A075	002YR	5.182	8.000	0.0005	37297	0.000	0.970
N-A075	010YR	6.312	8.000	0.0007	136464	76.252	72.735
N-A075	025YR	6.645	8.000	0.0007	149820	107.655	103.693
N-A075	050YR	7.063	8.000	0.0006	166101	150.875	146.727
N-A075	100YR	7.438	8.000	0.0005	183584	200.102	195.317
N-A075	500YR	7.691	8.000	0.0006	197009	238.135	235.657
N-A080	002YR	7.640	7.000	0.0004	31995	96.515	95.967
N-A080	010YR	8.193	7.000	0.0007	33983	184.678	184.721
N-A080	025YR	8.242	7.000	0.0007	34167	215.547	215.592
N-A080	050YR	8.302	7.000	0.0007	34391	254.233	254.262
N-A080	100YR	8.363	7.000	0.0007	34657	301.773	301.853
N-A080	500YR	8.406	7.000	0.0009	34855	337.477	337.502
N-A090	002YR	7.660	8.000	0.0005	32165	98.212	96.515
N-A090	010YR	8.226	8.000	0.0006	33962	184.644	184.678
N-A090	025YR	8.284	8.000	0.0007	34160	215.509	215.547

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
N-A090	050YR	8.356	8.000	0.0007	34404	254.211	254.233
N-A090	100YR	8.433	8.000	0.0007	34701	301.712	301.773
N-A090	500YR	8.488	8.000	0.0007	34919	337.459	337.477
N-A100	002YR	7.737	14.800	0.0005	54177	103.461	98.212
N-A100	010YR	8.674	14.800	0.0006	218697	189.260	184.644
N-A100	025YR	8.946	14.800	0.0007	297806	224.861	215.509
N-A100	050YR	9.360	14.800	0.0007	467071	279.668	254.211
N-A100	100YR	9.822	14.800	0.0007	600361	354.349	301.712
N-A100	500YR	10.202	14.800	0.0007	679629	416.039	337.459
N-A110	002YR	5.712	8.000	0.0002	1898277	357.964	344.351
N-A110	010YR	6.424	8.000	0.0003	2139054	531.762	526.787
N-A110	025YR	6.771	8.000	0.0003	2317974	641.941	641.096
N-A110	050YR	7.091	8.000	0.0003	2524275	755.362	758.429
N-A110	100YR	7.410	8.000	0.0003	2682223	872.904	877.885
N-A110	500YR	7.794	8.000	0.0003	3268684	1024.843	1042.977
N-A120	002YR	5.841	8.000	0.0018	456833	345.108	333.236
N-A120	010YR	6.622	8.000	0.0018	668229	505.488	491.568
N-A120	025YR	7.017	8.000	0.0018	822313	602.188	592.966
N-A120	050YR	7.385	8.000	0.0018	1040431	702.930	696.900
N-A120	100YR	7.780	8.000	0.0018	1113097	806.878	804.494
N-A120	500YR	8.379	8.000	0.0018	1334379	956.753	940.743
N-A130	002YR	5.990	8.000	-0.0018	9272	25.487	25.448
N-A130	010YR	6.743	8.000	-0.0018	15554	40.331	40.196
N-A130	025YR	7.112	8.000	-0.0018	17472	49.393	49.386
N-A130	050YR	7.442	8.000	-0.0018	18786	58.684	58.700
N-A130	100YR	7.768	8.000	-0.0018	20122	68.523	68.540
N-A130	500YR	8.182	8.000	-0.0018	21819	84.167	84.176
N-A140	002YR	6.018	8.000	-0.0019	518804	107.060	95.598
N-A140	010YR	6.778	8.000	-0.0019	644091	168.668	141.971
N-A140	025YR	7.155	8.000	-0.0019	782760	196.767	162.174
N-A140	050YR	7.501	8.000	-0.0019	978132	222.367	188.745
N-A140	100YR	7.866	8.000	-0.0019	1011479	247.314	218.996
N-A140	500YR	8.420	8.000	-0.0019	1040684	276.336	252.841
N-A150	002YR	6.279	8.000	0.0004	468118	66.437	68.592
N-A150	010YR	6.966	8.000	0.0004	739559	95.713	100.594
N-A150	025YR	7.317	8.000	0.0004	826376	113.635	121.227
N-A150	050YR	7.649	8.000	0.0004	885482	134.451	143.090
N-A150	100YR	7.995	8.000	0.0004	924814	160.446	170.897
N-A150	500YR	8.509	8.000	0.0005	982316	190.374	209.455
N-A160	002YR	6.496	8.000	0.0003	78647	65.781	65.844
N-A160	010YR	7.169	8.000	0.0004	568410	95.684	94.860
N-A160	025YR	7.487	8.000	0.0004	832225	113.986	112.783
N-A160	050YR	7.793	8.000	0.0006	1081495	134.628	133.674
N-A160	100YR	8.115	8.000	0.0007	1340516	157.202	159.775
N-A160	500YR	8.585	8.000	0.0006	1712442	173.552	189.863
N-A200	002YR	7.902	10.000	0.0009	9081	29.763	28.150
N-A200	010YR	8.739	10.000	0.0012	11901	53.099	50.298
N-A200	025YR	9.087	10.000	0.0013	13066	63.854	60.360
N-A200	050YR	9.422	10.000	0.0014	14174	74.585	70.300
N-A200	100YR	9.812	10.000	0.0015	15427	87.362	82.010
N-A200	500YR	10.286	10.000	0.0016	16727	103.092	96.260
N-A210	002YR	8.362	9.000	0.0007	6796	25.455	24.966
N-A210	010YR	8.965	9.000	0.0008	9241	45.402	42.186
N-A210	025YR	9.259	9.000	0.0009	10356	54.644	49.836
N-A210	050YR	9.556	9.000	0.0010	11463	63.919	57.339
N-A210	100YR	9.914	9.000	0.0010	12781	75.055	66.127
N-A210	500YR	10.359	9.000	0.0011	14411	88.957	76.769
N-A300	002YR	5.502	5.000	0.0004	26825	121.257	120.632
N-A300	010YR	6.174	5.000	0.0004	29134	178.288	177.445
N-A300	025YR	6.441	5.000	0.0005	30224	195.794	194.877
N-A300	050YR	6.709	5.000	0.0004	31317	212.307	210.614
N-A300	100YR	7.020	5.000	0.0004	32592	229.126	228.194
N-A300	500YR	7.376	5.000	0.0005	34048	239.222	238.303

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
N-A310	002YR	5.917	9.000	0.0011	1834	121.286	121.257
N-A310	010YR	6.561	9.000	0.0027	1941	178.335	178.288
N-A310	025YR	6.733	9.000	-0.0030	1887	195.845	195.794
N-A310	050YR	6.878	9.000	-0.0028	1911	212.462	212.307
N-A310	100YR	7.106	9.000	0.0026	1812	229.169	229.126
N-A310	500YR	7.426	9.000	-0.0037	1788	249.061	239.222
N-A320	002YR	6.240	8.000	0.0005	34998	121.760	121.286
N-A320	010YR	7.028	8.000	0.0006	46995	182.560	178.335
N-A320	025YR	7.271	8.000	0.0006	46962	201.726	195.845
N-A320	050YR	7.421	8.000	0.0006	47092	216.797	212.462
N-A320	100YR	7.568	8.000	0.0007	45871	232.152	229.169
N-A320	500YR	7.799	8.000	0.0008	41944	245.512	249.061
N-A330	002YR	7.276	10.100	0.0005	5857	95.967	95.976
N-A330	010YR	7.742	10.100	0.0006	5857	109.828	109.884
N-A330	025YR	7.824	10.100	0.0007	5857	109.479	109.532
N-A330	050YR	7.922	10.100	0.0047	1810	110.117	115.615
N-A330	100YR	7.993	10.100	0.0050	1810	103.310	108.399
N-A330	500YR	8.153	10.100	0.0050	461	100.215	100.223
N-B010	002YR	6.085	8.100	-0.0050	409593	268.443	260.496
N-B010	010YR	6.851	8.100	0.0040	560433	390.081	385.480
N-B010	025YR	7.242	8.100	-0.0031	652007	484.309	478.011
N-B010	050YR	7.598	8.100	-0.0031	696184	579.808	569.687
N-B010	100YR	7.969	8.100	-0.0031	720081	662.661	654.798
N-B010	500YR	8.548	8.100	0.0005	827032	881.077	839.595
N-B020	002YR	6.627	8.550	0.0050	58093	314.747	267.524
N-B020	010YR	7.693	8.550	0.0039	165663	330.027	389.123
N-B020	025YR	8.217	8.550	0.0042	204047	468.281	483.215
N-B020	050YR	8.656	8.550	0.0040	211992	679.505	578.578
N-B020	100YR	9.108	8.550	0.0038	289230	641.485	661.218
N-B020	500YR	9.563	8.550	0.0007	309752	932.010	879.360
N-B030	002YR	6.628	8.550	0.0006	47392	7.532	1.966
N-B030	010YR	7.693	8.550	0.0008	82634	10.539	6.258
N-B030	025YR	8.217	8.550	0.0007	104409	11.491	8.090
N-B030	050YR	8.657	8.550	0.0008	114998	12.379	7.418
N-B030	100YR	9.109	8.550	0.0008	114998	13.363	5.520
N-B030	500YR	9.564	8.550	0.0007	114998	14.487	7.084
N-B040	002YR	8.501	11.000	0.0002	71458	15.393	7.532
N-B040	010YR	8.796	11.000	0.0002	75310	24.641	10.539
N-B040	025YR	8.947	11.000	0.0003	77276	28.839	11.491
N-B040	050YR	9.099	11.000	0.0003	79690	33.035	12.379
N-B040	100YR	9.280	11.000	0.0004	82853	38.047	13.363
N-B040	500YR	9.572	11.000	0.0004	87376	44.283	14.487
N-B050	002YR	6.630	8.550	0.0047	6599	17.812	64.983
N-B050	010YR	7.691	8.550	-0.0034	9078	32.687	18.973
N-B050	025YR	8.216	8.550	0.0040	10704	47.940	47.396
N-B050	050YR	8.659	8.550	0.0038	13545	64.138	132.038
N-B050	100YR	9.107	8.550	0.0036	13558	84.043	82.838
N-B050	500YR	9.563	8.550	-0.0047	13571	109.006	231.764
N-B060	002YR	7.526	8.550	0.0006	107724	25.704	17.812
N-B060	010YR	9.150	8.550	0.0010	156947	45.409	32.687
N-B060	025YR	9.312	8.550	0.0011	156997	60.253	47.940
N-B060	050YR	9.423	8.550	0.0011	157031	78.080	64.138
N-B060	100YR	9.526	8.550	0.0011	157062	99.528	84.043
N-B060	500YR	9.629	8.550	0.0011	157094	116.634	109.006
N-B070	002YR	7.526	8.550	0.0006	44023	0.000	1.316
N-B070	010YR	9.150	8.550	0.0010	165727	0.000	8.797
N-B070	025YR	9.312	8.550	0.0011	165850	0.000	8.961
N-B070	050YR	9.423	8.550	0.0011	165934	0.000	19.020
N-B070	100YR	9.526	8.550	0.0011	166013	0.000	18.375
N-B070	500YR	9.629	8.550	0.0011	166091	0.000	0.000
N-B080	002YR	6.713	8.550	0.0008	111779	189.479	230.596
N-B080	010YR	7.897	8.550	0.0013	375243	378.633	353.387

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
N-B080	025YR	8.367	8.550	0.0007	411349	491.188	442.965
N-B080	050YR	8.771	8.550	0.0008	442830	453.683	531.327
N-B080	100YR	9.194	8.550	0.0008	597298	727.761	615.110
N-B080	500YR	9.638	8.550	0.0008	619847	635.171	791.232
N-B090	002YR	6.712	10.000	0.0009	7180	9.023	6.140
N-B090	010YR	7.897	10.000	0.0013	21391	24.147	66.090
N-B090	025YR	8.368	10.000	0.0012	22123	27.795	66.177
N-B090	050YR	8.770	10.000	0.0008	22148	29.911	24.804
N-B090	100YR	9.195	10.000	0.0010	22175	35.474	116.260
N-B090	500YR	9.636	10.000	0.0008	22203	39.211	35.389
N-B100	002YR	6.772	10.000	0.0005	18464	9.826	9.023
N-B100	010YR	7.901	10.000	0.0008	38856	25.511	24.147
N-B100	025YR	8.370	10.000	0.0009	259176	31.912	27.795
N-B100	050YR	8.774	10.000	0.0009	259252	36.747	29.911
N-B100	100YR	9.198	10.000	0.0008	260014	41.800	35.474
N-B100	500YR	9.642	10.000	0.0006	261088	53.149	39.211
N-B110	002YR	6.771	10.000	0.0005	17090	0.000	0.000
N-B110	010YR	7.901	10.000	0.0008	24156	0.000	1.753
N-B110	025YR	8.370	10.000	0.0009	97708	0.000	3.103
N-B110	050YR	8.774	10.000	0.0009	97830	0.000	3.461
N-B110	100YR	9.198	10.000	0.0008	100009	0.000	5.607
N-B110	500YR	9.642	10.000	0.0006	103117	0.000	6.932
N-B120	002YR	6.794	10.000	0.0005	112768	240.208	227.060
N-B120	010YR	8.063	10.000	0.0007	438279	323.082	350.985
N-B120	025YR	8.487	10.000	0.0007	492614	366.889	440.635
N-B120	050YR	8.871	10.000	0.0008	528461	626.915	528.028
N-B120	100YR	9.271	10.000	0.0008	654426	488.433	612.205
N-B120	500YR	9.708	10.000	0.0008	749437	955.263	788.668
N-B125	002YR	6.947	8.550	0.0008	37503	63.930	59.228
N-B125	010YR	8.426	8.550	0.0009	41730	128.928	118.897
N-B125	025YR	8.798	8.550	0.0009	42794	141.797	130.887
N-B125	050YR	9.161	8.550	0.0009	43829	151.209	140.863
N-B125	100YR	9.545	8.550	0.0010	45034	157.950	143.854
N-B125	500YR	9.957	8.550	0.0010	46392	167.753	164.823
N-B130	002YR	6.794	10.000	0.0005	14514	16.248	23.271
N-B130	010YR	8.063	10.000	0.0007	17584	20.301	21.088
N-B130	025YR	8.487	10.000	0.0007	17606	26.072	27.148
N-B130	050YR	8.873	10.000	0.0008	17627	29.494	116.914
N-B130	100YR	9.270	10.000	0.0008	17648	33.311	31.677
N-B130	500YR	9.711	10.000	0.0008	17671	29.960	189.336
N-B140	002YR	6.834	10.000	0.0011	88998	23.568	16.248
N-B140	010YR	8.069	10.000	0.0015	415728	32.463	20.301
N-B140	025YR	8.492	10.000	0.0014	454163	38.205	26.072
N-B140	050YR	8.876	10.000	0.0014	475329	44.453	29.494
N-B140	100YR	9.276	10.000	0.0012	476407	46.153	33.311
N-B140	500YR	9.713	10.000	0.0008	483609	57.900	29.960
N-B150	002YR	6.834	10.000	0.0012	50029	0.000	6.030
N-B150	010YR	8.069	10.000	0.0015	174906	0.000	7.566
N-B150	025YR	8.492	10.000	0.0015	290057	0.000	9.544
N-B150	050YR	8.876	10.000	0.0014	353419	0.000	15.402
N-B150	100YR	9.276	10.000	0.0012	356507	0.000	10.019
N-B150	500YR	9.713	10.000	0.0009	377957	0.000	24.968
N-B160	002YR	6.928	10.000	0.0006	77824	219.848	216.980
N-B160	010YR	8.426	10.000	0.0008	323316	360.554	338.102
N-B160	025YR	8.780	10.000	0.0008	358998	425.405	424.785
N-B160	050YR	9.102	10.000	0.0008	379734	511.397	510.400
N-B160	100YR	9.453	10.000	0.0008	474586	596.993	593.197
N-B160	500YR	9.873	10.000	0.0009	585662	779.377	770.088
N-B164	002YR	6.953	10.000	0.0008	34529	68.143	63.930
N-B164	010YR	8.423	10.000	0.0009	38389	138.172	128.928
N-B164	025YR	8.791	10.000	0.0010	39363	154.086	141.797
N-B164	050YR	9.151	10.000	0.0010	40307	165.075	151.209
N-B164	100YR	9.532	10.000	0.0010	41395	170.693	157.950

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
N-B164	500YR	9.945	10.000	0.0010	42630	175.151	167.753
N-B170	002YR	6.929	9.500	0.0006	65558	26.269	5.635
N-B170	010YR	8.427	9.500	0.0007	69691	42.788	9.168
N-B170	025YR	8.781	9.500	0.0007	70770	50.267	7.635
N-B170	050YR	9.103	9.500	0.0008	79481	57.718	11.664
N-B170	100YR	9.454	9.500	0.0008	107072	66.622	17.839
N-B170	500YR	9.874	9.500	0.0008	110642	77.700	25.404
N-B180	002YR	6.941	10.000	0.0050	14065	126.706	123.717
N-B180	010YR	8.429	10.000	0.0050	14241	211.439	206.629
N-B180	025YR	8.805	10.000	0.0050	28488	239.679	233.695
N-B180	050YR	9.170	10.000	0.0050	41945	253.397	246.320
N-B180	100YR	9.556	10.000	0.0050	59168	256.663	248.739
N-B180	500YR	9.967	10.000	0.0050	98724	321.245	322.790
N-B200	002YR	6.956	10.000	0.0009	18661	65.775	58.836
N-B200	010YR	8.421	10.000	0.0009	21640	128.168	121.693
N-B200	025YR	8.787	10.000	0.0010	22293	144.646	135.390
N-B200	050YR	9.144	10.000	0.0011	22924	154.722	144.582
N-B200	100YR	9.522	10.000	0.0011	23616	160.429	148.329
N-B200	500YR	9.937	10.000	0.0011	24373	161.569	157.822
N-B220	002YR	6.951	10.000	0.0011	13131	17.135	13.898
N-B220	010YR	8.414	10.000	0.0010	14247	30.060	25.809
N-B220	025YR	8.779	10.000	0.0011	14526	35.580	29.403
N-B220	050YR	9.136	10.000	0.0012	14788	37.845	29.698
N-B220	100YR	9.514	10.000	0.0011	15078	39.657	30.771
N-B220	500YR	9.931	10.000	0.0011	15398	40.636	32.324
N-B230	002YR	9.547	13.000	0.0001	216300	39.822	15.677
N-B230	010YR	9.814	13.000	0.0002	224921	63.889	28.627
N-B230	025YR	9.931	13.000	0.0003	228673	74.760	33.665
N-B230	050YR	10.085	13.000	0.0003	231723	85.585	35.496
N-B230	100YR	10.291	13.000	0.0003	233692	98.519	36.469
N-B230	500YR	10.558	13.000	0.0004	236194	114.612	36.471
N-B320	002YR	6.942	10.000	0.0008	18666	60.349	57.892
N-B320	010YR	8.428	10.000	0.0009	20784	121.888	116.688
N-B320	025YR	8.804	10.000	0.0009	21316	135.252	129.822
N-B320	050YR	9.168	10.000	0.0009	21826	146.125	141.694
N-B320	100YR	9.555	10.000	0.0009	22409	152.027	144.616
N-B320	500YR	9.965	10.000	0.0009	23068	167.474	165.985
N-B380	002YR	6.951	10.000	0.0009	12768	32.480	32.099
N-B380	010YR	8.415	10.000	0.0010	14942	63.423	64.191
N-B380	025YR	8.780	10.000	0.0011	15411	75.010	68.956
N-B380	050YR	9.138	10.000	0.0011	15869	81.509	78.693
N-B380	100YR	9.516	10.000	0.0012	16387	91.568	87.535
N-B380	500YR	9.932	10.000	0.0011	16927	98.583	97.329
N-C010	002YR	6.938	9.000	-0.0006	15259	31.297	27.745
N-C010	010YR	8.396	9.000	-0.0019	20466	65.006	59.736
N-C010	025YR	8.756	9.000	-0.0023	22711	84.416	72.413
N-C010	050YR	9.108	9.000	-0.0025	24621	96.960	81.552
N-C010	100YR	9.475	9.000	-0.0026	31490	102.414	92.748
N-C010	500YR	9.897	9.000	-0.0025	45125	109.483	104.535
N-C020	002YR	6.939	9.000	0.0008	16023	17.904	15.635
N-C020	010YR	8.398	9.000	0.0009	114802	54.855	40.942
N-C020	025YR	8.761	9.000	0.0012	161513	74.434	50.695
N-C020	050YR	9.114	9.000	0.0013	203980	88.562	62.210
N-C020	100YR	9.482	9.000	0.0013	231070	97.314	72.504
N-C020	500YR	9.904	9.000	0.0013	284764	110.093	86.556
N-C030	002YR	6.939	10.000	0.0005	11086	2.551	5.136
N-C030	010YR	8.398	10.000	0.0009	46011	6.827	14.403
N-C030	025YR	8.761	10.000	0.0012	57094	7.766	16.206
N-C030	050YR	9.114	10.000	0.0013	86382	6.729	25.548
N-C030	100YR	9.482	10.000	0.0013	111267	11.887	31.117
N-C030	500YR	9.904	10.000	0.0013	132264	58.219	48.413
N-C040	002YR	6.939	10.000	0.0005	6803	7.243	2.671

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
N-C040	010YR	8.398	10.000	0.0010	8842	7.041	6.266
N-C040	025YR	8.762	10.000	0.0013	9382	7.290	6.948
N-C040	050YR	9.114	10.000	0.0013	9913	10.730	5.790
N-C040	100YR	9.482	10.000	0.0015	15658	12.429	11.943
N-C040	500YR	9.905	10.000	0.0013	41218	59.309	56.405
N-C050	002YR	6.940	8.900	0.0005	3246	5.703	4.701
N-C050	010YR	8.398	8.900	0.0009	4190	13.775	7.041
N-C050	025YR	8.761	8.900	0.0012	5194	17.797	7.290
N-C050	050YR	9.115	8.900	0.0013	7675	12.057	10.193
N-C050	100YR	9.483	8.900	0.0014	15541	26.551	19.300
N-C050	500YR	9.904	8.900	0.0013	19824	88.572	86.647
N-C060	002YR	6.937	9.600	0.0048	326	0.000	3.884
N-C060	010YR	8.398	9.600	0.0046	19145	0.000	3.882
N-C060	025YR	8.761	9.600	0.0046	35014	0.081	3.884
N-C060	050YR	9.114	9.600	0.0046	73032	0.993	3.674
N-C060	100YR	9.482	9.600	0.0047	156742	2.007	4.224
N-C060	500YR	9.904	9.600	0.0016	190014	18.736	4.617
N-C070	002YR	6.939	10.000	0.0005	3725	0.000	0.073
N-C070	010YR	8.399	10.000	0.0009	4877	0.000	12.934
N-C070	025YR	8.762	10.000	0.0012	7474	0.000	13.848
N-C070	050YR	9.114	10.000	0.0013	9729	0.000	0.000
N-C070	100YR	9.482	10.000	0.0013	15155	14.232	13.654
N-C070	500YR	9.905	10.000	0.0013	19801	82.374	80.578
N-C080	002YR	8.913	11.400	0.0007	115304	107.783	85.364
N-C080	010YR	10.509	11.400	0.0009	158409	202.619	153.065
N-C080	025YR	10.903	11.400	0.0010	209681	230.694	180.662
N-C080	050YR	11.306	11.400	0.0010	392188	259.612	230.107
N-C080	100YR	11.667	11.400	0.0010	647817	368.139	305.742
N-C080	500YR	11.950	11.400	0.0010	868585	506.194	414.820
N-C085	002YR	8.729	8.280	0.0006	29390	85.364	84.203
N-C085	010YR	9.921	8.280	0.0009	35081	153.065	152.558
N-C085	025YR	10.279	8.280	0.0008	36753	180.662	179.956
N-C085	050YR	10.822	8.280	0.0007	39238	230.107	228.689
N-C085	100YR	11.397	8.280	0.0007	41849	292.184	290.049
N-C085	500YR	11.758	8.280	0.0008	43549	335.104	332.412
N-C090	002YR	8.927	11.900	0.0018	5969	71.282	69.851
N-C090	010YR	10.525	11.900	-0.0015	7059	130.631	126.720
N-C090	025YR	10.928	11.900	-0.0016	47029	144.613	140.071
N-C090	050YR	11.403	11.900	-0.0016	144874	180.179	169.473
N-C090	100YR	11.718	11.900	-0.0016	206291	274.536	250.447
N-C090	500YR	11.984	11.900	-0.0015	210300	389.718	356.935
N-C100	002YR	9.054	11.900	-0.0050	2322	71.873	71.282
N-C100	010YR	10.893	11.900	0.0050	4057	132.763	130.631
N-C100	025YR	11.403	11.900	0.0050	5432	147.238	144.613
N-C100	050YR	11.750	11.900	0.0050	6958	156.756	153.702
N-C100	100YR	11.949	11.900	0.0050	7801	163.560	160.150
N-C100	500YR	12.105	11.900	0.0050	9634	166.467	162.187
N-C110	002YR	10.135	9.500	0.0050	13855	116.128	17.479
N-C110	010YR	11.175	9.500	0.0050	15542	116.128	51.301
N-C110	025YR	11.630	9.500	0.0050	16280	116.128	58.154
N-C110	050YR	11.923	9.500	0.0050	16887	116.128	63.094
N-C110	100YR	12.120	9.500	0.0050	17423	116.128	67.110
N-C110	500YR	12.323	9.500	0.0050	17972	116.128	70.373
N-C120	002YR	10.135	10.000	-0.0020	120035	124.088	116.128
N-C120	010YR	11.176	10.000	-0.0020	216251	240.433	200.477
N-C120	025YR	11.631	10.000	-0.0020	234703	291.837	228.286
N-C120	050YR	11.923	10.000	-0.0020	249440	339.571	279.490
N-C120	100YR	12.121	10.000	-0.0020	263970	395.522	360.859
N-C120	500YR	12.324	10.000	-0.0020	280982	500.780	480.310
N-C130	002YR	10.145	10.000	0.0006	131927	130.488	84.827
N-C130	010YR	11.185	10.000	0.0008	184249	235.423	170.216
N-C130	025YR	11.640	10.000	0.0008	209573	296.091	211.373
N-C130	050YR	11.937	10.000	0.0008	232347	337.088	250.702

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
N-C130	100YR	12.144	10.000	0.0008	252862	395.597	293.471
N-C130	500YR	12.361	10.000	0.0008	272976	471.463	368.426
N-C140	002YR	11.307	11.500	0.0005	36524	19.918	11.940
N-C140	010YR	11.923	11.500	0.0007	113897	32.990	18.028
N-C140	025YR	12.143	11.500	0.0007	127555	38.930	18.331
N-C140	050YR	12.267	11.500	0.0008	133209	44.853	18.393
N-C140	100YR	12.371	11.500	0.0008	137888	51.936	20.740
N-C140	500YR	12.471	11.500	0.0007	142413	60.755	28.975
N-C150	002YR	10.145	10.000	0.0006	56817	20.427	14.308
N-C150	010YR	11.186	10.000	0.0008	69370	38.391	26.146
N-C150	025YR	11.640	10.000	0.0008	78325	46.890	30.494
N-C150	050YR	11.937	10.000	0.0008	84423	55.491	39.411
N-C150	100YR	12.145	10.000	0.0008	88692	65.888	51.650
N-C150	500YR	12.362	10.000	0.0008	93194	79.004	68.605
N-C160	002YR	10.146	10.000	0.0006	19471	89.365	80.637
N-C160	010YR	11.186	10.000	0.0008	21018	156.617	145.306
N-C160	025YR	11.641	10.000	0.0008	21576	187.581	176.412
N-C160	050YR	11.938	10.000	0.0008	21941	218.699	207.953
N-C160	100YR	12.147	10.000	0.0008	22197	256.049	244.700
N-C160	500YR	12.366	10.000	0.0008	22465	302.769	289.824
N-C170	002YR	12.416	10.000	0.0017	19062	84.397	89.365
N-C170	010YR	12.553	10.000	0.0006	19318	151.324	156.617
N-C170	025YR	12.608	10.000	0.0006	19419	193.233	187.581
N-C170	050YR	12.659	10.000	0.0005	19514	224.500	218.699
N-C170	100YR	12.717	10.000	0.0005	19622	262.017	256.049
N-C170	500YR	12.786	10.000	0.0005	19749	296.771	302.769
N-C180	002YR	12.416	10.000	0.0017	19062	0.000	0.000
N-C180	010YR	12.553	10.000	0.0006	19318	0.000	0.000
N-C180	025YR	12.608	10.000	0.0006	19419	0.000	6.230
N-C180	050YR	12.659	10.000	0.0005	19514	0.000	6.435
N-C180	100YR	12.717	10.000	0.0005	19622	0.000	6.667
N-C180	500YR	12.785	10.000	0.0005	19749	0.000	0.284
N-C203	002YR	8.100	10.000	0.0000	113	0.000	0.000
N-C203	010YR	8.417	10.000	-0.0001	9631	0.000	0.347
N-C203	025YR	8.783	10.000	0.0002	10799	0.000	0.444
N-C203	050YR	9.133	10.000	0.0002	11969	0.000	0.494
N-C203	100YR	9.503	10.000	0.0003	13468	0.000	0.565
N-C203	500YR	9.916	10.000	0.0005	17158	0.000	0.643
N-C205	002YR	7.700	9.000	0.0000	113	0.000	0.000
N-C205	010YR	8.401	9.000	-0.0006	5418	0.912	1.543
N-C205	025YR	8.775	9.000	-0.0010	6102	2.482	3.749
N-C205	050YR	9.130	9.000	0.0012	7018	4.062	4.744
N-C205	100YR	9.502	9.000	0.0011	8748	5.711	5.668
N-C205	500YR	9.916	9.000	0.0011	16039	7.413	7.367
N-C206	002YR	6.935	10.000	-0.0018	1501	0.000	1.806
N-C206	010YR	8.397	10.000	-0.0050	11986	1.543	1.334
N-C206	025YR	8.770	10.000	-0.0050	12866	3.749	2.277
N-C206	050YR	9.126	10.000	-0.0050	13840	4.744	2.880
N-C206	100YR	9.499	10.000	-0.0050	15030	5.668	3.129
N-C206	500YR	9.915	10.000	0.0050	17256	7.367	3.447
N-C210	002YR	7.660	8.000	-0.0050	45445	80.102	69.668
N-C210	010YR	8.423	8.000	-0.0050	120603	135.529	131.216
N-C210	025YR	8.783	8.000	-0.0050	160534	166.850	158.796
N-C210	050YR	9.127	8.000	-0.0050	185315	196.479	181.251
N-C210	100YR	9.490	8.000	-0.0050	209611	229.399	201.855
N-C210	500YR	9.909	8.000	-0.0050	247399	247.217	224.208
N-C230	002YR	7.687	9.800	0.0005	114816	85.407	58.469
N-C230	010YR	8.427	9.800	0.0006	125738	148.678	104.265
N-C230	025YR	8.790	9.800	0.0007	130634	177.286	125.442
N-C230	050YR	9.203	9.800	0.0007	164494	205.644	146.302
N-C230	100YR	9.560	9.800	0.0008	214440	239.418	166.656
N-C230	500YR	10.060	9.800	0.0009	251950	280.079	179.090

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
N-C240	002YR	7.744	10.900	0.0005	2495	39.371	39.467
N-C240	010YR	8.433	10.900	-0.0012	2753	60.340	60.353
N-C240	025YR	8.814	10.900	0.0016	2867	70.929	70.855
N-C240	050YR	9.251	10.900	0.0019	2825	76.523	76.462
N-C240	100YR	9.682	10.900	-0.0014	3027	82.501	82.399
N-C240	500YR	10.181	10.900	-0.0016	3263	86.874	86.775
N-C243	002YR	7.954	10.000	0.0007	2202	39.315	39.371
N-C243	010YR	8.590	10.000	0.0006	2499	60.331	60.340
N-C243	025YR	8.979	10.000	0.0012	2691	70.984	70.929
N-C243	050YR	9.380	10.000	0.0016	2888	76.639	76.523
N-C243	100YR	9.772	10.000	-0.0016	3078	82.591	82.501
N-C243	500YR	10.234	10.000	0.0017	3297	86.967	86.874
N-C245	002YR	10.028	10.000	0.0050	3252	48.847	39.315
N-C245	010YR	11.068	10.000	0.0050	18271	60.624	60.331
N-C245	025YR	11.566	10.000	0.0050	38140	72.654	70.984
N-C245	050YR	11.762	10.000	0.0050	40966	529.874	76.639
N-C245	100YR	11.911	10.000	0.0050	42946	529.653	82.591
N-C245	500YR	12.033	10.000	0.0050	44468	529.781	86.967
N-C250	002YR	10.042	10.000	-0.0050	2634	72.602	48.847
N-C250	010YR	11.084	10.000	-0.0050	8169	73.989	60.624
N-C250	025YR	11.569	10.000	-0.0050	15827	76.834	72.654
N-C250	050YR	11.844	10.000	-0.0050	19568	122.243	529.874
N-C250	100YR	11.986	10.000	-0.0050	21893	124.025	529.653
N-C250	500YR	12.101	10.000	-0.0050	23501	117.401	529.781
N-C255	002YR	9.718	10.500	0.0018	6352	54.938	54.534
N-C255	010YR	11.026	10.500	0.0017	9994	84.050	81.228
N-C255	025YR	11.512	10.500	0.0016	14032	92.841	88.799
N-C255	050YR	11.816	10.500	0.0016	22529	98.660	93.351
N-C255	100YR	11.981	10.500	0.0015	27180	102.643	96.022
N-C255	500YR	12.113	10.500	0.0015	30917	106.590	96.096
N-C260	002YR	10.067	10.000	-0.0020	18687	98.626	124.276
N-C260	010YR	11.133	10.000	-0.0016	30313	146.373	140.785
N-C260	025YR	11.595	10.000	-0.0017	33155	166.465	159.042
N-C260	050YR	11.864	10.000	-0.0017	36374	225.366	231.894
N-C260	100YR	12.006	10.000	-0.0016	39168	312.694	312.049
N-C260	500YR	12.120	10.000	-0.0017	44520	421.652	420.905
N-C290	002YR	7.837	8.500	-0.0050	357	2.379	2.260
N-C290	010YR	8.402	8.500	-0.0050	420	3.426	3.300
N-C290	025YR	8.762	8.500	-0.0050	472	3.724	3.585
N-C290	050YR	9.115	8.500	-0.0050	523	3.910	3.758
N-C290	100YR	9.482	8.500	-0.0050	576	3.886	3.885
N-C290	500YR	9.904	8.500	-0.0050	637	4.173	4.014
N-C291	002YR	6.965	10.000	-0.0031	122	2.260	2.435
N-C291	010YR	8.407	10.000	0.0050	120	3.300	3.409
N-C291	025YR	8.769	10.000	0.0050	120	3.585	3.495
N-C291	050YR	9.124	10.000	0.0050	120	3.758	3.625
N-C291	100YR	9.495	10.000	0.0050	120	3.885	3.760
N-C291	500YR	9.914	10.000	-0.0050	120	4.014	3.872
N-C292	002YR	6.963	12.500	0.0044	122	2.435	2.257
N-C292	010YR	8.410	12.500	0.0049	122	3.409	3.042
N-C292	025YR	8.773	12.500	-0.0045	122	3.495	3.245
N-C292	050YR	9.128	12.500	-0.0046	122	3.625	3.503
N-C292	100YR	9.502	12.500	-0.0045	122	3.760	3.642
N-C292	500YR	9.920	12.500	-0.0045	122	3.872	3.738
N-C293	002YR	6.961	13.000	0.0050	116	2.257	2.267
N-C293	010YR	8.414	13.000	0.0050	116	3.042	2.887
N-C293	025YR	8.777	13.000	0.0050	116	3.245	3.125
N-C293	050YR	9.133	13.000	0.0050	116	3.503	3.389
N-C293	100YR	9.507	13.000	-0.0050	116	3.642	3.529
N-C293	500YR	9.925	13.000	-0.0050	116	3.738	3.611
N-C294	002YR	6.959	13.000	-0.0050	121	2.267	2.755
N-C294	010YR	8.417	13.000	0.0050	121	2.887	2.745
N-C294	025YR	8.782	13.000	-0.0050	121	3.125	3.007

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
N-C294	050YR	9.138	13.000	-0.0050	121	3.389	3.270
N-C294	100YR	9.511	13.000	-0.0050	121	3.529	3.412
N-C294	500YR	9.929	13.000	-0.0050	121	3.611	3.480
N-C295	002YR	7.838	6.270	0.0050	122	0.000	0.151
N-C295	010YR	8.402	6.270	0.0050	122	0.000	0.267
N-C295	025YR	8.762	6.270	0.0050	122	0.000	0.260
N-C295	050YR	9.114	6.270	0.0050	122	0.000	0.258
N-C295	100YR	9.483	6.270	0.0050	122	0.000	0.257
N-C295	500YR	9.905	6.270	0.0050	122	0.000	0.257
N-C296	002YR	6.958	13.000	-0.0050	121	2.755	4.133
N-C296	010YR	8.419	13.000	0.0050	121	2.745	3.801
N-C296	025YR	8.784	13.000	-0.0050	121	3.007	3.618
N-C296	050YR	9.141	13.000	-0.0050	121	3.270	3.595
N-C296	100YR	9.518	13.000	-0.0050	121	3.412	3.612
N-C296	500YR	9.935	13.000	-0.0050	121	3.480	3.574
N-C300	002YR	6.937	9.000	0.0015	13701	29.273	26.116
N-C300	010YR	8.394	9.000	0.0026	17793	60.376	58.118
N-C300	025YR	8.754	9.000	0.0027	18805	73.711	68.021
N-C300	050YR	9.105	9.000	0.0030	19792	84.484	80.559
N-C300	100YR	9.472	9.000	0.0035	20823	90.520	90.114
N-C300	500YR	9.894	9.000	0.0033	22008	106.685	118.605
N-C304	002YR	6.937	8.000	-0.0050	1681	1.839	4.482
N-C304	010YR	8.396	8.000	0.0050	3145	8.343	6.236
N-C304	025YR	8.758	8.000	-0.0050	3474	12.638	22.704
N-C304	050YR	9.114	8.000	0.0050	3700	15.347	25.600
N-C304	100YR	9.483	8.000	0.0050	3810	16.962	24.418
N-C304	500YR	9.906	8.000	0.0050	3826	20.146	19.347
N-C305	002YR	8.154	8.000	0.0009	741	1.803	1.839
N-C305	010YR	8.401	8.000	-0.0013	1782	7.712	8.343
N-C305	025YR	8.760	8.000	-0.0018	2767	11.733	12.638
N-C305	050YR	9.114	8.000	-0.0050	3446	14.504	15.347
N-C305	100YR	9.481	8.000	-0.0048	3777	16.254	16.962
N-C305	500YR	9.904	8.000	-0.0041	3826	19.149	20.146
N-C310	002YR	6.939	8.000	-0.0050	2845	26.708	66.430
N-C310	010YR	8.395	8.000	0.0050	3472	58.637	124.914
N-C310	025YR	8.754	8.000	0.0050	3626	66.777	141.511
N-C310	050YR	9.104	8.000	-0.0050	3777	77.714	147.700
N-C310	100YR	9.470	8.000	-0.0050	3934	87.819	172.254
N-C310	500YR	9.891	8.000	-0.0050	4115	116.204	199.350
N-C320	002YR	6.934	11.000	0.0050	936	66.430	30.926
N-C320	010YR	8.387	11.000	0.0050	901	124.914	62.289
N-C320	025YR	8.747	11.000	0.0050	825	141.511	67.058
N-C320	050YR	9.095	11.000	0.0050	793	147.700	69.943
N-C320	100YR	9.461	11.000	0.0050	822	172.254	79.806
N-C320	500YR	9.880	11.000	0.0050	856	199.350	90.413
N-C330	002YR	6.951	10.000	0.0009	20545	30.747	32.435
N-C330	010YR	8.414	10.000	0.0010	22102	73.805	63.405
N-C330	025YR	8.779	10.000	0.0011	22415	85.086	72.098
N-C330	050YR	9.137	10.000	0.0012	22816	93.876	78.722
N-C330	100YR	9.515	10.000	0.0011	23263	98.233	88.461
N-C330	500YR	9.931	10.000	0.0011	23755	102.452	98.499
N-D170	002YR	11.292	10.800	-0.0013	105044	1.885	4.039
N-D170	010YR	11.877	10.800	-0.0026	138131	2.688	5.917
N-D170	025YR	12.083	10.800	-0.0026	148579	2.043	4.302
N-D170	050YR	12.249	10.800	-0.0026	154142	1.906	4.693
N-D170	100YR	12.404	10.800	-0.0026	159308	2.132	5.193
N-D170	500YR	12.562	10.800	0.0034	172936	2.118	5.276
N-G010	002YR	7.010	8.000	-0.0009	32457	64.768	64.768
N-G010	010YR	7.764	8.000	-0.0009	251325	95.009	94.151
N-G010	025YR	8.036	8.000	-0.0009	424824	114.233	112.213
N-G010	050YR	8.279	8.000	-0.0009	583507	136.019	132.763
N-G010	100YR	8.526	8.000	-0.0009	747267	159.910	155.440
N-G010	500YR	8.848	8.000	-0.0009	968087	178.133	172.843

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
N-G020	002YR	7.111	8.000	0.0006	1578681	133.705	64.768
N-G020	010YR	8.089	8.000	0.0006	1729074	203.236	95.009
N-G020	025YR	8.502	8.000	0.0006	1769514	253.064	114.233
N-G020	050YR	8.936	8.000	0.0006	1826325	301.646	136.019
N-G020	100YR	9.433	8.000	0.0006	2028099	355.294	159.910
N-G020	500YR	9.966	8.000	0.0006	2326094	417.965	178.133
N-G030	002YR	7.114	10.000	-0.0001	492094	9.507	17.735
N-G030	010YR	8.088	10.000	0.0001	506870	10.359	17.271
N-G030	025YR	8.498	10.000	0.0001	513055	10.359	17.211
N-G030	050YR	8.932	10.000	0.0002	527550	10.359	17.174
N-G030	100YR	9.430	10.000	0.0002	992556	10.359	17.111
N-G030	500YR	9.964	10.000	0.0003	1678328	10.359	16.861
N-G040	002YR	8.000	11.500	0.0000	34	0.000	9.507
N-G040	010YR	8.000	11.500	0.0000	34	0.000	10.359
N-G040	025YR	8.000	11.500	0.0000	34	0.000	10.359
N-G040	050YR	8.000	11.500	0.0000	34	0.000	10.359
N-G040	100YR	8.000	11.500	0.0000	34	0.000	10.359
N-G040	500YR	8.000	11.500	0.0000	34	0.000	10.359
N-G050	002YR	7.259	10.000	0.0004	338184	83.014	73.001
N-G050	010YR	8.185	10.000	0.0005	730469	172.347	149.724
N-G050	025YR	8.593	10.000	0.0005	878879	228.536	192.423
N-G050	050YR	9.021	10.000	0.0004	1017329	280.175	229.963
N-G050	100YR	9.508	10.000	0.0004	1129053	333.369	267.001
N-G050	500YR	10.031	10.000	0.0004	1290317	400.336	310.678
N-G060	002YR	11.744	13.900	0.0007	14691	9.854	2.265
N-G060	010YR	12.785	13.900	0.0010	17300	16.931	6.834
N-G060	025YR	12.945	13.900	0.0012	17716	20.173	10.822
N-G060	050YR	13.065	13.900	0.0013	17861	23.415	15.991
N-G060	100YR	13.150	13.900	0.0014	17861	27.297	22.827
N-G060	500YR	13.224	13.900	0.0015	17861	32.132	30.143
N-G070	002YR	10.887	33.500	0.0004	5151	5.307	5.267
N-G070	010YR	11.386	33.500	0.0006	5584	16.018	15.987
N-G070	025YR	11.528	33.500	0.0007	5707	21.579	21.544
N-G070	050YR	11.651	33.500	0.0007	5814	27.039	27.001
N-G070	100YR	11.780	33.500	0.0007	5926	33.351	33.306
N-G070	500YR	11.918	33.500	0.0007	6047	40.724	40.689
N-G080	002YR	10.895	13.000	0.0004	36714	12.794	4.719
N-G080	010YR	11.457	13.000	0.0006	37832	23.529	13.868
N-G080	025YR	11.653	13.000	0.0007	38218	28.631	18.452
N-G080	050YR	11.843	13.000	0.0008	38592	33.772	22.928
N-G080	100YR	12.067	13.000	0.0008	39193	39.943	28.070
N-G080	500YR	12.341	13.000	0.0008	40380	47.613	34.081
N-G090	002YR	12.922	15.000	0.0003	34591	13.213	4.818
N-G090	010YR	13.398	15.000	0.0005	36879	22.285	9.873
N-G090	025YR	13.594	15.000	0.0005	37816	26.422	12.290
N-G090	050YR	13.780	15.000	0.0006	38704	30.550	14.716
N-G090	100YR	13.993	15.000	0.0006	39715	35.488	17.602
N-G090	500YR	14.247	15.000	0.0007	40913	41.635	21.143
N-G100	002YR	8.511	10.000	0.0010	27622	57.481	57.310
N-G100	010YR	9.918	10.000	0.0013	225086	138.744	134.801
N-G100	025YR	10.409	10.000	0.0013	350217	189.586	181.881
N-G100	050YR	10.762	10.000	0.0014	474105	234.899	222.466
N-G100	100YR	11.062	10.000	0.0013	583988	279.207	266.427
N-G100	500YR	11.368	10.000	0.0012	726486	334.006	324.142
N-G110	002YR	10.964	14.000	0.0050	15001	115.133	31.459
N-G110	010YR	11.420	14.000	0.0050	15843	115.133	63.408
N-G110	025YR	11.655	14.000	0.0050	16225	115.133	77.397
N-G110	050YR	11.925	14.000	0.0050	16530	115.133	88.285
N-G110	100YR	12.308	14.000	0.0050	17138	115.133	99.388
N-G110	500YR	12.628	14.000	0.0050	17829	115.854	110.473
N-G120	002YR	10.991	14.000	-0.0050	16286	28.319	115.133
N-G120	010YR	11.515	14.000	-0.0050	17197	50.523	115.133

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
N-G120	025YR	11.806	14.000	-0.0050	18064	64.594	115.133
N-G120	050YR	12.124	14.000	-0.0050	18668	74.418	115.133
N-G120	100YR	12.560	14.000	-0.0050	19224	86.378	115.133
N-G120	500YR	12.921	14.000	-0.0050	19921	92.333	115.133
N-G130	002YR	11.889	15.000	0.0005	20710	22.722	20.300
N-G130	010YR	12.496	15.000	0.0007	22011	38.876	36.531
N-G130	025YR	12.648	15.000	0.0007	22447	48.217	45.181
N-G130	050YR	12.839	15.000	0.0008	22836	55.425	51.943
N-G130	100YR	13.094	15.000	0.0009	23246	64.021	60.538
N-G130	500YR	13.645	15.000	0.0009	24421	70.590	75.271
N-G140	002YR	11.918	17.000	0.0005	14257	10.759	11.556
N-G140	010YR	12.585	17.000	0.0007	15621	19.755	21.086
N-G140	025YR	12.773	17.000	0.0007	15982	23.707	24.918
N-G140	050YR	13.010	17.000	0.0008	16405	28.094	29.550
N-G140	100YR	13.316	17.000	0.0009	16867	33.224	34.830
N-G140	500YR	13.959	17.000	0.0009	17868	40.622	43.793
N-G150	002YR	11.967	13.500	0.0004	2508	8.274	8.400
N-G150	010YR	12.632	13.500	0.0007	6955	15.344	15.885
N-G150	025YR	12.830	13.500	0.0007	8297	18.685	19.327
N-G150	050YR	13.079	13.500	0.0008	10154	22.063	22.772
N-G150	100YR	13.405	13.500	0.0009	13108	26.147	27.447
N-G150	500YR	14.156	13.500	0.0009	13546	31.276	34.089
N-G160	002YR	11.837	14.000	0.0003	22158	6.171	1.050
N-G160	010YR	12.465	14.000	0.0004	24274	10.736	1.729
N-G160	025YR	12.649	14.000	0.0005	24916	12.834	3.382
N-G160	050YR	12.764	14.000	0.0006	25314	14.934	5.530
N-G160	100YR	12.881	14.000	0.0007	25724	17.450	8.311
N-G160	500YR	13.014	14.000	0.0007	26186	20.586	12.060
N-G170	002YR	9.476	12.000	0.0005	14222	48.666	48.657
N-G170	010YR	10.584	12.000	0.0010	57312	122.321	121.776
N-G170	025YR	10.977	12.000	0.0012	90893	171.514	170.168
N-G170	050YR	11.277	12.000	0.0012	122010	214.428	211.810
N-G170	100YR	11.562	12.000	0.0012	174500	258.158	254.070
N-G170	500YR	11.862	12.000	0.0008	244805	315.311	309.752
N-G170A	002YR	9.330	12.000	0.0005	26919	48.657	48.651
N-G170A	010YR	10.324	12.000	0.0011	96914	117.464	116.769
N-G170A	025YR	10.689	12.000	0.0012	133101	157.437	155.306
N-G170A	050YR	10.998	12.000	0.0012	164718	190.980	186.872
N-G170A	100YR	11.291	12.000	0.0012	265712	225.681	218.957
N-G170A	500YR	11.615	12.000	0.0008	412709	270.157	261.209
N-G180	002YR	10.174	11.000	0.0050	125236	48.735	46.215
N-G180	010YR	11.059	11.000	0.0050	269681	115.384	114.994
N-G180	025YR	11.162	11.000	0.0050	299289	162.297	161.667
N-G180	050YR	11.328	11.000	0.0050	346995	209.149	201.272
N-G180	100YR	11.601	11.000	0.0050	425418	259.490	242.257
N-G180	500YR	11.897	11.000	0.0050	510645	316.876	297.308
N-G200	002YR	11.557	14.000	0.0004	9898	3.237	1.064
N-G200	010YR	11.975	14.000	0.0005	10441	6.292	3.826
N-G200	025YR	12.166	14.000	0.0006	10903	7.748	4.860
N-G200	050YR	12.370	14.000	0.0006	11428	9.225	5.877
N-G200	100YR	12.599	14.000	0.0006	12024	11.013	7.120
N-G200	500YR	12.876	14.000	0.0006	12749	13.262	8.494
N-G210	002YR	10.559	12.750	-0.0002	529930	58.542	30.261
N-G210	010YR	11.271	12.750	-0.0002	699990	115.980	50.238
N-G210	025YR	11.439	12.750	0.0002	742728	144.917	68.611
N-G210	050YR	11.561	12.750	0.0003	773536	174.180	89.731
N-G210	100YR	11.735	12.750	0.0003	817644	207.869	108.410
N-G210	500YR	11.991	12.750	0.0004	882816	240.033	134.050
N-G220	002YR	11.396	15.000	0.0002	50333	11.898	5.176
N-G220	010YR	11.996	15.000	0.0004	54053	24.140	13.226
N-G220	025YR	12.238	15.000	0.0005	55538	32.071	17.237
N-G220	050YR	12.472	15.000	0.0006	56968	39.601	21.425
N-G220	100YR	12.729	15.000	0.0007	58525	45.609	26.282

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
N-G220	500YR	13.038	15.000	0.0007	60406	53.192	32.403
N-G230	002YR	11.396	14.000	0.0002	12826	3.566	1.198
N-G230	010YR	11.996	14.000	0.0004	14395	6.875	2.240
N-G230	025YR	12.238	14.000	0.0005	15132	8.447	2.776
N-G230	050YR	12.473	14.000	0.0005	15847	10.038	3.362
N-G230	100YR	12.730	14.000	0.0006	16630	11.964	4.118
N-G230	500YR	13.039	14.000	0.0007	17540	14.383	5.109
N-G240	002YR	11.400	15.000	-0.0005	450	3.991	3.926
N-G240	010YR	12.019	15.000	-0.0050	312	11.230	11.175
N-G240	025YR	12.277	15.000	-0.0050	181	12.610	12.516
N-G240	050YR	12.534	15.000	-0.0050	181	12.594	13.083
N-G240	100YR	12.818	15.000	-0.0050	181	12.312	12.659
N-G240	500YR	13.168	15.000	-0.0050	181	13.252	13.230
N-G250	002YR	11.411	15.000	0.0003	1117	4.153	3.991
N-G250	010YR	12.142	15.000	0.0050	541	12.387	11.230
N-G250	025YR	12.399	15.000	0.0050	211	13.199	12.610
N-G250	050YR	12.720	15.000	0.0050	202	13.436	12.594
N-G250	100YR	13.078	15.000	0.0050	184	13.342	12.312
N-G250	500YR	13.542	15.000	0.0050	184	13.275	13.252
N-G260	002YR	11.549	15.000	0.0004	15946	7.569	4.153
N-G260	010YR	12.193	15.000	0.0005	17541	13.962	12.387
N-G260	025YR	12.429	15.000	0.0006	18013	16.957	13.199
N-G260	050YR	12.774	15.000	0.0007	18737	19.976	13.436
N-G260	100YR	13.240	15.000	0.0008	20116	23.613	13.342
N-G260	500YR	13.772	15.000	0.0009	22201	28.166	13.275
N-G270	002YR	10.592	15.000	0.0050	279	12.956	12.486
N-G270	010YR	11.333	15.000	0.0050	240	14.613	14.560
N-G270	025YR	11.518	15.000	0.0050	217	17.964	17.906
N-G270	050YR	11.659	15.000	0.0050	172	21.812	21.494
N-G270	100YR	11.860	15.000	0.0050	167	25.739	27.825
N-G270	500YR	12.124	15.000	0.0050	167	30.630	34.125
N-G280	002YR	10.671	15.000	0.0050	976	8.941	12.956
N-G280	010YR	11.428	15.000	0.0050	878	14.756	14.613
N-G280	025YR	11.634	15.000	0.0050	814	18.144	17.964
N-G280	050YR	11.807	15.000	0.0050	315	21.770	21.812
N-G280	100YR	12.110	15.000	0.0050	669	25.978	25.739
N-G280	500YR	12.441	15.000	0.0050	657	54.833	30.630
N-G290	002YR	12.293	16.000	-0.0027	11069	10.229	8.941
N-G290	010YR	12.718	16.000	-0.0027	11819	15.699	14.756
N-G290	025YR	12.943	16.000	-0.0027	12199	19.543	18.144
N-G290	050YR	13.174	16.000	-0.0027	12654	23.087	21.770
N-G290	100YR	13.435	16.000	-0.0027	13177	27.743	25.978
N-G290	500YR	13.564	16.000	-0.0027	13347	33.394	54.833
N-G300	002YR	12.350	15.000	0.0050	141	8.226	8.226
N-G300	010YR	12.733	15.000	0.0050	141	11.113	11.113
N-G300	025YR	12.964	15.000	0.0050	141	12.110	12.110
N-G300	050YR	13.200	15.000	0.0050	141	12.981	12.982
N-G300	100YR	13.467	15.000	0.0050	141	13.902	13.902
N-G300	500YR	13.614	15.000	0.0050	141	14.909	14.912
N-G310	002YR	12.589	15.000	0.0050	136	8.226	8.226
N-G310	010YR	13.075	15.000	0.0050	136	11.113	11.113
N-G310	025YR	13.262	15.000	0.0050	136	12.110	12.110
N-G310	050YR	13.430	15.000	0.0050	136	12.981	12.981
N-G310	100YR	13.636	15.000	0.0050	136	13.901	13.902
N-G310	500YR	13.893	15.000	0.0050	136	14.907	14.909
N-G320	002YR	13.028	13.000	0.0050	130	8.226	8.226
N-G320	010YR	13.876	13.000	0.0050	130	11.113	11.113
N-G320	025YR	14.223	13.000	0.0050	130	12.110	12.110
N-G320	050YR	14.534	13.000	0.0050	130	12.981	12.981
N-G320	100YR	14.880	13.000	0.0050	130	13.901	13.901
N-G320	500YR	15.321	13.000	0.0050	130	14.906	14.907
N-G330	002YR	15.481	14.500	0.0002	120487	17.718	8.226

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
N-G330	010YR	16.957	14.500	0.0003	186685	33.094	11.113
N-G330	025YR	17.569	14.500	0.0003	214152	40.406	12.110
N-G330	050YR	18.147	14.500	0.0003	240065	47.841	12.981
N-G330	100YR	18.800	14.500	0.0003	269386	56.853	13.901
N-G330	500YR	19.565	14.500	0.0004	303708	68.204	14.906
N-G340	002YR	10.565	12.500	0.0005	23141	16.493	15.689
N-G340	010YR	11.277	12.500	0.0005	111875	37.175	34.489
N-G340	025YR	11.451	12.500	0.0005	159361	47.607	43.451
N-G340	050YR	11.579	12.500	0.0005	194589	58.443	52.268
N-G340	100YR	11.764	12.500	0.0005	245329	74.577	62.077
N-G340	500YR	12.039	12.500	0.0005	320914	104.586	71.902
N-G350	002YR	10.695	15.000	0.0002	24217	6.318	5.525
N-G350	010YR	11.313	15.000	0.0004	25115	18.547	16.645
N-G350	025YR	11.501	15.000	0.0005	25387	25.300	22.947
N-G350	050YR	11.659	15.000	0.0005	25631	32.546	29.746
N-G350	100YR	11.979	15.000	0.0006	26017	52.370	42.571
N-G350	500YR	12.219	15.000	-0.0015	26910	61.237	53.598
N-G360	002YR	11.030	16.500	0.0002	22280	5.023	3.504
N-G360	010YR	11.515	16.500	0.0004	23074	13.569	10.630
N-G360	025YR	11.740	16.500	0.0004	23376	18.098	14.662
N-G360	050YR	11.962	16.500	0.0005	23643	22.883	19.015
N-G360	100YR	12.149	16.500	0.0006	24042	28.879	34.054
N-G360	500YR	12.315	16.500	0.0007	24425	36.748	34.244
N-G370	002YR	12.723	12.500	0.0001	501997	20.375	1.256
N-G370	010YR	13.324	12.500	0.0002	669566	50.114	9.347
N-G370	025YR	13.524	12.500	0.0002	725346	65.679	15.537
N-G370	050YR	13.700	12.500	0.0002	774525	82.059	23.096
N-G370	100YR	13.888	12.500	0.0002	827022	102.647	33.615
N-G370	500YR	14.097	12.500	0.0003	885198	129.340	48.522
N-G400	002YR	10.208	12.500	0.0005	142989	55.932	21.343
N-G400	010YR	11.413	12.500	0.0009	186324	137.306	57.953
N-G400	025YR	11.839	12.500	0.0013	194070	188.413	82.167
N-G400	050YR	12.305	12.500	0.0015	201062	217.194	100.854
N-G400	100YR	12.844	12.500	0.0016	208007	233.019	125.522
N-G400	500YR	13.413	12.500	0.0014	215279	248.209	160.415
N-G410	002YR	10.208	13.000	0.0004	33961	13.783	8.219
N-G410	010YR	11.417	13.000	0.0006	37483	25.352	17.447
N-G410	025YR	11.845	13.000	0.0007	38790	30.765	21.707
N-G410	050YR	12.313	13.000	0.0008	41445	36.216	24.116
N-G410	100YR	12.856	13.000	0.0009	45229	42.781	22.781
N-G410	500YR	13.432	13.000	0.0013	49240	50.994	15.509
N-G420	002YR	10.209	13.000	0.0005	86956	33.242	8.108
N-G420	010YR	11.422	13.000	0.0009	95861	70.645	19.961
N-G420	025YR	11.856	13.000	0.0011	100686	89.856	26.851
N-G420	050YR	12.330	13.000	0.0014	105866	107.633	33.004
N-G420	100YR	12.884	13.000	0.0015	112146	127.494	43.240
N-G420	500YR	13.488	13.000	0.0015	118983	131.356	60.169
N-G430	002YR	10.209	13.000	-0.0006	32918	15.376	24.875
N-G430	010YR	11.427	13.000	0.0006	36238	31.433	36.474
N-G430	025YR	11.865	13.000	0.0007	37119	39.289	40.057
N-G430	050YR	12.350	13.000	0.0009	40168	47.351	42.526
N-G430	100YR	12.917	13.000	0.0012	45105	57.216	42.062
N-G430	500YR	13.547	13.000	0.0014	50596	69.744	43.163
N-G440	002YR	10.210	13.500	0.0004	22085	13.250	10.426
N-G440	010YR	11.438	13.500	0.0005	25633	26.645	23.241
N-G440	025YR	11.884	13.500	0.0006	26609	33.422	30.615
N-G440	050YR	12.390	13.500	0.0007	27825	41.259	39.612
N-G440	100YR	12.989	13.500	0.0007	29651	53.823	48.387
N-G440	500YR	13.719	13.500	0.0010	32818	69.102	53.769
N-G450	002YR	11.077	17.000	0.0003	7097	3.721	3.575
N-G450	010YR	12.240	17.000	0.0007	8215	11.416	11.095
N-G450	025YR	12.626	17.000	0.0008	8719	17.108	16.535
N-G450	050YR	12.977	17.000	0.0010	9178	23.033	22.241

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
N-G450	100YR	13.470	17.000	0.0011	9822	30.071	28.366
N-G450	500YR	14.271	17.000	0.0012	10751	36.054	32.170
N-G460	002YR	11.079	15.000	0.0003	17656	4.390	2.698
N-G460	010YR	12.263	15.000	0.0007	20236	13.506	8.647
N-G460	025YR	12.678	15.000	0.0008	21138	18.602	13.036
N-G460	050YR	13.072	15.000	0.0010	22029	24.075	17.721
N-G460	100YR	13.594	15.000	0.0011	23394	31.027	22.962
N-G460	500YR	14.453	15.000	0.0013	25441	40.164	26.778
N-G470	002YR	10.770	15.000	0.0005	51568	36.260	31.030
N-G470	010YR	11.639	15.000	0.0006	54432	70.491	90.568
N-G470	025YR	12.569	15.000	0.0007	58596	87.696	95.504
N-G470	050YR	13.431	15.000	0.0008	63854	101.973	96.672
N-G470	100YR	14.436	15.000	0.0009	72158	115.891	94.159
N-G470	500YR	15.558	15.000	0.0012	84832	133.721	88.378
N-G480	002YR	12.845	17.000	0.0006	21878	10.442	1.656
N-G480	010YR	13.708	17.000	0.0010	24066	20.809	7.655
N-G480	025YR	14.339	17.000	0.0012	25568	25.790	8.683
N-G480	050YR	15.196	17.000	0.0013	27519	30.861	8.938
N-G480	100YR	16.270	17.000	0.0013	30326	37.021	9.045
N-G480	500YR	17.542	17.000	0.0014	33651	44.788	9.385
N-G490	002YR	11.500	13.900	0.0000	143	0.000	0.000
N-G490	010YR	11.639	13.900	-0.0002	922	0.000	0.109
N-G490	025YR	12.569	13.900	0.0004	5290	0.000	0.360
N-G490	050YR	13.431	13.900	-0.0012	9201	0.000	7.732
N-G490	100YR	14.436	13.900	-0.0013	18027	0.000	8.926
N-G490	500YR	15.558	13.900	-0.0013	32584	0.000	8.559
N-G510	002YR	11.635	14.000	0.0002	18379	4.231	0.934
N-G510	010YR	12.293	14.000	0.0004	19935	8.550	1.736
N-G510	025YR	12.618	14.000	0.0005	20785	10.633	2.038
N-G510	050YR	12.949	14.000	0.0006	21649	12.755	2.300
N-G510	100YR	13.352	14.000	0.0007	22701	15.336	2.581
N-G510	500YR	13.847	14.000	0.0008	23995	18.591	2.886
N-H100	002YR	7.140	13.000	0.0005	78086	37.216	0.704
N-H100	010YR	8.735	13.000	0.0009	84018	70.408	0.997
N-H100	025YR	9.179	13.000	0.0011	85644	86.056	2.432
N-H100	050YR	9.386	13.000	0.0012	86454	101.857	5.677
N-H100	100YR	9.628	13.000	0.0014	87402	120.919	10.644
N-H100	500YR	10.016	13.000	0.0017	88925	144.799	20.706
N-H110	002YR	9.075	13.000	0.0008	60046	44.008	1.460
N-H110	010YR	9.650	13.000	0.0011	62237	64.161	11.076
N-H110	025YR	9.959	13.000	0.0012	63553	72.583	18.985
N-H110	050YR	10.258	13.000	0.0012	64791	81.029	28.011
N-H110	100YR	10.590	13.000	0.0013	66200	91.722	39.176
N-H110	500YR	10.969	13.000	0.0013	67849	106.100	51.666
N-H120	002YR	9.076	13.000	0.0007	10449	20.772	17.580
N-H120	010YR	9.673	13.000	0.0010	11655	32.467	22.832
N-H120	025YR	10.065	13.000	0.0013	12439	37.655	24.767
N-H120	050YR	10.531	13.000	0.0014	13155	42.738	27.215
N-H120	100YR	11.079	13.000	0.0016	14374	48.550	31.070
N-H120	500YR	11.744	13.000	0.0017	16071	57.116	37.024
N-H130	002YR	11.381	13.000	0.0009	7241	12.463	10.411
N-H130	010YR	11.917	13.000	0.0012	7915	19.054	16.505
N-H130	025YR	12.137	13.000	0.0013	8181	22.025	19.194
N-H130	050YR	12.352	13.000	0.0015	8426	24.985	21.782
N-H130	100YR	12.616	13.000	0.0016	8708	28.526	24.667
N-H130	500YR	12.910	13.000	0.0018	9091	32.939	30.632
N-I040	002YR	7.000	12.000	0.0000	4356	0.000	0.000
N-I040	010YR	7.000	12.000	0.0000	4356	0.000	0.000
N-I040	025YR	7.000	12.000	0.0000	4356	0.000	0.000
N-I040	050YR	7.000	12.000	0.0000	4356	0.000	0.000
N-I040	100YR	7.000	12.000	0.0000	4356	0.000	0.000
N-I040	500YR	7.000	12.000	0.0000	4356	0.000	0.000

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
N-I042	002YR	9.036	9.760	0.0008	152	5.524	5.512
N-I042	010YR	9.679	9.760	0.0010	135	10.533	10.521
N-I042	025YR	9.960	9.760	0.0010	124	12.905	12.899
N-I042	050YR	10.213	9.760	0.0014	124	15.305	15.292
N-I042	100YR	10.518	9.760	0.0017	123	18.207	18.197
N-I042	500YR	10.914	9.760	0.0019	122	21.848	21.831
N-I060	002YR	6.946	7.400	-0.0048	58358	93.401	86.278
N-I060	010YR	8.446	7.400	-0.0048	260377	160.601	132.866
N-I060	025YR	8.929	7.400	-0.0048	328267	174.125	140.861
N-I060	050YR	9.556	7.400	-0.0048	416123	218.308	212.363
N-I060	100YR	10.341	7.400	-0.0048	526722	311.056	297.127
N-I060	500YR	10.947	7.400	-0.0048	612159	348.151	332.730
N-I080	002YR	8.021	9.200	0.0003	8956	3.438	1.844
N-I080	010YR	8.446	9.200	0.0005	9658	6.877	5.581
N-I080	025YR	8.930	9.200	0.0005	10450	8.529	8.014
N-I080	050YR	9.556	9.200	0.0006	13713	10.212	10.080
N-I080	100YR	10.341	9.200	0.0006	28722	12.256	12.218
N-I080	500YR	10.946	9.200	0.0006	49144	14.842	14.820
N-I090	002YR	6.947	7.500	-0.0037	101711	14.488	3.607
N-I090	010YR	8.446	7.500	-0.0037	181857	26.429	6.934
N-I090	025YR	8.929	7.500	-0.0037	219902	32.005	8.312
N-I090	050YR	9.556	7.500	-0.0037	276317	37.616	9.347
N-I090	100YR	10.341	7.500	-0.0037	348105	44.370	16.274
N-I090	500YR	10.944	7.500	-0.0036	403302	52.816	21.450
N-I098	002YR	8.774	10.000	0.0050	140	8.844	7.017
N-I098	010YR	10.086	10.000	-0.0050	140	10.200	8.579
N-I098	025YR	10.395	10.000	-0.0050	140	9.768	8.106
N-I098	050YR	10.613	10.000	-0.0050	140	9.117	8.837
N-I098	100YR	10.823	10.000	-0.0050	140	9.722	9.671
N-I098	500YR	11.299	10.000	-0.0050	140	11.447	11.404
N-I099	002YR	8.772	10.000	-0.0050	134	5.633	8.844
N-I099	010YR	10.069	10.000	0.0050	134	7.751	10.200
N-I099	025YR	10.370	10.000	0.0050	134	8.062	9.768
N-I099	050YR	10.591	10.000	0.0050	134	9.016	9.117
N-I099	100YR	10.816	10.000	0.0050	134	9.776	9.722
N-I099	500YR	11.295	10.000	0.0050	134	11.488	11.447
N-I100	002YR	8.766	10.400	0.0050	131	5.523	5.633
N-I100	010YR	10.051	10.400	0.0050	131	7.559	7.751
N-I100	025YR	10.346	10.400	0.0050	131	8.148	8.062
N-I100	050YR	10.569	10.400	0.0050	131	9.092	9.016
N-I100	100YR	10.805	10.400	0.0050	131	9.834	9.776
N-I100	500YR	11.287	10.400	0.0050	131	11.529	11.488
N-I101	002YR	8.418	8.000	0.0003	20675	0.742	0.946
N-I101	010YR	9.066	8.000	0.0005	44793	26.916	26.888
N-I101	025YR	9.592	8.000	0.0006	64386	109.006	108.840
N-I101	050YR	10.096	8.000	0.0006	92791	215.133	213.972
N-I101	100YR	10.650	8.000	0.0006	168767	333.291	329.182
N-I101	500YR	11.215	8.000	0.0008	241574	447.691	436.787
N-I150	002YR	8.714	9.200	0.0007	9829	10.108	6.823
N-I150	010YR	9.703	9.200	0.0010	10853	18.003	17.680
N-I150	025YR	9.985	9.200	0.0010	11192	21.723	18.407
N-I150	050YR	10.229	9.200	0.0011	11485	25.474	20.246
N-I150	100YR	10.702	9.200	0.0012	12054	29.981	22.104
N-I150	500YR	11.247	9.200	0.0013	12709	35.610	33.812
N-I152	002YR	8.589	11.200	-0.0012	188	3.188	3.191
N-I152	010YR	9.798	11.200	0.0050	132	7.232	5.846
N-I152	025YR	10.045	11.200	0.0050	132	7.377	6.645
N-I152	050YR	10.229	11.200	0.0050	132	7.655	7.624
N-I152	100YR	10.458	11.200	0.0050	132	8.541	8.514
N-I152	500YR	10.886	11.200	-0.0050	132	8.840	8.777
N-I153	002YR	8.561	11.250	0.0011	120	3.191	3.194
N-I153	010YR	9.816	11.250	0.0050	120	5.846	5.784
N-I153	025YR	10.056	11.250	0.0050	120	6.645	6.729

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
N-I153	050YR	10.229	11.250	0.0050	120	7.624	7.584
N-I153	100YR	10.412	11.250	0.0050	120	8.514	8.458
N-I153	500YR	10.818	11.250	0.0050	120	8.777	8.720
N-I170	002YR	8.852	10.000	-0.0012	117	1.924	2.010
N-I170	010YR	10.095	10.000	0.0014	11876	3.762	3.181
N-I170	025YR	10.341	10.000	0.0016	12032	4.183	3.262
N-I170	050YR	10.521	10.000	0.0017	12125	4.239	3.058
N-I170	100YR	10.758	10.000	0.0017	12248	4.186	2.565
N-I170	500YR	11.248	10.000	0.0016	14575	4.109	2.105
N-I180	002YR	9.998	9.200	0.0006	538906	47.723	2.504
N-I180	010YR	10.223	9.200	0.0003	672791	79.879	14.286
N-I180	025YR	10.335	9.200	0.0002	738051	94.552	23.715
N-I180	050YR	10.441	9.200	0.0002	799480	109.196	34.463
N-I180	100YR	10.684	9.200	0.0002	940523	126.716	48.408
N-I180	500YR	11.247	9.200	0.0002	1229400	148.529	67.144
N-I230	002YR	9.388	10.000	0.0050	122	9.653	9.583
N-I230	010YR	10.876	10.000	0.0050	122	17.537	17.406
N-I230	025YR	11.863	10.000	0.0050	122	21.211	21.049
N-I230	050YR	12.975	10.000	0.0050	122	24.904	24.719
N-I230	100YR	14.296	10.000	0.0050	122	29.347	29.196
N-I230	500YR	16.117	10.000	0.0050	122	34.899	34.720
N-I240	002YR	9.363	10.000	0.0004	36285	16.868	4.874
N-I240	010YR	10.200	10.000	0.0007	133869	30.907	8.723
N-I240	025YR	10.329	10.000	0.0008	195227	37.466	11.226
N-I240	050YR	10.422	10.000	0.0009	239339	44.081	11.347
N-I240	100YR	10.542	10.000	0.0010	296380	52.097	11.311
N-I240	500YR	10.846	10.000	0.0010	440884	62.057	11.391
N-I250	002YR	11.027	11.200	0.0009	20559	26.819	15.196
N-I250	010YR	12.277	11.200	0.0015	70049	49.821	20.905
N-I250	025YR	12.624	11.200	0.0017	85859	60.628	23.105
N-I250	050YR	12.933	11.200	0.0017	99937	71.525	24.599
N-I250	100YR	13.238	11.200	0.0017	166974	84.661	25.464
N-I250	500YR	13.511	11.200	0.0015	240548	101.110	25.663
N-I252	002YR	10.952	12.000	0.0050	150	15.196	15.192
N-I252	010YR	12.068	12.000	0.0050	117	20.905	21.048
N-I252	025YR	12.356	12.000	0.0050	117	23.105	23.112
N-I252	050YR	12.624	12.000	0.0050	117	24.599	24.598
N-I252	100YR	12.932	12.000	0.0050	117	25.464	25.452
N-I252	500YR	13.209	12.000	0.0050	117	25.663	25.630
N-I255	002YR	10.893	12.000	0.0044	257	15.192	15.185
N-I255	010YR	11.705	12.000	-0.0050	186	21.048	20.937
N-I255	025YR	11.879	12.000	-0.0050	180	23.112	23.121
N-I255	050YR	12.061	12.000	-0.0050	161	24.598	24.597
N-I255	100YR	12.381	12.000	-0.0050	127	25.452	25.435
N-I255	500YR	12.662	12.000	-0.0050	127	25.630	25.589
N-I260	002YR	8.952	11.000	0.0003	79220	23.919	9.737
N-I260	010YR	9.727	11.000	0.0004	85882	38.758	19.504
N-I260	025YR	9.956	11.000	0.0005	87788	44.700	22.518
N-I260	050YR	10.147	11.000	0.0005	89337	50.355	24.945
N-I260	100YR	10.342	11.000	0.0005	90993	57.687	27.249
N-I260	500YR	10.585	11.000	0.0006	93014	67.409	29.588
N-I265	002YR	8.879	16.000	-0.0035	519	9.737	9.737
N-I265	010YR	9.610	16.000	-0.0032	481	19.504	19.503
N-I265	025YR	9.819	16.000	-0.0035	448	22.518	22.518
N-I265	050YR	9.988	16.000	-0.0035	411	24.945	24.945
N-I265	100YR	10.155	16.000	-0.0035	357	27.249	27.249
N-I265	500YR	10.336	16.000	-0.0047	247	29.588	29.588
N-I270	002YR	7.509	8.000	0.0050	23884	60.983	52.799
N-I270	010YR	8.422	8.000	0.0050	37539	72.618	70.874
N-I270	025YR	8.784	8.000	0.0050	40501	78.934	76.599
N-I270	050YR	9.133	8.000	0.0050	44420	83.848	81.640
N-I270	100YR	9.503	8.000	0.0050	49643	88.999	84.318
N-I270	500YR	9.916	8.000	0.0050	55917	92.302	86.360

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
N-I280	002YR	10.019	10.200	0.0002	14037	3.295	1.455
N-I280	010YR	10.289	10.200	0.0003	14838	6.004	3.962
N-I280	025YR	10.336	10.200	0.0003	15078	7.268	5.861
N-I280	050YR	10.367	10.200	0.0004	15236	8.539	7.677
N-I280	100YR	10.393	10.200	0.0004	15365	10.069	9.625
N-I280	500YR	10.416	10.200	0.0004	15482	11.982	11.701
N-I290	002YR	8.156	8.300	0.0003	10733	5.409	4.052
N-I290	010YR	8.401	8.300	-0.0004	12972	9.352	10.313
N-I290	025YR	8.761	8.300	-0.0005	18847	11.163	14.922
N-I290	050YR	9.114	8.300	-0.0004	24131	12.973	18.003
N-I290	100YR	9.482	8.300	0.0004	28565	15.142	19.999
N-I290	500YR	9.905	8.300	0.0004	33649	17.844	23.054

Updated Model
Nodes Output

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
N-A010	002YR	4.800	0.000	0.0003	1358513	596.196	0.000
N-A010	010YR	4.800	0.000	0.0003	1360688	944.931	0.000
N-A010	025YR	4.800	0.000	0.0003	1361863	1128.828	0.000
N-A010	050YR	4.800	0.000	0.0003	1362488	1315.704	0.000
N-A010	100YR	4.800	0.000	0.0003	1364179	1612.813	0.000
N-A010	500YR	4.800	0.000	0.0003	1367233	1971.389	0.000
N-A015	002YR	4.794	0.000	0.0003	1797931	555.806	596.196
N-A015	010YR	5.355	0.000	0.0003	2178448	911.310	944.931
N-A015	025YR	5.634	0.000	0.0003	1898833	1112.224	1128.828
N-A015	050YR	5.892	0.000	0.0003	2130749	1290.918	1315.704
N-A015	100YR	6.193	0.000	0.0003	2169065	1498.318	1612.813
N-A015	500YR	6.491	0.000	0.0003	2220528	1749.379	1971.389
N-A020	002YR	4.847	0.000	0.0004	362630	548.612	555.806
N-A020	010YR	5.469	0.000	0.0004	446294	905.160	911.310
N-A020	025YR	5.750	0.000	0.0004	449343	1111.553	1112.224
N-A020	050YR	6.000	0.000	0.0004	452074	1292.961	1290.918
N-A020	100YR	6.292	0.000	0.0004	455257	1496.123	1498.318
N-A020	500YR	6.578	0.000	0.0004	460057	1740.908	1749.379
N-A030	002YR	4.914	0.000	0.0008	1931478	540.078	548.612
N-A030	010YR	5.653	0.000	0.0008	2665150	934.359	905.160
N-A030	025YR	5.983	0.000	0.0008	2714177	1129.710	1111.553
N-A030	050YR	6.254	0.000	0.0008	3049756	1307.257	1292.961
N-A030	100YR	6.553	0.000	0.0008	3577178	1505.741	1496.123
N-A030	500YR	6.838	0.000	0.0008	3749577	1734.149	1740.908
N-A040	002YR	5.239	0.000	0.0003	4383799	637.079	469.797
N-A040	010YR	6.213	0.000	0.0003	5158515	1067.296	809.360
N-A040	025YR	6.608	0.000	0.0003	5361655	1237.132	1016.104
N-A040	050YR	6.918	0.000	0.0003	5729643	1407.320	1181.632
N-A040	100YR	7.247	0.000	0.0003	6391652	1600.172	1363.193
N-A040	500YR	7.545	0.000	0.0003	6639829	1840.538	1562.723
N-A050	002YR	5.239	8.000	0.0004	428994	155.424	123.881
N-A050	010YR	6.214	8.000	0.0004	475140	271.564	220.044
N-A050	025YR	6.609	8.000	0.0003	492536	307.438	243.291
N-A050	050YR	6.919	8.000	0.0003	516902	339.669	266.891
N-A050	100YR	7.248	8.000	0.0003	545672	382.017	298.827
N-A050	500YR	7.546	8.000	0.0003	574899	435.050	340.480
N-A060	002YR	5.240	8.000	0.0003	48615	27.503	27.249
N-A060	010YR	6.214	8.000	0.0002	62507	127.143	127.622
N-A060	025YR	6.640	8.000	0.0002	70050	153.519	154.100
N-A060	050YR	7.014	8.000	0.0003	73979	180.591	181.124
N-A060	100YR	7.416	8.000	0.0004	77230	209.340	210.316
N-A060	500YR	7.844	8.000	0.0005	81307	248.580	249.388
N-A070	002YR	5.240	8.000	0.0005	145744	24.297	16.903
N-A070	010YR	6.236	8.000	0.0004	222017	113.714	113.481
N-A070	025YR	6.669	8.000	0.0002	248724	135.687	135.787
N-A070	050YR	7.042	8.000	0.0003	265694	158.627	157.545
N-A070	100YR	7.443	8.000	0.0004	280125	181.850	181.578
N-A070	500YR	7.869	8.000	0.0004	295542	210.586	212.019
N-A075	002YR	5.527	8.000	0.0005	41214	17.533	15.686
N-A075	010YR	6.693	8.000	0.0008	151687	109.568	108.206
N-A075	025YR	6.905	8.000	0.0009	160080	130.320	128.768
N-A075	050YR	7.184	8.000	0.0010	175819	151.741	149.976
N-A075	100YR	7.563	8.000	0.0012	191894	173.487	170.404
N-A075	500YR	7.974	8.000	0.0013	204568	198.186	196.138
N-A080	002YR	8.073	7.000	0.0007	33542	128.340	128.342
N-A080	010YR	8.245	7.000	0.0011	34179	222.613	222.624
N-A080	025YR	8.275	7.000	0.0012	34290	242.111	242.126
N-A080	050YR	8.303	7.000	0.0012	34396	258.338	259.936
N-A080	100YR	8.331	7.000	0.0012	34510	275.713	275.750
N-A080	500YR	8.361	7.000	0.0011	34645	296.807	296.850
N-A083	002YR	9.078	11.000	0.0008	34113	118.666	118.344
N-A083	010YR	10.160	11.000	0.0009	40252	208.321	208.334
N-A083	025YR	10.353	11.000	0.0010	41418	223.840	223.782

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
N-A083	050YR	10.501	11.000	0.0011	42332	235.489	235.005
N-A083	100YR	10.668	11.000	0.0011	43328	251.360	250.398
N-A083	500YR	10.852	11.000	0.0011	44463	266.837	265.641
N-A083A	002YR	9.580	12.000	0.0010	3388	4.011	4.586
N-A083A	010YR	10.163	12.000	0.0011	5106	11.749	10.654
N-A083A	025YR	10.356	12.000	0.0023	5395	21.704	17.119
N-A083A	050YR	10.504	12.000	0.0026	5618	24.536	20.805
N-A083A	100YR	10.683	12.000	0.0029	5881	26.544	24.192
N-A083A	500YR	10.864	12.000	0.0033	6154	29.088	27.807
N-A083B	002YR	12.309	12.920	0.0007	15609	10.666	4.011
N-A083B	010YR	12.967	12.920	0.0007	17587	16.683	11.749
N-A083B	025YR	12.994	12.920	0.0008	17668	19.393	21.704
N-A083B	050YR	13.005	12.920	0.0009	17686	22.090	24.536
N-A083B	100YR	13.015	12.920	0.0010	17688	25.314	26.544
N-A083B	500YR	13.028	12.920	0.0011	17690	29.328	29.088
N-A090	002YR	8.092	8.000	0.0005	33497	128.354	128.340
N-A090	010YR	8.290	8.000	0.0008	34177	222.604	222.613
N-A090	025YR	8.325	8.000	0.0010	34298	242.098	242.111
N-A090	050YR	8.358	8.000	0.0011	34411	257.543	258.338
N-A090	100YR	8.391	8.000	0.0011	34539	275.680	275.713
N-A090	500YR	8.428	8.000	0.0011	34685	296.771	296.807
N-A100	002YR	8.263	14.800	0.0006	107659	129.221	128.354
N-A100	010YR	9.000	14.800	0.0008	305074	227.926	222.604
N-A100	025YR	9.204	14.800	0.0009	391493	252.152	242.098
N-A100	050YR	9.386	14.800	0.0011	468824	272.904	257.543
N-A100	100YR	9.566	14.800	0.0012	532209	297.399	275.680
N-A100	500YR	9.775	14.800	0.0012	579887	333.043	296.771
N-A101	002YR	8.346	11.000	-0.0003	1763	2.793	2.872
N-A101	010YR	9.010	11.000	0.0013	2234	6.352	6.002
N-A101	025YR	9.212	11.000	0.0016	2374	7.320	6.920
N-A101	050YR	9.394	11.000	0.0019	2499	8.091	7.576
N-A101	100YR	9.573	11.000	0.0020	2623	8.538	7.822
N-A101	500YR	9.781	11.000	0.0021	2767	8.776	7.874
N-A102	002YR	9.223	10.950	0.0005	26020	12.318	2.793
N-A102	010YR	9.973	10.950	0.0006	29582	19.025	6.352
N-A102	025YR	10.235	10.950	0.0007	29708	22.046	7.320
N-A102	050YR	10.515	10.950	0.0007	29708	25.055	8.091
N-A102	100YR	10.912	10.950	0.0008	29708	28.653	8.538
N-A102	500YR	11.392	10.950	0.0010	29708	33.135	8.776
N-A110	002YR	5.732	8.000	0.0003	1905365	357.770	340.965
N-A110	010YR	6.588	8.000	0.0003	2223946	551.020	560.201
N-A110	025YR	7.040	8.000	0.0003	2488219	721.969	730.885
N-A110	050YR	7.379	8.000	0.0003	2657250	857.639	868.666
N-A110	100YR	7.733	8.000	0.0003	3179637	1011.466	1033.020
N-A110	500YR	8.029	8.000	0.0003	3427807	1187.578	1203.808
N-A120	002YR	5.859	8.000	0.0006	460565	344.774	330.281
N-A120	010YR	6.784	8.000	0.0006	713123	534.072	506.593
N-A120	025YR	7.314	8.000	0.0006	1000853	669.135	665.318
N-A120	050YR	7.739	8.000	0.0006	1110075	796.580	791.519
N-A120	100YR	8.246	8.000	0.0006	1258147	935.017	931.295
N-A120	500YR	9.010	8.000	0.0006	1515943	1063.079	1074.239
N-A130	002YR	6.027	8.000	-0.0026	9594	27.870	27.657
N-A130	010YR	6.922	8.000	-0.0026	16638	46.820	46.424
N-A130	025YR	7.386	8.000	-0.0026	18558	56.984	57.050
N-A130	050YR	7.726	8.000	-0.0026	19964	66.911	67.035
N-A130	100YR	8.099	8.000	-0.0026	21496	80.128	80.226
N-A130	500YR	8.586	8.000	-0.0026	23302	114.180	114.231
N-A140	002YR	6.055	8.000	0.0050	126806	124.477	118.477
N-A140	010YR	6.961	8.000	0.0050	198989	196.645	187.636
N-A140	025YR	7.438	8.000	0.0050	446110	229.020	220.456
N-A140	050YR	7.817	8.000	0.0050	510560	264.429	252.399
N-A140	100YR	8.299	8.000	0.0050	533527	307.716	305.385
N-A140	500YR	9.031	8.000	0.0050	557167	375.699	391.331

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
N-A141	002YR	8.900	12.000	0.0004	4135	12.261	12.063
N-A141	010YR	9.168	12.000	0.0005	4751	19.601	19.396
N-A141	025YR	9.271	12.000	0.0006	4976	22.946	22.727
N-A141	050YR	9.368	12.000	0.0006	5185	26.286	26.051
N-A141	100YR	9.477	12.000	0.0007	5420	30.292	30.039
N-A141	500YR	9.604	12.000	0.0007	5708	35.302	35.018
N-A142	002YR	10.551	12.000	0.0009	240	10.782	10.758
N-A142	010YR	11.047	12.000	0.0012	221	16.788	16.754
N-A142	025YR	11.265	12.000	0.0013	203	19.493	19.458
N-A142	050YR	11.481	12.000	0.0014	161	22.186	22.153
N-A142	100YR	11.742	12.000	0.0016	150	25.405	25.369
N-A142	500YR	12.087	12.000	0.0018	149	29.413	29.365
N-A145	002YR	6.100	8.000	-0.0021	466667	157.265	120.727
N-A145	010YR	6.990	8.000	-0.0021	669609	258.932	191.266
N-A145	025YR	7.459	8.000	-0.0021	760849	303.133	222.672
N-A145	050YR	7.833	8.000	-0.0021	832671	345.670	257.139
N-A145	100YR	8.312	8.000	-0.0021	923338	396.230	298.579
N-A145	500YR	9.041	8.000	-0.0021	1033407	457.205	375.549
N-A150	002YR	6.480	8.000	0.0011	516637	191.616	136.560
N-A150	010YR	7.213	8.000	0.0007	945444	359.649	220.260
N-A150	025YR	7.626	8.000	0.0006	1144050	415.067	255.610
N-A150	050YR	7.966	8.000	-0.0005	1298813	460.431	289.538
N-A150	100YR	8.426	8.000	-0.0005	1510024	528.592	334.054
N-A150	500YR	9.117	8.000	-0.0005	1770728	628.426	385.531
N-A160	002YR	6.749	8.000	0.0010	269782	87.422	87.348
N-A160	010YR	7.511	8.000	0.0007	922604	147.680	143.577
N-A160	025YR	7.868	8.000	0.0006	1212745	179.887	174.272
N-A160	050YR	8.168	8.000	0.0006	1455204	205.241	206.551
N-A160	100YR	8.598	8.000	0.0006	1803924	254.101	259.803
N-A160	500YR	9.227	8.000	0.0005	2310568	304.562	317.198
N-A161	002YR	10.398	12.000	0.0021	4196	9.356	9.330
N-A161	010YR	10.720	12.000	0.0021	4823	16.981	16.959
N-A161	025YR	10.842	12.000	0.0021	5091	20.564	20.533
N-A161	050YR	10.953	12.000	0.0021	5330	24.176	24.139
N-A161	100YR	10.987	12.000	0.0021	5470	25.298	25.294
N-A161	500YR	10.994	12.000	0.0021	5604	25.551	25.549
N-A162	002YR	10.805	14.500	-0.0050	241	9.360	9.356
N-A162	010YR	12.615	14.500	-0.0050	125	16.987	16.981
N-A162	025YR	13.622	14.500	-0.0050	125	20.573	20.564
N-A162	050YR	14.798	14.500	-0.0050	125	24.189	24.176
N-A162	100YR	15.198	14.500	-0.0050	125	28.549	28.548
N-A162	500YR	15.290	14.500	-0.0050	125	34.012	34.011
N-A200	002YR	7.902	10.000	0.0009	9081	29.763	28.150
N-A200	010YR	8.739	10.000	0.0012	11901	53.099	50.298
N-A200	025YR	9.087	10.000	0.0013	13066	63.854	60.360
N-A200	050YR	9.422	10.000	0.0014	14174	74.585	70.300
N-A200	100YR	9.812	10.000	0.0015	15427	87.362	82.010
N-A200	500YR	10.286	10.000	-0.0027	16727	103.092	96.260
N-A210	002YR	8.362	9.000	0.0007	6796	25.455	24.966
N-A210	010YR	8.965	9.000	0.0008	9241	45.402	42.186
N-A210	025YR	9.259	9.000	0.0009	10356	54.644	49.836
N-A210	050YR	9.556	9.000	0.0010	11463	63.919	57.339
N-A210	100YR	9.914	9.000	0.0010	12781	75.055	66.127
N-A210	500YR	10.359	9.000	0.0011	14411	88.957	76.769
N-A300	002YR	5.692	5.000	0.0005	27433	135.198	134.572
N-A300	010YR	6.455	5.000	0.0005	30281	175.556	174.823
N-A300	025YR	6.752	5.000	0.0005	31499	188.296	187.517
N-A300	050YR	7.014	5.000	0.0005	32568	197.019	195.711
N-A300	100YR	7.303	5.000	0.0004	33750	210.646	209.652
N-A300	500YR	7.576	5.000	0.0004	34869	228.416	227.177
N-A310	002YR	6.080	9.000	-0.0011	1861	135.229	135.198
N-A310	010YR	6.621	9.000	-0.0049	1969	175.594	175.556

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
N-A310	025YR	6.878	9.000	0.0022	2016	188.334	188.296
N-A310	050YR	7.107	9.000	-0.0030	1730	197.218	197.019
N-A310	100YR	7.358	9.000	0.0050	1776	210.689	210.646
N-A310	500YR	7.608	9.000	0.0032	1821	228.489	228.416
N-A320	002YR	6.440	8.000	0.0007	46184	136.265	135.229
N-A320	010YR	6.991	8.000	0.0008	46958	178.546	175.594
N-A320	025YR	7.158	8.000	0.0008	47108	190.916	188.334
N-A320	050YR	7.284	8.000	0.0008	45623	202.085	197.218
N-A320	100YR	7.499	8.000	0.0006	45729	212.116	210.689
N-A320	500YR	7.725	8.000	0.0006	41879	230.890	228.489
N-A330	002YR	7.588	10.100	0.0007	5857	110.851	110.868
N-A330	010YR	7.763	10.100	0.0008	5857	113.455	113.462
N-A330	025YR	7.823	10.100	0.0009	5857	112.407	112.416
N-A330	050YR	7.920	10.100	0.0050	1810	111.520	117.000
N-A330	100YR	7.973	10.100	0.0050	1810	111.077	109.561
N-A330	500YR	8.105	10.100	0.0050	461	111.372	109.940
N-B010	002YR	6.084	8.100	0.0004	410155	252.594	247.903
N-B010	010YR	6.985	8.100	0.0005	604335	401.315	394.509
N-B010	025YR	7.525	8.100	0.0005	690828	554.306	546.881
N-B010	050YR	7.940	8.100	0.0005	718454	679.505	669.932
N-B010	100YR	8.427	8.100	0.0005	779709	818.699	806.161
N-B010	500YR	9.141	8.100	0.0005	1092554	1015.598	982.626
N-B011	002YR	6.110	8.100	-0.0050	522	25.766	12.988
N-B011	010YR	7.012	8.100	0.0050	412	37.132	20.453
N-B011	025YR	7.559	8.100	0.0050	198	36.821	23.414
N-B011	050YR	7.987	8.100	0.0050	198	40.639	25.567
N-B011	100YR	8.483	8.100	0.0050	198	43.297	34.583
N-B011	500YR	9.258	8.100	0.0050	198	44.703	44.278
N-B012	002YR	6.109	10.000	-0.0021	1179	9.845	8.832
N-B012	010YR	7.012	10.000	0.0021	846	11.704	11.479
N-B012	025YR	7.563	10.000	-0.0050	183	13.881	13.665
N-B012	050YR	7.992	10.000	0.0050	183	16.056	15.913
N-B012	100YR	8.483	10.000	0.0050	183	18.586	18.429
N-B012	500YR	9.260	10.000	0.0050	183	21.795	21.705
N-B013	002YR	7.068	11.000	0.0050	494	12.517	9.845
N-B013	010YR	7.276	11.000	0.0050	476	12.517	11.704
N-B013	025YR	7.563	11.000	0.0050	367	13.883	13.881
N-B013	050YR	7.992	11.000	0.0050	314	16.059	16.056
N-B013	100YR	8.595	11.000	0.0050	367	18.665	18.586
N-B013	500YR	9.936	11.000	0.0050	135	21.855	21.795
N-B014	002YR	11.080	12.000	-0.0050	337	6.953	12.517
N-B014	010YR	11.080	12.000	-0.0050	337	11.710	12.517
N-B014	025YR	11.217	12.000	-0.0050	322	13.885	13.883
N-B014	050YR	11.441	12.000	-0.0050	274	16.060	16.059
N-B014	100YR	11.720	12.000	-0.0050	207	18.666	18.665
N-B014	500YR	13.140	12.000	-0.0050	130	21.914	21.855
N-B015	002YR	6.105	10.500	0.0050	1525	13.808	24.690
N-B015	010YR	7.066	10.500	0.0050	553	13.816	35.718
N-B015	025YR	7.625	10.500	0.0050	560	13.817	35.717
N-B015	050YR	8.099	10.500	0.0050	540	19.432	35.718
N-B015	100YR	8.694	10.500	0.0050	195	30.382	35.718
N-B015	500YR	9.658	10.500	0.0050	195	34.232	34.216
N-B016	002YR	8.043	10.050	-0.0026	1725	9.076	13.808
N-B016	010YR	8.073	10.050	-0.0028	1271	10.261	13.816
N-B016	025YR	8.367	10.050	0.0023	1292	12.445	13.817
N-B016	050YR	9.057	10.050	-0.0025	1161	19.452	19.432
N-B016	100YR	11.084	10.050	-0.0031	198	30.390	30.382
N-B016	500YR	12.082	10.050	0.0050	198	41.610	34.232
N-B020	002YR	6.753	8.550	0.0007	60106	296.505	240.215
N-B020	010YR	7.606	8.550	0.0007	154716	314.635	389.056
N-B020	025YR	8.231	8.550	0.0007	204228	444.403	540.295
N-B020	050YR	8.688	8.550	0.0007	215600	771.152	659.960
N-B020	100YR	9.161	8.550	0.0008	297423	664.942	794.978

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
N-B020	500YR	9.624	8.550	0.0007	311061	1187.249	982.013
N-B030	002YR	6.754	8.550	0.0005	48161	7.532	2.258
N-B030	010YR	7.606	8.550	0.0006	78769	10.539	7.328
N-B030	025YR	8.232	8.550	0.0007	104952	11.491	9.520
N-B030	050YR	8.688	8.550	0.0007	114998	12.379	9.867
N-B030	100YR	9.162	8.550	0.0008	114998	13.363	7.081
N-B030	500YR	9.624	8.550	0.0007	114998	14.487	8.486
N-B040	002YR	8.501	11.000	0.0002	71458	15.393	7.532
N-B040	010YR	8.796	11.000	0.0002	75310	24.641	10.539
N-B040	025YR	8.947	11.000	0.0003	77276	28.839	11.491
N-B040	050YR	9.099	11.000	0.0003	79690	33.035	12.379
N-B040	100YR	9.280	11.000	0.0004	82853	38.047	13.363
N-B040	500YR	9.624	11.000	0.0004	87870	44.283	14.487
N-B050	002YR	6.755	8.550	-0.0034	8738	6.174	55.654
N-B050	010YR	7.603	8.550	-0.0034	8996	8.498	13.004
N-B050	025YR	8.229	8.550	-0.0034	10747	10.480	13.004
N-B050	050YR	8.690	8.550	-0.0034	13546	12.322	111.315
N-B050	100YR	9.159	8.550	-0.0034	13559	14.096	13.004
N-B050	500YR	9.628	8.550	-0.0034	13573	14.677	206.580
N-B060	002YR	6.755	8.550	0.0005	14754	11.050	6.174
N-B060	010YR	7.608	8.550	0.0008	107776	16.109	8.498
N-B060	025YR	8.234	8.550	0.0008	109603	19.496	10.480
N-B060	050YR	8.691	8.550	0.0009	112689	22.732	12.322
N-B060	100YR	9.162	8.550	0.0010	156951	26.491	14.096
N-B060	500YR	9.624	8.550	0.0011	157092	34.861	14.677
N-B070	002YR	6.756	8.550	0.0005	12748	0.000	10.274
N-B070	010YR	7.608	8.550	0.0007	44082	0.000	0.000
N-B070	025YR	8.234	8.550	0.0008	45068	0.000	0.000
N-B070	050YR	8.691	8.550	0.0009	46445	0.000	14.416
N-B070	100YR	9.162	8.550	0.0010	165737	0.000	0.000
N-B070	500YR	9.624	8.550	0.0011	166087	0.000	21.790
N-B071	002YR	10.090	11.500	0.0002	526489	55.466	9.076
N-B071	010YR	10.937	11.500	0.0002	713260	92.117	10.261
N-B071	025YR	11.273	11.500	0.0003	727970	110.334	12.445
N-B071	050YR	11.505	11.500	0.0003	728803	129.111	19.452
N-B071	100YR	11.735	11.500	0.0003	729661	154.685	30.390
N-B071	500YR	12.085	11.500	0.0003	730518	198.704	41.610
N-B072	002YR	12.931	12.000	0.0050	9073	28.548	15.269
N-B072	010YR	13.898	12.000	0.0050	11301	31.138	31.115
N-B072	025YR	14.275	12.000	0.0050	12193	39.515	39.414
N-B072	050YR	14.651	12.000	0.0050	13076	49.258	48.948
N-B072	100YR	15.355	12.000	0.0050	14538	73.775	69.847
N-B072	500YR	15.798	12.000	0.0050	15556	317.031	86.138
N-B073	002YR	12.994	15.000	-0.0050	202	5.620	39.897
N-B073	010YR	14.109	15.000	-0.0050	145	11.074	39.897
N-B073	025YR	14.620	15.000	-0.0050	122	13.689	39.897
N-B073	050YR	15.108	15.000	-0.0050	122	16.349	39.897
N-B073	100YR	15.385	15.000	-0.0050	122	19.578	39.897
N-B073	500YR	15.823	15.000	-0.0050	122	23.648	39.897
N-B075	002YR	12.993	15.000	0.0050	71899	29.509	19.413
N-B075	010YR	14.111	15.000	0.0050	71899	57.048	24.321
N-B075	025YR	14.619	15.000	0.0050	71899	69.922	30.885
N-B075	050YR	15.103	15.000	0.0050	71899	81.985	39.330
N-B075	100YR	15.363	15.000	0.0050	71899	100.007	69.430
N-B075	500YR	15.798	15.000	0.0050	71899	121.564	314.565
N-B080	002YR	6.828	8.550	0.0005	115694	183.798	223.880
N-B080	010YR	7.846	8.550	0.0006	361652	397.008	373.225
N-B080	025YR	8.431	8.550	0.0007	411982	579.933	527.807
N-B080	050YR	8.846	8.550	0.0008	468989	570.076	647.218
N-B080	100YR	9.285	8.550	0.0008	604598	907.144	783.422
N-B080	500YR	9.719	8.550	0.0007	623543	815.190	964.570
N-B090	002YR	6.827	10.000	0.0006	7705	9.023	0.070

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
N-B090	010YR	7.847	10.000	0.0006	21047	22.908	65.104
N-B090	025YR	8.431	10.000	0.0007	22127	26.159	65.193
N-B090	050YR	8.845	10.000	0.0008	22153	28.061	25.265
N-B090	100YR	9.287	10.000	0.0010	22181	35.657	122.775
N-B090	500YR	9.717	10.000	0.0007	22208	38.351	34.183
N-B100	002YR	6.845	10.000	0.0005	18534	9.826	9.023
N-B100	010YR	7.851	10.000	0.0008	37739	25.244	22.908
N-B100	025YR	8.433	10.000	0.0009	259188	31.164	26.159
N-B100	050YR	8.848	10.000	0.0009	259348	35.980	28.061
N-B100	100YR	9.288	10.000	0.0008	260187	41.931	35.657
N-B100	500YR	9.721	10.000	0.0006	261289	53.077	38.351
N-B110	002YR	6.845	10.000	0.0005	17131	0.000	0.000
N-B110	010YR	7.851	10.000	0.0008	23772	0.000	1.785
N-B110	025YR	8.433	10.000	0.0009	97727	0.000	3.102
N-B110	050YR	8.848	10.000	0.0009	98100	0.000	3.872
N-B110	100YR	9.288	10.000	0.0008	100503	0.000	5.942
N-B110	500YR	9.720	10.000	0.0006	103698	0.000	7.689
N-B120	002YR	6.899	10.000	0.0005	120732	237.139	221.308
N-B120	010YR	8.042	10.000	0.0007	432433	323.220	371.747
N-B120	025YR	8.583	10.000	0.0007	494961	450.152	528.668
N-B120	050YR	8.977	10.000	0.0008	559118	758.935	648.577
N-B120	100YR	9.392	10.000	0.0008	690072	662.460	788.794
N-B120	500YR	9.806	10.000	0.0008	762632	1168.132	977.995
N-B125	002YR	7.037	8.550	0.0050	37762	61.714	56.668
N-B125	010YR	8.451	8.550	0.0050	41801	126.383	116.078
N-B125	025YR	9.044	8.550	0.0050	43502	139.135	127.886
N-B125	050YR	9.509	8.550	0.0050	44927	178.799	177.296
N-B125	100YR	9.973	8.550	0.0050	46464	241.755	240.007
N-B125	500YR	10.360	8.550	0.0050	47746	291.673	289.571
N-B130	002YR	6.899	10.000	0.0005	15416	15.761	24.108
N-B130	010YR	8.042	10.000	0.0006	17583	20.030	16.868
N-B130	025YR	8.582	10.000	0.0007	17612	25.237	26.155
N-B130	050YR	8.979	10.000	0.0008	17633	26.716	121.893
N-B130	100YR	9.390	10.000	0.0008	17654	32.681	26.313
N-B130	500YR	9.809	10.000	0.0008	17677	41.473	197.291
N-B140	002YR	6.935	10.000	0.0012	158185	23.282	15.761
N-B140	010YR	8.048	10.000	0.0014	415001	33.545	20.030
N-B140	025YR	8.587	10.000	0.0014	463674	39.007	25.237
N-B140	050YR	8.981	10.000	0.0013	475476	44.257	26.716
N-B140	100YR	9.396	10.000	0.0011	476930	46.931	32.681
N-B140	500YR	9.809	10.000	0.0008	485732	54.548	41.473
N-B150	002YR	6.935	10.000	0.0012	73172	0.000	6.226
N-B150	010YR	8.048	10.000	0.0014	172729	0.000	7.531
N-B150	025YR	8.587	10.000	0.0014	318556	0.000	10.569
N-B150	050YR	8.981	10.000	0.0014	353819	0.000	16.826
N-B150	100YR	9.396	10.000	0.0011	358033	0.000	12.639
N-B150	500YR	9.809	10.000	0.0008	384292	0.000	27.535
N-B160	002YR	7.027	10.000	0.0006	84630	212.791	213.031
N-B160	010YR	8.443	10.000	0.0007	323032	360.458	357.767
N-B160	025YR	8.928	10.000	0.0008	368506	518.885	517.579
N-B160	050YR	9.267	10.000	0.0008	420026	646.280	642.023
N-B160	100YR	9.640	10.000	0.0008	533404	790.150	781.206
N-B160	500YR	10.020	10.000	0.0009	610970	1013.906	993.995
N-B164	002YR	7.041	10.000	0.0008	34757	66.236	61.714
N-B164	010YR	8.451	10.000	0.0009	38461	136.236	126.383
N-B164	025YR	9.065	10.000	0.0010	40075	151.879	139.135
N-B164	050YR	9.555	10.000	0.0010	41446	180.249	178.799
N-B164	100YR	10.046	10.000	0.0010	42903	243.368	241.755
N-B164	500YR	10.461	10.000	0.0010	44117	293.503	291.673
N-B170	002YR	7.028	9.500	0.0006	65849	26.269	4.548
N-B170	010YR	8.444	9.500	0.0007	69743	42.788	5.681
N-B170	025YR	8.929	9.500	0.0008	71221	50.267	7.101
N-B170	050YR	9.268	9.500	0.0008	92464	57.718	11.166

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
N-B170	100YR	9.641	9.500	0.0008	110642	66.622	17.316
N-B170	500YR	10.021	9.500	0.0008	110642	77.700	25.942
N-B180	002YR	7.035	10.000	0.0050	14149	122.446	119.364
N-B180	010YR	8.451	10.000	0.0050	15063	206.682	201.707
N-B180	025YR	9.026	10.000	0.0050	36180	235.363	229.149
N-B180	050YR	9.469	10.000	0.0050	52309	315.286	315.205
N-B180	100YR	9.909	10.000	0.0050	88827	429.132	428.902
N-B180	500YR	10.270	10.000	0.0050	109716	501.585	498.868
N-B200	002YR	7.042	10.000	0.0009	18832	64.552	57.341
N-B200	010YR	8.451	10.000	0.0009	21693	126.346	119.877
N-B200	025YR	9.076	10.000	0.0010	22804	143.103	133.364
N-B200	050YR	9.580	10.000	0.0011	23717	158.140	157.473
N-B200	100YR	10.085	10.000	0.0011	24604	219.587	218.795
N-B200	500YR	10.516	10.000	0.0011	25392	269.105	268.104
N-B220	002YR	7.035	10.000	0.0010	13195	17.303	13.550
N-B220	010YR	8.445	10.000	0.0010	14271	30.193	25.825
N-B220	025YR	9.084	10.000	0.0011	14759	35.487	29.153
N-B220	050YR	9.598	10.000	0.0011	15161	37.846	29.456
N-B220	100YR	10.105	10.000	0.0011	15531	39.676	30.376
N-B220	500YR	10.544	10.000	0.0011	15864	40.611	30.997
N-B230	002YR	9.547	13.000	0.0001	216293	39.822	15.667
N-B230	010YR	9.814	13.000	0.0002	224918	63.889	28.622
N-B230	025YR	9.931	13.000	0.0003	228683	74.760	33.645
N-B230	050YR	10.087	13.000	0.0003	231735	85.585	35.429
N-B230	100YR	10.294	13.000	0.0003	233726	98.519	36.355
N-B230	500YR	10.567	13.000	0.0004	236273	114.612	36.380
N-B320	002YR	7.035	10.000	0.0008	18796	57.803	55.184
N-B320	010YR	8.450	10.000	0.0009	20816	119.086	114.961
N-B320	025YR	9.029	10.000	0.0009	21638	132.232	127.187
N-B320	050YR	9.474	10.000	0.0009	22300	178.623	177.857
N-B320	100YR	9.918	10.000	0.0009	23013	241.617	240.686
N-B320	500YR	10.283	10.000	0.0009	23616	291.714	290.574
N-B380	002YR	7.036	10.000	0.0009	12885	33.617	33.187
N-B380	010YR	8.446	10.000	0.0010	14982	64.765	64.117
N-B380	025YR	9.083	10.000	0.0011	15794	73.978	72.602
N-B380	050YR	9.595	10.000	0.0011	16486	98.152	97.347
N-B380	100YR	10.102	10.000	0.0011	17139	117.200	114.945
N-B380	500YR	10.540	10.000	0.0011	17699	139.686	138.841
N-C010	002YR	7.017	9.000	0.0008	15540	31.036	27.426
N-C010	010YR	8.436	9.000	-0.0018	20735	65.284	59.664
N-C010	025YR	9.134	9.000	-0.0023	24722	84.041	78.912
N-C010	050YR	9.731	9.000	-0.0024	40590	109.609	109.078
N-C010	100YR	10.282	9.000	-0.0025	67359	127.279	124.497
N-C010	500YR	10.805	9.000	-0.0025	94686	150.375	148.654
N-C020	002YR	7.018	9.000	0.0009	16626	17.175	15.562
N-C020	010YR	8.448	9.000	0.0009	118991	55.314	41.106
N-C020	025YR	9.154	9.000	0.0011	205611	81.664	73.518
N-C020	050YR	9.752	9.000	0.0013	263252	114.456	102.631
N-C020	100YR	10.299	9.000	0.0013	309897	147.579	115.666
N-C020	500YR	10.813	9.000	0.0013	325400	180.653	136.328
N-C030	002YR	7.018	10.000	0.0005	11254	3.975	5.175
N-C030	010YR	8.448	10.000	0.0009	47078	7.026	12.727
N-C030	025YR	9.155	10.000	0.0011	88485	52.955	48.968
N-C030	050YR	9.753	10.000	0.0013	125815	106.085	95.201
N-C030	100YR	10.300	10.000	0.0013	154533	181.235	165.293
N-C030	500YR	10.814	10.000	0.0013	191931	284.093	260.713
N-C040	002YR	7.018	10.000	0.0005	6912	4.700	3.344
N-C040	010YR	8.448	10.000	0.0009	8916	6.960	6.324
N-C040	025YR	9.157	10.000	0.0011	9999	52.530	52.001
N-C040	050YR	9.763	10.000	0.0013	35412	103.327	102.186
N-C040	100YR	10.317	10.000	0.0013	61093	181.649	176.307
N-C040	500YR	10.829	10.000	0.0013	95016	288.733	278.570

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
N-C050	002YR	7.018	8.900	0.0005	3300	5.702	4.700
N-C050	010YR	8.447	8.900	0.0009	4222	14.097	6.960
N-C050	025YR	9.174	8.900	0.0011	8418	61.483	61.315
N-C050	050YR	9.775	8.900	0.0013	18536	137.314	136.126
N-C050	100YR	10.335	8.900	0.0014	24756	233.342	230.187
N-C050	500YR	10.850	8.900	0.0013	38056	355.649	350.995
N-C060	002YR	7.019	9.600	0.0011	280	0.000	2.087
N-C060	010YR	8.448	9.600	0.0024	20440	0.000	2.373
N-C060	025YR	9.158	9.600	0.0016	83115	4.971	3.656
N-C060	050YR	9.772	9.600	-0.0020	180428	27.520	10.213
N-C060	100YR	10.333	9.600	-0.0019	219575	71.870	12.809
N-C060	500YR	10.849	9.600	0.0017	248211	117.514	15.565
N-C070	002YR	7.019	10.000	0.0005	3787	0.000	5.091
N-C070	010YR	8.449	10.000	0.0009	4916	2.083	13.348
N-C070	025YR	9.188	10.000	0.0011	10515	58.704	58.498
N-C070	050YR	9.792	10.000	0.0013	18513	133.946	132.652
N-C070	100YR	10.359	10.000	0.0014	24903	229.617	226.931
N-C070	500YR	10.883	10.000	0.0013	49838	351.080	346.983
N-C080	002YR	9.625	11.000	0.0028	8520	118.007	117.245
N-C080	010YR	11.519	11.000	0.0035	10903	209.423	208.422
N-C080	025YR	11.879	11.000	0.0032	11362	280.919	279.989
N-C080	050YR	12.066	11.000	0.0032	11607	366.828	365.998
N-C080	100YR	12.213	11.000	0.0030	11805	474.891	474.207
N-C080	500YR	12.348	11.000	0.0032	11995	610.945	610.357
N-C085	002YR	9.267	11.000	0.0026	7619	118.023	117.908
N-C085	010YR	10.406	11.000	0.0025	8884	207.325	207.307
N-C085	025YR	10.600	11.000	0.0022	9101	222.596	222.570
N-C085	050YR	10.746	11.000	0.0023	9266	233.859	233.742
N-C085	100YR	10.912	11.000	0.0023	9453	246.885	246.700
N-C085	500YR	11.092	11.000	0.0026	9657	262.274	261.978
N-C086	002YR	9.668	11.000	0.0009	149378	303.042	117.746
N-C086	010YR	11.554	11.000	0.0013	495406	798.831	209.095
N-C086	025YR	11.930	11.000	0.0015	577215	989.938	280.481
N-C086	050YR	12.145	11.000	0.0018	622677	1133.198	366.290
N-C086	100YR	12.333	11.000	0.0019	661890	1312.568	474.200
N-C086	500YR	12.531	11.000	0.0021	702984	1526.106	610.096
N-C086A	002YR	9.664	10.000	0.0050	759	4.605	225.457
N-C086A	010YR	11.554	10.000	0.0050	1121	68.532	723.737
N-C086A	025YR	11.932	10.000	0.0050	1193	79.651	865.286
N-C086A	050YR	12.139	10.000	0.0050	1408	82.297	948.917
N-C086A	100YR	12.328	10.000	0.0050	1269	87.470	1030.264
N-C086A	500YR	12.527	10.000	0.0050	1307	91.659	1119.414
N-C086B	002YR	10.270	10.000	0.0007	10201	7.228	4.605
N-C086B	010YR	11.550	10.000	0.0024	17673	12.611	68.532
N-C086B	025YR	11.928	10.000	0.0024	19879	15.089	79.651
N-C086B	050YR	12.141	10.000	0.0025	21121	17.570	82.297
N-C086B	100YR	12.329	10.000	0.0025	22218	20.544	87.470
N-C086B	500YR	12.527	10.000	0.0027	23377	24.251	91.659
N-C086C	002YR	9.685	13.500	0.0011	138	1.602	1.566
N-C086C	010YR	11.577	13.500	0.0028	138	3.656	3.561
N-C086C	025YR	11.970	13.500	0.0030	138	4.200	4.084
N-C086C	050YR	12.210	13.500	0.0028	138	4.590	4.442
N-C086C	100YR	12.432	13.500	0.0021	138	4.869	4.702
N-C086C	500YR	12.735	13.500	0.0015	138	8.021	7.952
N-C086D	002YR	10.661	14.200	0.0009	20575	17.014	1.602
N-C086D	010YR	11.886	14.200	0.0012	23708	26.612	3.656
N-C086D	025YR	12.500	14.200	0.0013	25287	30.935	4.200
N-C086D	050YR	13.079	14.200	0.0014	26791	35.238	4.590
N-C086D	100YR	13.738	14.200	0.0015	28629	40.381	4.869
N-C086D	500YR	14.267	14.200	0.0016	29429	46.783	8.021
N-C090	002YR	9.679	11.900	0.0009	6451	99.312	97.873
N-C090	010YR	11.557	11.900	0.0010	206413	173.675	169.163
N-C090	025YR	11.932	11.900	0.0012	212005	238.238	193.730

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
N-C090	050YR	12.148	11.900	0.0013	214088	282.811	226.236
N-C090	100YR	12.338	11.900	0.0014	215678	351.237	267.723
N-C090	500YR	12.538	11.900	0.0014	216885	450.874	373.452
N-C100	002YR	9.803	11.900	0.0013	3432	66.827	66.168
N-C100	010YR	11.558	11.900	0.0017	8436	77.306	74.928
N-C100	025YR	11.933	11.900	0.0017	14456	70.952	67.923
N-C100	050YR	12.149	11.900	0.0017	17927	62.689	59.044
N-C100	100YR	12.340	11.900	0.0016	20827	56.610	52.370
N-C100	500YR	12.541	11.900	0.0015	21226	59.394	58.233
N-C110	002YR	10.163	9.500	0.0050	13901	116.128	17.842
N-C110	010YR	11.576	9.500	0.0050	16191	116.128	29.802
N-C110	025YR	11.952	9.500	0.0050	16969	116.128	28.516
N-C110	050YR	12.190	9.500	0.0050	17612	116.128	26.292
N-C110	100YR	12.409	9.500	0.0050	18204	116.128	31.200
N-C110	500YR	12.650	9.500	0.0050	18858	116.128	38.495
N-C120	002YR	10.164	10.000	-0.0020	121893	123.299	116.128
N-C120	010YR	11.575	10.000	-0.0020	232451	220.827	182.530
N-C120	025YR	11.954	10.000	-0.0020	251138	279.479	253.144
N-C120	050YR	12.190	10.000	-0.0020	270488	335.813	271.514
N-C120	100YR	12.408	10.000	-0.0020	288807	407.061	323.509
N-C120	500YR	12.650	10.000	-0.0020	308110	488.196	385.692
N-C130	002YR	10.172	10.000	0.0006	132816	130.506	83.993
N-C130	010YR	11.578	10.000	0.0008	206120	226.315	153.738
N-C130	025YR	11.957	10.000	0.0008	234494	287.718	195.832
N-C130	050YR	12.197	10.000	0.0008	258284	335.353	241.478
N-C130	100YR	12.419	10.000	0.0008	278089	390.558	297.656
N-C130	500YR	12.666	10.000	0.0009	300808	474.701	365.945
N-C140	002YR	11.342	11.500	0.0005	37006	19.918	8.954
N-C140	010YR	11.963	11.500	0.0007	117628	32.990	11.484
N-C140	025YR	12.168	11.500	0.0007	128689	38.930	11.790
N-C140	050YR	12.282	11.500	0.0008	133862	44.853	14.896
N-C140	100YR	12.439	11.500	0.0008	140997	51.936	20.840
N-C140	500YR	12.682	11.500	0.0007	151998	60.755	28.932
N-C150	002YR	10.172	10.000	0.0006	57090	20.427	13.238
N-C150	010YR	11.578	10.000	0.0008	77054	38.391	24.943
N-C150	025YR	11.957	10.000	0.0008	84839	46.890	30.363
N-C150	050YR	12.197	10.000	0.0008	89767	55.491	35.582
N-C150	100YR	12.420	10.000	0.0008	95216	65.888	43.302
N-C150	500YR	12.667	10.000	0.0009	110596	79.004	57.540
N-C160	002YR	10.173	10.000	0.0006	19520	89.365	80.593
N-C160	010YR	11.578	10.000	0.0008	21499	156.617	144.880
N-C160	025YR	11.957	10.000	0.0008	21965	187.581	175.201
N-C160	050YR	12.198	10.000	0.0008	22260	218.699	205.650
N-C160	100YR	12.421	10.000	0.0008	22546	256.049	243.889
N-C160	500YR	12.669	10.000	0.0009	23444	302.769	290.748
N-C170	002YR	12.416	10.000	0.0017	19062	84.397	89.365
N-C170	010YR	12.553	10.000	0.0006	19318	151.324	156.617
N-C170	025YR	12.608	10.000	0.0006	19419	193.233	187.581
N-C170	050YR	12.659	10.000	0.0005	19514	224.500	218.699
N-C170	100YR	12.717	10.000	0.0005	19622	262.017	256.049
N-C170	500YR	12.786	10.000	0.0005	19749	296.771	302.769
N-C180	002YR	12.416	10.000	0.0017	19062	0.000	0.000
N-C180	010YR	12.553	10.000	0.0006	19318	0.000	0.000
N-C180	025YR	12.608	10.000	0.0006	19419	0.000	6.230
N-C180	050YR	12.659	10.000	0.0005	19514	0.000	6.435
N-C180	100YR	12.717	10.000	0.0005	19622	0.000	6.667
N-C180	500YR	12.785	10.000	0.0005	19749	0.000	0.284
N-C203	002YR	8.100	10.000	0.0000	113	0.000	0.000
N-C203	010YR	8.468	10.000	-0.0001	9766	0.000	0.237
N-C203	025YR	9.102	10.000	0.0002	11863	0.000	0.434
N-C203	050YR	9.632	10.000	0.0003	14436	0.000	0.587
N-C203	100YR	10.241	10.000	0.0004	26140	0.000	1.046
N-C203	500YR	10.777	10.000	-0.0008	39029	0.000	8.986

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
N-C205	002YR	7.700	9.000	0.0000	113	0.000	0.000
N-C205	010YR	8.434	9.000	-0.0005	5513	0.912	1.518
N-C205	025YR	9.103	9.000	0.0009	6943	2.482	3.686
N-C205	050YR	9.634	9.000	0.0012	11883	4.062	4.498
N-C205	100YR	10.241	9.000	0.0011	21328	5.706	5.663
N-C205	500YR	10.777	9.000	-0.0050	26384	11.415	122.574
N-C206	002YR	7.014	10.000	-0.0010	1604	0.000	1.574
N-C206	010YR	8.431	10.000	-0.0050	12173	1.518	1.369
N-C206	025YR	9.103	10.000	-0.0050	13775	3.686	2.244
N-C206	050YR	9.634	10.000	-0.0050	15926	4.498	2.775
N-C206	100YR	10.241	10.000	-0.0046	18789	5.663	3.121
N-C206	500YR	10.777	10.000	0.0050	20922	122.574	3.437
N-C210	002YR	7.659	8.000	-0.0050	45364	80.078	69.635
N-C210	010YR	8.514	8.000	-0.0050	127740	135.795	131.980
N-C210	025YR	9.167	8.000	-0.0050	188056	167.257	159.383
N-C210	050YR	9.754	8.000	-0.0050	235759	197.382	181.818
N-C210	100YR	10.299	8.000	-0.0050	294094	230.064	202.594
N-C210	500YR	10.812	8.000	-0.0050	363789	248.718	224.683
N-C230	002YR	7.686	9.800	0.0005	114802	85.404	58.451
N-C230	010YR	8.547	9.800	0.0006	127192	148.712	105.613
N-C230	025YR	9.312	9.800	0.0007	181217	177.399	126.915
N-C230	050YR	9.926	9.800	0.0007	241572	206.003	147.392
N-C230	100YR	10.352	9.800	0.0008	275836	240.321	167.383
N-C230	500YR	10.826	9.800	0.0009	310399	282.082	180.473
N-C240	002YR	7.744	10.900	0.0005	2496	40.112	40.210
N-C240	010YR	8.592	10.900	-0.0012	2823	70.111	70.067
N-C240	025YR	9.390	10.900	0.0019	2891	78.322	78.223
N-C240	050YR	10.055	10.900	0.0015	3203	86.859	86.576
N-C240	100YR	10.480	10.900	0.0014	3405	91.575	91.054
N-C240	500YR	10.933	10.900	-0.0019	3620	94.873	94.213
N-C243	002YR	7.957	10.000	0.0007	2203	40.055	40.112
N-C243	010YR	8.805	10.000	0.0006	2601	70.141	70.111
N-C243	025YR	9.510	10.000	0.0015	2951	78.425	78.322
N-C243	050YR	10.118	10.000	0.0016	3243	87.124	86.859
N-C243	100YR	10.523	10.000	0.0010	3429	92.063	91.575
N-C243	500YR	10.957	10.000	-0.0014	3631	95.497	94.873
N-C245	002YR	10.066	10.000	0.0050	3302	48.452	40.055
N-C245	010YR	11.526	10.000	0.0050	37659	70.700	70.141
N-C245	025YR	11.837	10.000	0.0050	41954	529.694	78.425
N-C245	050YR	12.068	10.000	0.0050	44885	529.791	87.124
N-C245	100YR	12.273	10.000	0.0050	48613	529.750	92.063
N-C245	500YR	12.492	10.000	0.0050	54646	529.770	95.497
N-C250	002YR	10.080	10.000	-0.0050	2662	72.641	48.452
N-C250	010YR	11.531	10.000	-0.0050	15340	74.081	70.700
N-C250	025YR	11.913	10.000	-0.0050	20712	123.690	529.694
N-C250	050YR	12.131	10.000	-0.0050	23921	129.089	529.791
N-C250	100YR	12.323	10.000	-0.0050	30146	136.393	529.750
N-C250	500YR	12.525	10.000	-0.0050	42645	129.918	529.770
N-C255	002YR	9.934	10.500	0.0022	7020	50.879	49.908
N-C255	010YR	11.558	10.500	0.0017	16183	52.341	47.417
N-C255	025YR	11.933	10.500	0.0015	28093	48.798	42.108
N-C255	050YR	12.149	10.500	0.0014	34531	45.571	38.954
N-C255	100YR	12.340	10.500	0.0013	39551	45.049	39.859
N-C255	500YR	12.541	10.500	0.0013	42276	46.355	43.146
N-C260	002YR	10.106	10.000	-0.0020	19544	97.156	122.606
N-C260	010YR	11.558	10.000	0.0016	33135	163.350	160.264
N-C260	025YR	11.933	10.000	0.0016	37355	204.333	197.287
N-C260	050YR	12.149	10.000	-0.0015	44352	241.640	236.371
N-C260	100YR	12.340	10.000	-0.0017	52141	288.444	293.419
N-C260	500YR	12.540	10.000	-0.0019	60403	343.324	336.000
N-C290	002YR	7.829	8.500	-0.0050	356	2.347	2.228
N-C290	010YR	8.438	8.500	-0.0050	426	3.413	3.287

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
N-C290	025YR	9.154	8.500	-0.0050	529	3.733	3.597
N-C290	050YR	9.769	8.500	-0.0050	618	3.936	3.784
N-C290	100YR	10.332	8.500	-0.0050	699	4.091	3.953
N-C290	500YR	10.849	8.500	-0.0050	774	4.344	4.163
N-C291	002YR	7.047	10.000	0.0050	126	2.228	6.650
N-C291	010YR	8.441	10.000	0.0050	120	3.287	6.651
N-C291	025YR	9.107	10.000	0.0050	120	3.597	6.649
N-C291	050YR	9.656	10.000	0.0050	120	3.784	6.651
N-C291	100YR	10.185	10.000	-0.0050	120	3.953	6.636
N-C291	500YR	10.664	10.000	0.0050	120	4.163	4.015
N-C292	002YR	7.046	12.500	0.0050	122	6.650	2.653
N-C292	010YR	8.444	12.500	-0.0050	122	6.651	3.003
N-C292	025YR	9.099	12.500	-0.0050	122	6.649	3.238
N-C292	050YR	9.634	12.500	-0.0050	122	6.651	3.455
N-C292	100YR	10.154	12.500	0.0050	122	6.636	3.671
N-C292	500YR	10.617	12.500	0.0050	122	4.015	3.879
N-C293	002YR	7.044	13.000	0.0050	116	2.653	2.542
N-C293	010YR	8.446	13.000	0.0050	116	3.003	2.882
N-C293	025YR	9.097	13.000	0.0050	116	3.238	3.115
N-C293	050YR	9.622	13.000	-0.0050	116	3.455	3.329
N-C293	100YR	10.138	13.000	0.0050	116	3.671	3.540
N-C293	500YR	10.592	13.000	0.0023	116	3.879	3.751
N-C294	002YR	7.043	13.000	0.0050	121	2.542	2.540
N-C294	010YR	8.449	13.000	-0.0050	121	2.882	2.757
N-C294	025YR	9.092	13.000	-0.0050	121	3.115	2.995
N-C294	050YR	9.609	13.000	0.0050	121	3.329	3.198
N-C294	100YR	10.120	13.000	0.0050	121	3.540	3.406
N-C294	500YR	10.565	13.000	-0.0048	121	3.751	3.618
N-C295	002YR	7.829	6.270	0.0050	122	0.000	0.132
N-C295	010YR	8.438	6.270	0.0050	122	0.000	0.411
N-C295	025YR	9.155	6.270	0.0050	122	0.000	0.410
N-C295	050YR	9.769	6.270	0.0050	122	0.000	0.408
N-C295	100YR	10.332	6.270	0.0050	122	0.000	0.408
N-C295	500YR	10.848	6.270	0.0050	122	0.000	0.296
N-C296	002YR	7.042	13.000	-0.0050	121	2.540	3.506
N-C296	010YR	8.451	13.000	0.0050	121	2.757	2.640
N-C296	025YR	9.092	13.000	-0.0050	121	2.995	2.882
N-C296	050YR	9.603	13.000	0.0050	121	3.198	3.068
N-C296	100YR	10.112	13.000	-0.0050	121	3.406	3.281
N-C296	500YR	10.554	13.000	-0.0050	121	3.618	3.486
N-C300	002YR	7.016	9.000	0.0018	13923	28.994	27.959
N-C300	010YR	8.433	9.000	-0.0023	17902	60.916	58.456
N-C300	025YR	9.128	9.000	-0.0027	19857	81.269	86.814
N-C300	050YR	9.723	9.000	-0.0027	21531	112.105	118.284
N-C300	100YR	10.276	9.000	-0.0034	23083	128.376	142.588
N-C300	500YR	10.799	9.000	-0.0037	24553	151.798	173.094
N-C304	002YR	7.015	8.000	-0.0025	1834	1.904	8.376
N-C304	010YR	8.433	8.000	-0.0043	3163	5.326	11.986
N-C304	025YR	9.157	8.000	-0.0033	3737	9.578	21.220
N-C304	050YR	9.772	8.000	0.0047	3826	10.920	21.220
N-C304	100YR	10.334	8.000	0.0037	3826	28.734	21.226
N-C304	500YR	10.850	8.000	-0.0050	3826	40.473	19.505
N-C305	002YR	8.147	8.000	0.0009	744	1.869	1.904
N-C305	010YR	8.437	8.000	-0.0012	1835	5.256	5.326
N-C305	025YR	9.157	8.000	-0.0024	3559	9.126	9.578
N-C305	050YR	9.769	8.000	-0.0050	3826	12.038	10.920
N-C305	100YR	10.339	8.000	-0.0050	3826	34.149	79.740
N-C305	500YR	10.854	8.000	0.0050	3826	44.388	114.270
N-C310	002YR	7.018	8.000	-0.0050	2880	28.804	69.297
N-C310	010YR	8.431	8.000	0.0050	3487	58.828	123.981
N-C310	025YR	9.119	8.000	0.0050	3784	85.101	151.890
N-C310	050YR	9.711	8.000	-0.0050	4039	115.240	194.809
N-C310	100YR	10.267	8.000	-0.0050	4277	141.545	229.837

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
N-C310	500YR	10.789	8.000	0.0050	4502	172.525	261.386
N-C320	002YR	7.020	11.000	0.0050	938	69.297	32.148
N-C320	010YR	8.423	11.000	0.0050	896	123.981	62.242
N-C320	025YR	9.111	11.000	0.0050	794	151.890	70.420
N-C320	050YR	9.701	11.000	-0.0050	842	194.809	87.059
N-C320	100YR	10.259	11.000	0.0050	886	229.837	99.725
N-C320	500YR	10.784	11.000	0.0050	928	261.386	118.485
N-C330	002YR	7.035	10.000	0.0009	20639	30.245	33.578
N-C330	010YR	8.445	10.000	0.0010	22131	69.337	64.745
N-C330	025YR	9.085	10.000	0.0011	22754	83.084	73.946
N-C330	050YR	9.599	10.000	0.0011	23362	99.499	97.213
N-C330	100YR	10.106	10.000	0.0011	23961	120.060	115.580
N-C330	500YR	10.545	10.000	0.0011	24479	136.104	133.360
N-D010	025YR	8.958	8.000	0.0008	62501	310.561	310.233
N-D012	025YR	9.029	8.000	-0.0025	20110	317.801	307.908
N-D014	025YR	9.050	9.000	0.0050	24064	474.367	317.801
N-D015	025YR	9.000	12.000	0.0000	24049	0.000	0.000
N-D025	025YR	9.054	10.000	-0.0050	14985	371.592	474.367
N-D030	025YR	9.161	7.400	0.0005	319160	196.390	148.855
N-D035	025YR	9.065	10.000	0.0050	17725	308.506	371.592
N-D040	025YR	9.164	11.000	0.0008	56380	70.523	54.543
N-D045	025YR	9.978	9.000	0.0007	20428	308.640	308.506
N-D050	025YR	10.648	12.000	0.0003	62292	72.927	70.523
N-D055	025YR	10.082	9.000	0.0015	4348	308.652	308.640
N-D060	025YR	13.821	16.000	0.0014	3257	15.202	13.051
N-D065	025YR	10.299	10.000	-0.0014	5113	310.780	310.754
N-D070	025YR	14.097	14.600	0.0002	5262	15.235	15.202
N-D080	025YR	14.939	16.500	0.0003	26532	17.804	15.235
N-D090	025YR	9.161	10.500	-0.0033	24886	71.113	148.100
N-D100	025YR	9.161	10.500	-0.0011	24600	72.198	71.113
N-D110	025YR	10.014	10.000	0.0012	46176	75.598	63.960
N-D120	025YR	9.166	7.700	-0.0050	48596	89.555	88.349
N-D130	025YR	10.437	10.000	0.0007	117622	311.726	310.780
N-D140	025YR	11.113	10.000	0.0007	1801910	420.830	394.429
N-D145	025YR	11.112	12.000	0.0006	219673	0.000	4.884
N-D150	025YR	11.115	10.600	0.0008	196776	65.178	60.853
N-D160	025YR	12.084	12.100	0.0008	383258	127.366	65.178
N-D170	002YR	11.292	10.800	-0.0013	105065	1.374	3.540
N-D170	010YR	11.877	10.800	-0.0026	138131	1.845	5.029
N-D170	025YR	12.083	10.800	-0.0026	148577	1.536	3.952
N-D170	050YR	12.249	10.800	-0.0026	154144	1.499	4.288
N-D170	100YR	12.404	10.800	-0.0026	159313	1.584	4.654
N-D170	500YR	12.562	10.800	0.0034	172964	1.479	5.276
N-D180	025YR	12.059	14.000	0.0005	53273	5.689	1.536

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
N-D190	025YR	11.739	12.000	0.0004	41678	19.988	11.072
N-D200	025YR	12.148	10.800	0.0009	9822	23.935	23.953
N-D210	025YR	12.931	13.000	-0.0030	73795	57.989	23.935
N-D220	025YR	13.167	14.000	0.0005	33558	28.941	17.036
N-D370	025YR	9.436	7.300	0.0022	97053	116.835	116.214
N-D375	025YR	8.417	8.000	0.0001	19702	0.762	0.000
N-D380	025YR	8.000	8.000	0.0000	1586	0.000	0.000
N-G010	002YR	7.396	8.000	-0.0008	202627	86.491	86.193
N-G010	010YR	8.139	8.000	0.0008	658585	149.159	145.945
N-G010	025YR	8.409	8.000	-0.0008	838233	182.117	178.124
N-G010	050YR	8.637	8.000	-0.0008	990861	208.627	204.370
N-G010	100YR	8.990	8.000	-0.0008	1219306	259.452	253.537
N-G010	500YR	9.487	8.000	-0.0008	1544535	315.992	304.757
N-G020	002YR	7.417	8.000	0.0026	206443	86.660	85.774
N-G020	010YR	8.191	8.000	0.0026	306476	151.100	148.029
N-G020	025YR	8.499	8.000	0.0026	309260	183.235	180.946
N-G020	050YR	8.915	8.000	0.0026	311882	211.889	208.137
N-G020	100YR	9.421	8.000	0.0026	315761	277.330	259.449
N-G020	500YR	10.113	8.000	0.0026	329157	360.140	315.989
N-G021	002YR	7.424	8.000	0.0008	155170	61.856	60.134
N-G021	010YR	8.191	8.000	0.0009	383579	113.519	99.041
N-G021	025YR	8.499	8.000	0.0009	394869	132.968	112.899
N-G021	050YR	8.915	8.000	0.0008	402318	151.619	124.588
N-G021	100YR	9.421	8.000	0.0007	405905	172.265	131.898
N-G021	500YR	10.113	8.000	0.0005	416174	194.339	139.053
N-G022	002YR	8.701	10.000	0.0003	496	17.795	17.789
N-G022	010YR	9.035	10.000	-0.0046	527	34.001	33.992
N-G022	025YR	9.160	10.000	-0.0050	542	41.686	41.676
N-G022	050YR	9.274	10.000	0.0050	556	49.465	49.455
N-G022	100YR	9.422	10.000	0.0050	650	58.874	60.683
N-G022	500YR	10.113	10.000	0.0050	756	70.691	132.487
N-G023	002YR	9.809	10.000	0.0007	222	17.809	17.795
N-G023	010YR	10.789	10.000	0.0021	141	34.016	34.001
N-G023	025YR	11.186	10.000	-0.0037	137	41.701	41.686
N-G023	050YR	11.624	10.000	-0.0037	133	49.484	49.465
N-G023	100YR	12.237	10.000	0.0050	130	58.898	58.874
N-G023	500YR	13.155	10.000	0.0050	126	70.722	70.691
N-G025	002YR	7.431	10.000	0.0007	18931	47.724	46.822
N-G025	010YR	8.191	10.000	0.0009	192279	86.332	83.901
N-G025	025YR	8.499	10.000	0.0009	270444	100.978	96.652
N-G025	050YR	8.915	10.000	0.0008	330741	117.830	110.763
N-G025	100YR	9.421	10.000	0.0007	345230	137.050	123.788
N-G025	500YR	10.113	10.000	0.0006	349804	158.501	136.448
N-G025A	002YR	8.053	11.000	0.0001	433	2.678	2.678
N-G025A	010YR	8.330	11.000	-0.0050	565	8.263	8.263
N-G025A	025YR	8.500	11.000	-0.0050	645	12.664	13.321
N-G025A	050YR	8.916	11.000	0.0050	841	16.859	31.782
N-G025A	100YR	9.420	11.000	0.0050	1078	21.871	67.242
N-G025A	500YR	10.112	11.000	0.0050	1402	25.949	142.877
N-G025B	002YR	10.188	12.000	0.0003	24088	7.227	2.678
N-G025B	010YR	10.926	12.000	0.0005	26761	12.798	8.263
N-G025B	025YR	11.094	12.000	0.0005	27367	15.495	12.664
N-G025B	050YR	11.244	12.000	0.0006	27873	18.875	16.859
N-G025B	100YR	11.409	12.000	0.0007	28447	24.998	21.871
N-G025B	500YR	11.634	12.000	0.0007	29233	32.322	25.949
N-G025C	002YR	10.188	12.000	-0.0013	2506	5.066	4.540
N-G025C	010YR	10.927	12.000	0.0005	3068	8.310	7.364
N-G025C	025YR	11.099	12.000	-0.0006	3191	9.782	8.576

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
N-G025C	050YR	11.254	12.000	0.0006	3280	11.247	9.751
N-G025C	100YR	11.429	12.000	0.0007	3432	12.999	11.265
N-G025C	500YR	11.672	12.000	0.0008	3643	15.179	13.284
N-G028	002YR	7.448	12.000	0.0007	33630	53.865	46.028
N-G028	010YR	8.191	12.000	0.0009	165523	90.009	82.763
N-G028	025YR	8.497	12.000	0.0009	511425	106.288	94.206
N-G028	050YR	8.913	12.000	0.0009	925028	124.508	103.846
N-G028	100YR	9.420	12.000	0.0009	1261731	150.384	115.638
N-G028	500YR	10.113	12.000	0.0009	1468423	185.765	132.560
N-G028A	002YR	8.059	12.000	0.0050	305	2.081	2.080
N-G028A	010YR	8.366	12.000	0.0050	600	4.847	4.848
N-G028A	025YR	8.557	12.000	0.0050	665	7.991	7.995
N-G028A	050YR	8.926	12.000	0.0050	829	11.833	11.839
N-G028A	100YR	9.426	12.000	0.0050	995	17.099	17.100
N-G028A	500YR	10.114	12.000	0.0050	1222	25.276	25.270
N-G028B	002YR	10.190	12.000	0.0004	85064	24.977	3.579
N-G028B	010YR	10.940	12.000	0.0005	90196	39.094	10.012
N-G028B	025YR	11.128	12.000	0.0006	91451	45.456	15.904
N-G028B	050YR	11.300	12.000	0.0007	92575	51.791	22.025
N-G028B	100YR	11.493	12.000	0.0007	93835	59.363	29.661
N-G028B	500YR	11.729	12.000	0.0008	95372	68.790	38.602
N-G030	002YR	7.558	10.000	0.0003	25324	10.359	10.460
N-G030	010YR	8.156	10.000	0.0008	56435	10.359	8.768
N-G030	025YR	8.434	10.000	0.0009	152400	10.359	8.347
N-G030	050YR	8.865	10.000	0.0009	269277	10.359	7.858
N-G030	100YR	9.396	10.000	0.0008	610912	10.359	7.227
N-G030	500YR	10.104	10.000	0.0008	1192358	10.359	6.479
N-G040	002YR	8.000	11.500	0.0000	34	0.000	10.359
N-G040	010YR	8.000	11.500	0.0000	34	0.000	10.359
N-G040	025YR	8.000	11.500	0.0000	34	0.000	10.359
N-G040	050YR	8.000	11.500	0.0000	34	0.000	10.359
N-G040	100YR	8.000	11.500	0.0000	34	0.000	10.359
N-G040	500YR	8.000	11.500	0.0000	34	0.000	10.359
N-G042	002YR	7.739	10.330	0.0005	29540	68.568	68.469
N-G042	010YR	8.728	10.330	0.0005	34317	150.038	149.810
N-G042	025YR	9.141	10.330	0.0005	35428	195.874	195.661
N-G042	050YR	9.553	10.330	0.0005	36610	238.587	238.240
N-G042	100YR	10.122	10.330	0.0005	38155	312.069	311.517
N-G042	500YR	10.816	10.330	0.0005	44729	419.617	418.650
N-G043	002YR	7.791	10.330	0.0005	162822	69.641	68.568
N-G043	010YR	8.978	10.330	0.0005	202231	152.450	150.038
N-G043	025YR	9.566	10.330	0.0005	213904	199.063	195.874
N-G043	050YR	10.173	10.330	0.0005	223176	242.453	238.587
N-G043	100YR	10.757	10.330	0.0005	232106	315.211	312.069
N-G043	500YR	11.087	10.330	0.0005	236678	423.574	419.617
N-G043A	002YR	8.013	10.000	0.0004	20288	6.872	0.403
N-G043A	010YR	8.982	10.000	0.0005	22692	11.224	0.857
N-G043A	025YR	9.568	10.000	0.0006	24173	13.194	2.147
N-G043A	050YR	10.173	10.000	0.0007	25416	15.156	4.063
N-G043A	100YR	10.757	10.000	0.0008	25924	17.500	6.640
N-G043A	500YR	11.087	10.000	0.0009	26212	20.416	8.455
N-G044	002YR	7.794	10.000	0.0005	251173	71.031	67.789
N-G044	010YR	8.981	10.000	0.0005	333651	158.906	149.851
N-G044	025YR	9.570	10.000	0.0005	357212	209.433	196.171
N-G044	050YR	10.176	10.000	0.0005	373724	257.628	239.548
N-G044	100YR	10.760	10.000	0.0005	388771	336.309	311.442
N-G044	500YR	11.091	10.000	0.0005	397273	445.887	418.611
N-G044A	002YR	11.783	16.300	0.0002	322	2.139	2.139
N-G044A	010YR	12.158	16.300	0.0007	445	9.831	9.823
N-G044A	025YR	12.255	16.300	0.0009	477	12.841	12.832
N-G044A	050YR	12.314	16.300	0.0009	497	14.872	14.866
N-G044A	100YR	12.385	16.300	0.0010	520	17.535	17.528
N-G044A	500YR	12.457	16.300	0.0011	543	20.504	20.502

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
N-G044B	002YR	14.199	16.000	0.0012	6451	7.541	2.139
N-G044B	010YR	14.934	16.000	0.0017	3396	11.696	9.831
N-G044B	025YR	15.171	16.000	0.0017	2751	13.587	12.841
N-G044B	050YR	15.407	16.000	0.0017	2341	15.469	14.872
N-G044B	100YR	15.787	16.000	0.0020	678	17.719	17.535
N-G044B	500YR	16.429	16.000	0.0050	113	20.519	20.504
N-G045	002YR	7.797	10.000	0.0005	255248	97.707	70.447
N-G045	010YR	8.985	10.000	0.0005	375184	290.216	158.206
N-G045	025YR	9.573	10.000	0.0005	404170	432.154	208.751
N-G045	050YR	10.179	10.000	0.0005	430304	608.733	256.891
N-G045	100YR	10.763	10.000	0.0005	446684	850.081	335.722
N-G045	500YR	11.096	10.000	0.0006	456961	1069.006	445.177
N-G045A	002YR	7.793	9.500	-0.0050	467	2.595	32.230
N-G045A	010YR	8.981	9.500	0.0050	752	13.732	164.626
N-G045A	025YR	9.568	9.500	0.0050	893	17.721	282.239
N-G045A	050YR	10.180	9.500	0.0050	1040	21.107	449.090
N-G045A	100YR	10.765	9.500	0.0050	1181	30.152	655.722
N-G045A	500YR	11.099	9.500	0.0050	1261	42.828	796.263
N-G045B	002YR	8.385	10.000	0.0004	88085	30.944	2.595
N-G045B	010YR	8.988	10.000	0.0006	92286	50.130	13.732
N-G045B	025YR	9.573	10.000	0.0006	96363	58.709	17.721
N-G045B	050YR	10.176	10.000	0.0007	99492	67.186	21.107
N-G045B	100YR	10.760	10.000	0.0008	100000	77.796	30.152
N-G045B	500YR	11.092	10.000	0.0008	100290	91.231	42.828
N-G045C	002YR	8.386	10.000	0.0004	17415	9.545	3.813
N-G045C	010YR	8.988	10.000	0.0006	18727	16.126	6.588
N-G045C	025YR	9.573	10.000	0.0007	20251	19.129	7.753
N-G045C	050YR	10.177	10.000	0.0007	21443	22.126	9.754
N-G045C	100YR	10.760	10.000	0.0008	21697	25.712	11.833
N-G045C	500YR	11.093	10.000	0.0009	21842	30.176	14.023
N-G050	002YR	7.805	10.000	0.0005	175158	80.673	72.120
N-G050	010YR	8.990	10.000	0.0005	424779	166.098	145.367
N-G050	025YR	9.577	10.000	0.0005	554327	218.963	185.379
N-G050	050YR	10.181	10.000	0.0005	765340	268.965	221.499
N-G050	100YR	10.765	10.000	0.0005	1012791	322.500	258.415
N-G050	500YR	11.099	10.000	0.0005	1208053	387.189	301.163
N-G060	002YR	11.744	13.900	0.0007	14691	9.854	2.265
N-G060	010YR	12.785	13.900	0.0010	17300	16.931	6.834
N-G060	025YR	12.945	13.900	0.0012	17716	20.173	10.822
N-G060	050YR	13.065	13.900	0.0013	17861	23.415	15.991
N-G060	100YR	13.150	13.900	0.0014	17861	27.297	22.827
N-G060	500YR	13.224	13.900	0.0015	17861	32.132	30.143
N-G070	002YR	10.887	33.500	0.0004	5151	5.307	5.267
N-G070	010YR	11.386	33.500	0.0006	5584	16.018	15.987
N-G070	025YR	11.528	33.500	0.0007	5707	21.579	21.544
N-G070	050YR	11.651	33.500	0.0007	5814	27.039	27.001
N-G070	100YR	11.780	33.500	0.0007	5926	33.351	33.306
N-G070	500YR	11.918	33.500	0.0007	6047	40.724	40.689
N-G080	002YR	10.895	13.000	0.0004	36714	12.794	4.719
N-G080	010YR	11.457	13.000	0.0006	37832	23.529	13.868
N-G080	025YR	11.653	13.000	0.0007	38218	28.631	18.452
N-G080	050YR	11.843	13.000	0.0008	38592	33.772	22.928
N-G080	100YR	12.067	13.000	0.0008	39193	39.943	28.070
N-G080	500YR	12.341	13.000	0.0008	40380	47.613	34.081
N-G090	002YR	12.922	15.000	0.0003	34591	13.213	4.818
N-G090	010YR	13.398	15.000	0.0005	36879	22.285	9.873
N-G090	025YR	13.594	15.000	0.0005	37816	26.422	12.290
N-G090	050YR	13.780	15.000	0.0006	38704	30.550	14.716
N-G090	100YR	13.993	15.000	0.0006	39715	35.488	17.602
N-G090	500YR	14.247	15.000	0.0007	40913	41.635	21.143
N-G100	002YR	8.664	10.000	0.0010	37826	57.270	56.727
N-G100	010YR	10.057	10.000	0.0013	268790	138.388	131.281

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
N-G100	025YR	10.530	10.000	0.0013	432212	187.517	176.790
N-G100	050YR	10.847	10.000	0.0013	552932	231.616	217.415
N-G100	100YR	11.145	10.000	0.0013	709460	275.834	259.425
N-G100	500YR	11.500	10.000	0.0012	937960	331.487	306.983
N-G110	002YR	10.964	14.000	0.0050	15001	115.133	31.459
N-G110	010YR	11.420	14.000	0.0050	15843	115.133	63.408
N-G110	025YR	11.655	14.000	0.0050	16225	115.133	77.397
N-G110	050YR	11.925	14.000	0.0050	16530	115.133	88.285
N-G110	100YR	12.308	14.000	0.0050	17138	115.133	99.388
N-G110	500YR	12.628	14.000	0.0050	17829	115.854	110.473
N-G120	002YR	10.991	14.000	-0.0050	16286	28.319	115.133
N-G120	010YR	11.515	14.000	-0.0050	17197	50.523	115.133
N-G120	025YR	11.806	14.000	-0.0050	18064	64.594	115.133
N-G120	050YR	12.124	14.000	-0.0050	18668	74.418	115.133
N-G120	100YR	12.560	14.000	-0.0050	19224	86.378	115.133
N-G120	500YR	12.921	14.000	-0.0050	19921	92.333	115.133
N-G130	002YR	11.889	15.000	0.0005	20710	22.722	20.300
N-G130	010YR	12.496	15.000	0.0007	22011	38.876	36.531
N-G130	025YR	12.648	15.000	0.0007	22447	48.217	45.181
N-G130	050YR	12.839	15.000	0.0008	22836	55.425	51.943
N-G130	100YR	13.094	15.000	0.0009	23246	64.021	60.538
N-G130	500YR	13.645	15.000	0.0009	24421	70.590	75.271
N-G140	002YR	11.918	17.000	0.0005	14257	10.759	11.556
N-G140	010YR	12.585	17.000	0.0007	15621	19.755	21.086
N-G140	025YR	12.773	17.000	0.0007	15982	23.707	24.918
N-G140	050YR	13.010	17.000	0.0008	16405	28.094	29.550
N-G140	100YR	13.316	17.000	0.0009	16867	33.224	34.830
N-G140	500YR	13.959	17.000	0.0009	17868	40.622	43.793
N-G150	002YR	11.967	13.500	0.0004	2508	8.274	8.400
N-G150	010YR	12.632	13.500	0.0007	6955	15.344	15.885
N-G150	025YR	12.830	13.500	0.0007	8297	18.685	19.327
N-G150	050YR	13.079	13.500	0.0008	10154	22.063	22.772
N-G150	100YR	13.405	13.500	0.0009	13108	26.147	27.447
N-G150	500YR	14.156	13.500	0.0009	13546	31.276	34.089
N-G160	002YR	11.837	14.000	0.0003	22158	6.171	1.050
N-G160	010YR	12.465	14.000	0.0004	24274	10.736	1.729
N-G160	025YR	12.649	14.000	0.0005	24916	12.834	3.382
N-G160	050YR	12.764	14.000	0.0006	25314	14.934	5.530
N-G160	100YR	12.881	14.000	0.0007	25724	17.450	8.311
N-G160	500YR	13.014	14.000	0.0007	26186	20.586	12.060
N-G170	002YR	9.479	12.000	0.0005	14260	48.544	48.535
N-G170	010YR	10.597	12.000	0.0010	58172	122.562	121.957
N-G170	025YR	11.003	12.000	0.0012	94199	171.453	169.754
N-G170	050YR	11.295	12.000	0.0012	124515	212.822	209.653
N-G170	100YR	11.577	12.000	0.0012	180522	256.279	252.146
N-G170	500YR	11.875	12.000	0.0008	246536	314.560	308.194
N-G170A	002YR	9.335	12.000	0.0005	27026	48.535	48.530
N-G170A	010YR	10.346	12.000	0.0011	98705	117.451	116.428
N-G170A	025YR	10.740	12.000	0.0012	137706	156.488	153.341
N-G170A	050YR	11.040	12.000	0.0012	168478	188.675	183.402
N-G170A	100YR	11.328	12.000	0.0011	282219	223.209	215.800
N-G170A	500YR	11.666	12.000	0.0007	415252	268.471	256.540
N-G180	002YR	10.174	11.000	0.0050	125241	47.985	46.121
N-G180	010YR	11.060	11.000	0.0050	270054	115.630	115.216
N-G180	025YR	11.164	11.000	0.0050	299901	162.395	161.761
N-G180	050YR	11.343	11.000	0.0050	351281	208.583	199.504
N-G180	100YR	11.614	11.000	0.0050	429296	258.747	240.855
N-G180	500YR	11.909	11.000	0.0050	514090	315.885	296.064
N-G200	002YR	11.557	14.000	0.0004	9898	3.237	1.064
N-G200	010YR	11.975	14.000	0.0005	10441	6.292	3.826
N-G200	025YR	12.166	14.000	0.0006	10903	7.748	4.860
N-G200	050YR	12.370	14.000	0.0006	11428	9.225	5.877
N-G200	100YR	12.599	14.000	0.0006	12024	11.013	7.120

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
N-G200	500YR	12.876	14.000	0.0006	12749	13.262	8.494
N-G210	002YR	10.559	12.750	-0.0002	529929	58.461	30.358
N-G210	010YR	11.272	12.750	-0.0002	700249	116.514	50.214
N-G210	025YR	11.441	12.750	0.0002	743087	145.639	68.694
N-G210	050YR	11.564	12.750	0.0003	774409	174.980	88.898
N-G210	100YR	11.742	12.750	0.0003	819480	206.093	107.641
N-G210	500YR	12.002	12.750	0.0004	885424	239.106	131.003
N-G220	002YR	11.396	15.000	0.0002	50333	11.903	5.174
N-G220	010YR	11.994	15.000	0.0004	54043	24.131	13.203
N-G220	025YR	12.238	15.000	0.0005	55535	32.194	17.229
N-G220	050YR	12.472	15.000	0.0006	56966	40.821	21.420
N-G220	100YR	12.729	15.000	0.0007	58524	46.856	26.279
N-G220	500YR	13.038	15.000	0.0007	60405	71.124	32.401
N-G230	002YR	11.396	14.000	0.0002	12826	3.566	1.252
N-G230	010YR	11.995	14.000	0.0004	14391	6.875	2.245
N-G230	025YR	12.238	14.000	0.0005	15131	8.447	2.778
N-G230	050YR	12.473	14.000	0.0006	15846	10.038	3.362
N-G230	100YR	12.729	14.000	0.0006	16630	11.964	4.117
N-G230	500YR	13.039	14.000	0.0007	17540	14.383	5.088
N-G240	002YR	11.400	15.000	-0.0050	450	3.975	4.229
N-G240	010YR	12.017	15.000	-0.0042	313	11.404	11.337
N-G240	025YR	12.277	15.000	-0.0050	181	12.520	13.001
N-G240	050YR	12.533	15.000	-0.0050	181	12.530	14.132
N-G240	100YR	12.818	15.000	-0.0050	181	12.278	13.791
N-G240	500YR	13.168	15.000	-0.0050	181	13.237	67.235
N-G250	002YR	11.411	15.000	0.0025	1117	4.135	3.975
N-G250	010YR	12.114	15.000	0.0050	591	12.130	11.404
N-G250	025YR	12.398	15.000	0.0050	211	12.984	12.520
N-G250	050YR	12.719	15.000	0.0050	202	13.221	12.530
N-G250	100YR	13.077	15.000	0.0050	184	13.063	12.278
N-G250	500YR	13.541	15.000	0.0050	184	13.260	13.237
N-G260	002YR	11.548	15.000	0.0004	15945	7.569	4.135
N-G260	010YR	12.172	15.000	0.0005	17485	13.962	12.130
N-G260	025YR	12.428	15.000	0.0006	18009	16.957	12.984
N-G260	050YR	12.773	15.000	0.0007	18735	19.976	13.221
N-G260	100YR	13.239	15.000	0.0008	20111	23.613	13.063
N-G260	500YR	13.771	15.000	0.0010	22196	28.166	13.260
N-G270	002YR	10.592	15.000	0.0050	279	13.445	12.487
N-G270	010YR	11.334	15.000	0.0050	240	14.623	14.570
N-G270	025YR	11.519	15.000	0.0050	217	17.966	17.905
N-G270	050YR	11.660	15.000	0.0050	172	21.812	21.496
N-G270	100YR	11.865	15.000	0.0050	167	25.743	27.786
N-G270	500YR	12.129	15.000	0.0050	167	30.632	34.110
N-G280	002YR	10.671	15.000	0.0050	976	8.941	13.445
N-G280	010YR	11.429	15.000	0.0050	877	14.767	14.623
N-G280	025YR	11.635	15.000	0.0050	622	18.142	17.966
N-G280	050YR	11.807	15.000	0.0050	316	21.772	21.812
N-G280	100YR	12.114	15.000	0.0050	669	25.977	25.743
N-G280	500YR	12.439	15.000	0.0050	657	54.832	30.632
N-G290	002YR	12.293	16.000	-0.0027	11069	10.161	8.941
N-G290	010YR	12.719	16.000	-0.0027	11820	15.700	14.767
N-G290	025YR	12.943	16.000	-0.0027	12199	19.543	18.142
N-G290	050YR	13.174	16.000	-0.0027	12654	23.087	21.772
N-G290	100YR	13.435	16.000	-0.0027	13177	27.743	25.977
N-G290	500YR	13.564	16.000	-0.0027	13347	33.394	54.832
N-G300	002YR	12.350	15.000	0.0050	141	8.226	8.226
N-G300	010YR	12.734	15.000	0.0050	141	11.113	11.113
N-G300	025YR	12.964	15.000	0.0050	141	12.110	12.110
N-G300	050YR	13.200	15.000	0.0050	141	12.981	12.982
N-G300	100YR	13.467	15.000	0.0050	141	13.902	13.903
N-G300	500YR	13.613	15.000	0.0050	141	14.908	14.908
N-G310	002YR	12.589	15.000	0.0050	136	8.226	8.226

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
N-G310	010YR	13.075	15.000	0.0050	136	11.113	11.113
N-G310	025YR	13.262	15.000	0.0050	136	12.110	12.110
N-G310	050YR	13.430	15.000	0.0050	136	12.981	12.981
N-G310	100YR	13.645	15.000	0.0050	136	13.902	13.902
N-G310	500YR	13.910	15.000	0.0050	136	14.907	14.908
N-G320	002YR	13.028	13.000	0.0050	130	8.226	8.226
N-G320	010YR	13.876	13.000	0.0050	130	11.113	11.113
N-G320	025YR	14.223	13.000	0.0050	130	12.110	12.110
N-G320	050YR	14.534	13.000	0.0050	130	12.981	12.981
N-G320	100YR	14.890	13.000	0.0050	130	13.901	13.902
N-G320	500YR	15.355	13.000	0.0050	130	14.906	14.907
N-G330	002YR	15.481	14.500	0.0002	120487	17.718	8.226
N-G330	010YR	16.957	14.500	0.0003	186685	33.094	11.113
N-G330	025YR	17.569	14.500	0.0003	214152	40.406	12.110
N-G330	050YR	18.147	14.500	0.0003	240065	47.841	12.981
N-G330	100YR	18.800	14.500	0.0003	269386	56.853	13.901
N-G330	500YR	19.565	14.500	0.0004	303708	68.204	14.906
N-G340	002YR	10.565	12.500	0.0005	23134	16.527	15.722
N-G340	010YR	11.278	12.500	0.0005	112135	37.501	34.902
N-G340	025YR	11.452	12.500	0.0005	159734	48.020	44.039
N-G340	050YR	11.587	12.500	0.0005	196687	59.663	53.028
N-G340	100YR	11.771	12.500	0.0005	247219	75.177	60.660
N-G340	500YR	12.050	12.500	0.0005	323834	95.085	70.703
N-G350	002YR	10.696	15.000	0.0002	24210	6.539	7.023
N-G350	010YR	11.279	15.000	-0.0006	25061	19.303	22.158
N-G350	025YR	11.499	15.000	-0.0009	25381	26.226	30.206
N-G350	050YR	11.670	15.000	-0.0011	25633	33.573	35.524
N-G350	100YR	11.917	15.000	-0.0012	25948	42.801	42.909
N-G350	500YR	12.205	15.000	-0.0012	26861	54.732	52.516
N-G360	002YR	11.008	16.500	0.0002	22237	5.023	3.552
N-G360	010YR	11.443	16.500	0.0003	22970	13.569	10.883
N-G360	025YR	11.643	16.500	0.0004	23250	18.098	14.977
N-G360	050YR	11.843	16.500	0.0004	23503	22.883	19.369
N-G360	100YR	12.082	16.500	0.0005	23882	28.879	24.922
N-G360	500YR	12.374	16.500	0.0006	24558	36.748	32.248
N-G370	002YR	12.723	12.500	0.0001	501997	20.375	1.256
N-G370	010YR	13.324	12.500	0.0002	669566	50.114	9.347
N-G370	025YR	13.524	12.500	0.0002	725346	65.679	15.537
N-G370	050YR	13.700	12.500	0.0002	774525	82.059	23.096
N-G370	100YR	13.888	12.500	0.0002	827022	102.647	33.615
N-G370	500YR	14.097	12.500	0.0003	885198	129.340	48.522
N-G400	002YR	10.208	12.500	0.0005	142998	55.982	21.486
N-G400	010YR	11.417	12.500	0.0009	186390	120.412	58.162
N-G400	025YR	11.848	12.500	0.0011	194227	155.360	82.652
N-G400	050YR	12.312	12.500	0.0012	201150	189.011	100.997
N-G400	100YR	12.848	12.500	0.0013	208055	242.822	125.469
N-G400	500YR	13.414	12.500	0.0014	215296	283.488	160.246
N-G410	002YR	10.208	13.000	-0.0005	34232	13.783	37.482
N-G410	010YR	11.420	13.000	-0.0013	37494	25.352	44.755
N-G410	025YR	11.854	13.000	0.0007	38816	30.765	44.755
N-G410	050YR	12.320	13.000	0.0009	41492	36.216	44.721
N-G410	100YR	12.860	13.000	0.0013	45255	42.781	44.756
N-G410	500YR	13.433	13.000	0.0015	49248	50.994	44.754
N-G420	002YR	10.209	13.000	0.0005	86957	30.506	7.651
N-G420	010YR	11.426	13.000	0.0009	95903	67.731	20.005
N-G420	025YR	11.865	13.000	0.0011	100775	85.989	26.883
N-G420	050YR	12.336	13.000	0.0013	105940	103.649	32.784
N-G420	100YR	12.888	13.000	0.0013	112184	120.592	42.931
N-G420	500YR	13.489	13.000	0.0013	118991	131.263	59.912
N-G430	002YR	10.209	13.000	0.0003	32919	15.376	13.744
N-G430	010YR	11.431	13.000	0.0005	36247	31.433	30.047
N-G430	025YR	11.874	13.000	0.0007	37130	39.289	35.376
N-G430	050YR	12.357	13.000	0.0008	40223	47.351	37.803

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
N-G430	100YR	12.920	13.000	0.0011	45131	57.216	34.787
N-G430	500YR	13.548	13.000	0.0013	50598	69.744	43.015
N-G440	002YR	10.214	13.500	0.0004	22095	13.250	10.427
N-G440	010YR	11.442	13.500	0.0005	25642	26.645	23.240
N-G440	025YR	11.893	13.500	0.0006	26621	33.422	30.576
N-G440	050YR	12.395	13.500	0.0007	27842	41.259	39.709
N-G440	100YR	12.990	13.500	0.0007	29656	53.831	48.706
N-G440	500YR	13.717	13.500	0.0010	32810	69.132	54.264
N-G450	002YR	11.077	17.000	0.0003	7097	3.721	3.575
N-G450	010YR	12.240	17.000	0.0007	8215	11.424	11.070
N-G450	025YR	12.625	17.000	0.0008	8717	17.114	16.576
N-G450	050YR	12.975	17.000	0.0010	9175	23.059	22.279
N-G450	100YR	13.465	17.000	0.0011	9816	30.112	28.436
N-G450	500YR	14.267	17.000	0.0012	10748	36.120	32.192
N-G460	002YR	11.079	15.000	0.0003	17656	4.390	2.698
N-G460	010YR	12.263	15.000	0.0007	20234	13.506	8.630
N-G460	025YR	12.677	15.000	0.0008	21136	18.602	13.064
N-G460	050YR	13.071	15.000	0.0010	22025	24.075	17.748
N-G460	100YR	13.590	15.000	0.0011	23382	31.027	23.011
N-G460	500YR	14.449	15.000	0.0013	25432	40.164	26.794
N-G470	002YR	10.770	15.000	0.0005	51568	36.260	31.031
N-G470	010YR	11.773	15.000	0.0006	55206	70.444	63.043
N-G470	025YR	12.637	15.000	0.0007	59014	86.503	71.933
N-G470	050YR	13.481	15.000	0.0008	64157	100.585	74.434
N-G470	100YR	14.466	15.000	0.0009	72488	139.508	75.294
N-G470	500YR	15.573	15.000	0.0011	85006	132.881	80.182
N-G480	002YR	12.845	17.000	0.0006	21878	10.442	1.658
N-G480	010YR	13.730	17.000	0.0010	24123	20.809	7.565
N-G480	025YR	14.410	17.000	0.0012	25721	25.790	8.103
N-G480	050YR	15.251	17.000	0.0013	27664	30.861	8.445
N-G480	100YR	16.302	17.000	0.0013	30411	37.021	8.752
N-G480	500YR	17.560	17.000	0.0014	33698	44.788	9.403
N-G490	002YR	11.500	13.900	0.0000	143	0.000	0.000
N-G490	010YR	11.773	13.900	0.0003	1583	0.000	1.005
N-G490	025YR	12.637	13.900	-0.0013	5605	0.000	14.362
N-G490	050YR	13.480	13.900	-0.0020	9421	0.000	37.745
N-G490	100YR	14.465	13.900	-0.0022	18380	0.000	69.644
N-G490	500YR	15.573	13.900	-0.0037	32786	0.000	70.781
N-G510	002YR	11.635	14.000	0.0002	18379	4.231	0.934
N-G510	010YR	12.293	14.000	0.0004	19935	8.550	1.736
N-G510	025YR	12.618	14.000	0.0005	20785	10.633	2.038
N-G510	050YR	12.949	14.000	0.0006	21649	12.755	2.300
N-G510	100YR	13.352	14.000	0.0007	22701	15.336	2.581
N-G510	500YR	13.848	14.000	0.0008	23996	18.591	2.886
N-H100	002YR	7.208	13.000	0.0005	78353	37.216	0.678
N-H100	010YR	8.804	13.000	0.0009	84258	70.408	0.963
N-H100	050YR	9.399	13.000	0.0012	86507	101.857	5.721
N-H100	100YR	9.634	13.000	0.0014	87429	120.919	10.599
N-H100	500YR	10.018	13.000	0.0017	88935	144.799	20.720
N-H110	002YR	9.084	13.000	0.0008	60080	44.008	1.463
N-H110	010YR	9.650	13.000	0.0011	62237	64.161	11.077
N-H110	050YR	10.258	13.000	0.0012	64791	81.029	28.011
N-H110	100YR	10.590	13.000	0.0013	66198	91.722	39.239
N-H110	500YR	10.969	13.000	0.0013	67851	106.102	51.595
N-H120	002YR	9.084	13.000	0.0007	10466	20.772	17.580
N-H120	010YR	9.673	13.000	0.0010	11655	32.467	22.832
N-H120	050YR	10.531	13.000	0.0014	13155	42.738	27.215
N-H120	100YR	11.079	13.000	0.0016	14374	48.550	31.070
N-H120	500YR	11.744	13.000	0.0017	16070	57.117	37.035
N-H130	002YR	11.381	13.000	0.0009	7241	12.463	10.411
N-H130	010YR	11.917	13.000	0.0012	7915	19.054	16.505
N-H130	050YR	12.352	13.000	0.0015	8426	24.985	21.782

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
N-H130	100YR	12.616	13.000	0.0016	8708	28.526	24.667
N-H130	500YR	12.910	13.000	0.0018	9091	32.939	30.632
N-I040	002YR	7.000	12.000	0.0000	4356	0.000	0.000
N-I040	010YR	7.000	12.000	0.0000	4356	0.000	0.000
N-I040	025YR	7.000	12.000	0.0000	4356	0.000	0.000
N-I040	050YR	7.000	12.000	0.0000	4356	0.000	0.000
N-I040	100YR	7.000	12.000	0.0000	4356	0.000	0.000
N-I040	500YR	7.000	12.000	0.0000	4356	0.000	0.000
N-I042	002YR	9.036	9.760	0.0008	152	5.524	5.512
N-I042	010YR	9.679	9.760	0.0010	135	10.533	10.521
N-I042	025YR	9.960	9.760	0.0010	124	12.905	12.899
N-I042	050YR	10.213	9.760	0.0014	124	15.305	15.292
N-I042	100YR	10.518	9.760	0.0017	123	18.207	18.197
N-I042	500YR	10.914	9.760	0.0019	122	21.848	21.831
N-I060	002YR	7.038	7.400	-0.0048	59001	93.621	85.171
N-I060	010YR	8.468	7.400	-0.0048	263411	152.980	126.122
N-I060	025YR	9.151	7.400	-0.0048	359290	167.900	135.576
N-I060	050YR	9.846	7.400	-0.0048	456966	215.365	206.387
N-I060	100YR	10.570	7.400	-0.0048	558947	290.365	273.209
N-I060	500YR	11.013	7.400	-0.0048	620151	315.939	290.051
N-I080	002YR	8.021	9.200	0.0003	8956	3.438	1.844
N-I080	010YR	8.468	9.200	0.0005	9694	6.877	5.581
N-I080	025YR	9.151	9.200	0.0005	10818	8.529	8.014
N-I080	050YR	9.846	9.200	0.0006	16003	10.212	10.080
N-I080	100YR	10.570	9.200	0.0006	36436	12.256	12.218
N-I080	500YR	11.012	9.200	0.0006	51834	14.842	14.819
N-I090	002YR	7.039	7.500	-0.0037	102643	14.488	3.894
N-I090	010YR	8.468	7.500	-0.0037	183556	26.429	7.176
N-I090	025YR	9.151	7.500	-0.0037	239250	32.005	7.888
N-I090	050YR	9.846	7.500	-0.0037	302828	37.616	10.153
N-I090	100YR	10.570	7.500	-0.0037	369022	44.370	14.857
N-I090	500YR	11.009	7.500	-0.0036	409271	52.816	19.033
N-I098	002YR	8.782	10.000	0.0050	140	27.267	12.828
N-I098	010YR	10.083	10.000	0.0050	140	27.297	12.863
N-I098	025YR	10.405	10.000	-0.0050	140	21.519	12.898
N-I098	050YR	10.628	10.000	-0.0050	140	25.495	12.688
N-I098	100YR	10.900	10.000	0.0050	140	27.337	12.861
N-I098	500YR	11.349	10.000	0.0050	140	27.328	11.332
N-I099	002YR	8.780	10.000	0.0050	134	5.421	27.267
N-I099	010YR	10.066	10.000	0.0050	134	8.123	27.297
N-I099	025YR	10.380	10.000	0.0050	134	9.425	21.519
N-I099	050YR	10.608	10.000	0.0050	134	10.498	25.495
N-I099	100YR	10.893	10.000	0.0050	134	11.711	27.337
N-I099	500YR	11.346	10.000	0.0050	134	12.908	27.328
N-I100	002YR	8.771	10.400	0.0050	131	5.454	5.421
N-I100	010YR	10.048	10.400	-0.0050	131	7.632	8.123
N-I100	025YR	10.355	10.400	0.0050	131	8.935	9.425
N-I100	050YR	10.588	10.400	0.0050	131	9.998	10.498
N-I100	100YR	10.884	10.400	0.0050	131	11.194	11.711
N-I100	500YR	11.338	10.400	0.0050	131	12.471	12.908
N-I101	002YR	8.420	8.000	0.0003	20747	0.743	1.454
N-I101	010YR	9.062	8.000	0.0005	44648	26.549	26.522
N-I101	025YR	9.635	8.000	0.0006	65953	112.081	111.821
N-I101	050YR	10.205	8.000	0.0006	107652	220.202	218.265
N-I101	100YR	10.783	8.000	0.0005	187044	325.172	319.308
N-I101	500YR	11.271	8.000	0.0008	247993	438.690	429.075
N-I150	002YR	8.725	9.200	-0.0008	9840	10.108	6.962
N-I150	010YR	9.701	9.200	0.0010	10850	18.003	16.433
N-I150	025YR	9.996	9.200	0.0010	11205	21.723	17.911
N-I150	050YR	10.294	9.200	0.0011	11563	25.474	20.026
N-I150	100YR	10.821	9.200	0.0012	12197	29.981	21.994
N-I150	500YR	11.301	9.200	0.0014	12775	35.610	33.397

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
N-I152	002YR	8.601	11.200	0.0007	187	3.169	3.169
N-I152	010YR	9.797	11.200	0.0050	132	6.223	5.722
N-I152	025YR	10.061	11.200	0.0050	132	6.665	6.634
N-I152	050YR	10.259	11.200	-0.0050	132	7.622	7.621
N-I152	100YR	10.547	11.200	0.0050	132	8.544	8.523
N-I152	500YR	10.949	11.200	0.0050	132	8.962	8.904
N-I153	002YR	8.573	11.250	0.0011	120	3.169	3.170
N-I153	010YR	9.815	11.250	-0.0050	120	5.722	5.714
N-I153	025YR	10.074	11.250	-0.0050	120	6.634	6.699
N-I153	050YR	10.256	11.250	-0.0050	120	7.621	7.574
N-I153	100YR	10.495	11.250	-0.0050	120	8.523	8.473
N-I153	500YR	10.882	11.250	-0.0050	120	8.904	8.850
N-I170	002YR	8.859	10.000	-0.0019	117	1.927	2.083
N-I170	010YR	10.092	10.000	0.0019	11875	3.753	3.157
N-I170	025YR	10.347	10.000	0.0032	12035	4.177	3.236
N-I170	050YR	10.534	10.000	0.0044	12132	4.244	3.024
N-I170	100YR	10.853	10.000	0.0046	12297	4.197	2.526
N-I170	500YR	11.304	10.000	0.0047	14763	4.128	2.074
N-I180	002YR	9.998	9.200	0.0006	538935	47.723	2.499
N-I180	010YR	10.223	9.200	0.0003	672889	79.879	14.273
N-I180	025YR	10.334	9.200	0.0002	737930	94.552	23.697
N-I180	050YR	10.441	9.200	0.0002	799721	109.196	34.443
N-I180	100YR	10.807	9.200	0.0002	1011600	126.716	48.390
N-I180	500YR	11.304	9.200	0.0002	1252461	148.529	67.127
N-I230	002YR	9.388	10.000	0.0050	122	9.653	9.583
N-I230	010YR	10.876	10.000	0.0050	122	17.537	17.406
N-I230	025YR	11.863	10.000	0.0050	122	21.211	21.049
N-I230	050YR	12.975	10.000	0.0050	122	24.904	24.719
N-I230	100YR	14.296	10.000	0.0050	122	29.347	29.196
N-I230	500YR	16.117	10.000	0.0050	122	34.899	34.720
N-I240	002YR	9.363	10.000	0.0004	36284	16.868	4.874
N-I240	010YR	10.200	10.000	0.0007	133868	30.907	8.034
N-I240	025YR	10.343	10.000	0.0008	201538	37.466	8.444
N-I240	050YR	10.455	10.000	0.0009	254800	44.081	8.754
N-I240	100YR	10.569	10.000	0.0010	309050	52.097	9.058
N-I240	500YR	10.900	10.000	0.0010	466499	62.057	9.364
N-I250	002YR	11.027	11.200	0.0009	20559	26.819	15.196
N-I250	010YR	12.277	11.200	0.0015	70049	49.821	20.905
N-I250	025YR	12.624	11.200	0.0017	85859	60.628	23.105
N-I250	050YR	12.933	11.200	0.0017	99937	71.525	24.599
N-I250	100YR	13.238	11.200	0.0017	166974	84.661	25.464
N-I250	500YR	13.511	11.200	0.0015	240548	101.110	25.663
N-I252	002YR	10.952	12.000	0.0050	150	15.196	15.192
N-I252	010YR	12.068	12.000	0.0050	117	20.905	21.048
N-I252	025YR	12.356	12.000	0.0050	117	23.105	23.112
N-I252	050YR	12.624	12.000	0.0050	117	24.599	24.598
N-I252	100YR	12.932	12.000	0.0050	117	25.464	25.452
N-I252	500YR	13.209	12.000	0.0050	117	25.663	25.630
N-I255	002YR	10.893	12.000	0.0044	257	15.192	15.185
N-I255	010YR	11.705	12.000	-0.0050	186	21.048	20.937
N-I255	025YR	11.879	12.000	-0.0050	180	23.112	23.121
N-I255	050YR	12.061	12.000	-0.0050	161	24.598	24.597
N-I255	100YR	12.381	12.000	-0.0050	127	25.452	25.435
N-I255	500YR	12.662	12.000	-0.0050	127	25.630	25.589
N-I260	002YR	8.952	11.000	0.0003	79220	23.919	9.737
N-I260	010YR	9.727	11.000	0.0004	85882	38.758	19.504
N-I260	025YR	9.956	11.000	0.0005	87788	44.700	22.518
N-I260	050YR	10.147	11.000	0.0005	89337	50.355	24.945
N-I260	100YR	10.342	11.000	0.0005	90993	57.687	27.249
N-I260	500YR	10.585	11.000	0.0006	93014	67.409	29.588
N-I265	002YR	8.879	16.000	-0.0035	519	9.737	9.737
N-I265	010YR	9.610	16.000	-0.0032	481	19.504	19.503
N-I265	025YR	9.819	16.000	-0.0034	448	22.518	22.518

Name	Simulation	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Inflow cfs	Max Outflow cfs
N-I265	050YR	9.988	16.000	-0.0035	411	24.945	24.945
N-I265	100YR	10.155	16.000	-0.0050	357	27.249	27.249
N-I265	500YR	10.466	16.000	-0.0050	244	29.588	29.588
N-I270	002YR	7.508	8.000	0.0050	23864	60.983	52.774
N-I270	010YR	8.469	8.000	0.0050	37832	72.653	70.991
N-I270	025YR	9.098	8.000	0.0050	43907	78.983	76.884
N-I270	050YR	9.625	8.000	0.0050	51491	83.952	81.770
N-I270	100YR	10.239	8.000	0.0050	65363	111.934	108.746
N-I270	500YR	10.777	8.000	0.0050	83976	136.109	130.309
N-I280	002YR	10.019	10.200	0.0002	14037	3.295	1.455
N-I280	010YR	10.289	10.200	0.0003	14838	6.004	3.962
N-I280	025YR	10.336	10.200	0.0003	15078	7.268	5.861
N-I280	050YR	10.367	10.200	0.0004	15236	8.539	7.677
N-I280	100YR	10.393	10.200	0.0004	15365	10.069	9.625
N-I280	500YR	10.773	10.200	0.0005	17284	11.982	11.701
N-I290	002YR	8.150	8.300	0.0003	10707	5.409	4.092
N-I290	010YR	8.437	8.300	0.0004	13555	9.352	8.537
N-I290	025YR	9.157	8.300	0.0004	24644	11.163	12.514
N-I290	050YR	9.771	8.300	-0.0005	32041	12.973	13.920
N-I290	100YR	10.333	8.300	-0.0006	38806	15.142	36.524
N-I290	500YR	10.849	8.300	0.0007	45019	17.844	46.773