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List of Acronyms

ac-ft – Acre-feet
DTM – Digital Terrain Model
FEMA – Federal Emergency Management Agency
FIPS – Federal Information Processing Standard
FIS – Flood Insurance Study
ft – Foot/Feet

GIS – Geographic Information System
H&H – Hydrologic and Hydraulic
H&H Protocols – Hydraulics & Hydrology Modeling Protocols
HGL – Hydraulic Grade Line
hr – Hour
in - Inches
LiDAR – Light Detection and Ranging
NAD – North American Datum
NLCD – National Land Cover Database
NRCS – National Resources Conservation Service
SWMM – City of Memphis/Shelby County Storm Water Management Manual, Volume 2
UMRF – University of Memphis Research Foundation
USDA – United States Department of Agriculture
USGS – United States Geological Survey

Section 1 - Model Development

The Ridgeway Basin study area is located in the City of Memphis, Tennessee and is just over 4,500 acres in size. The Ridgeway Basin is divided into three smaller subbasins: Ridgeway, Balmoral, and South Germantown subbasins. The study area is bounded to the south by the Nonconnah Creek and extends northward to Poplar Avenue. To the west, it is approximately bordered by South White Station Road, and to the east by state route 177 (Figure 1). This volume describes the data collection and evaluation, the methodology used to develop the hydrologic and hydraulic (H&H) model, and the details of the analysis performed for the study area.

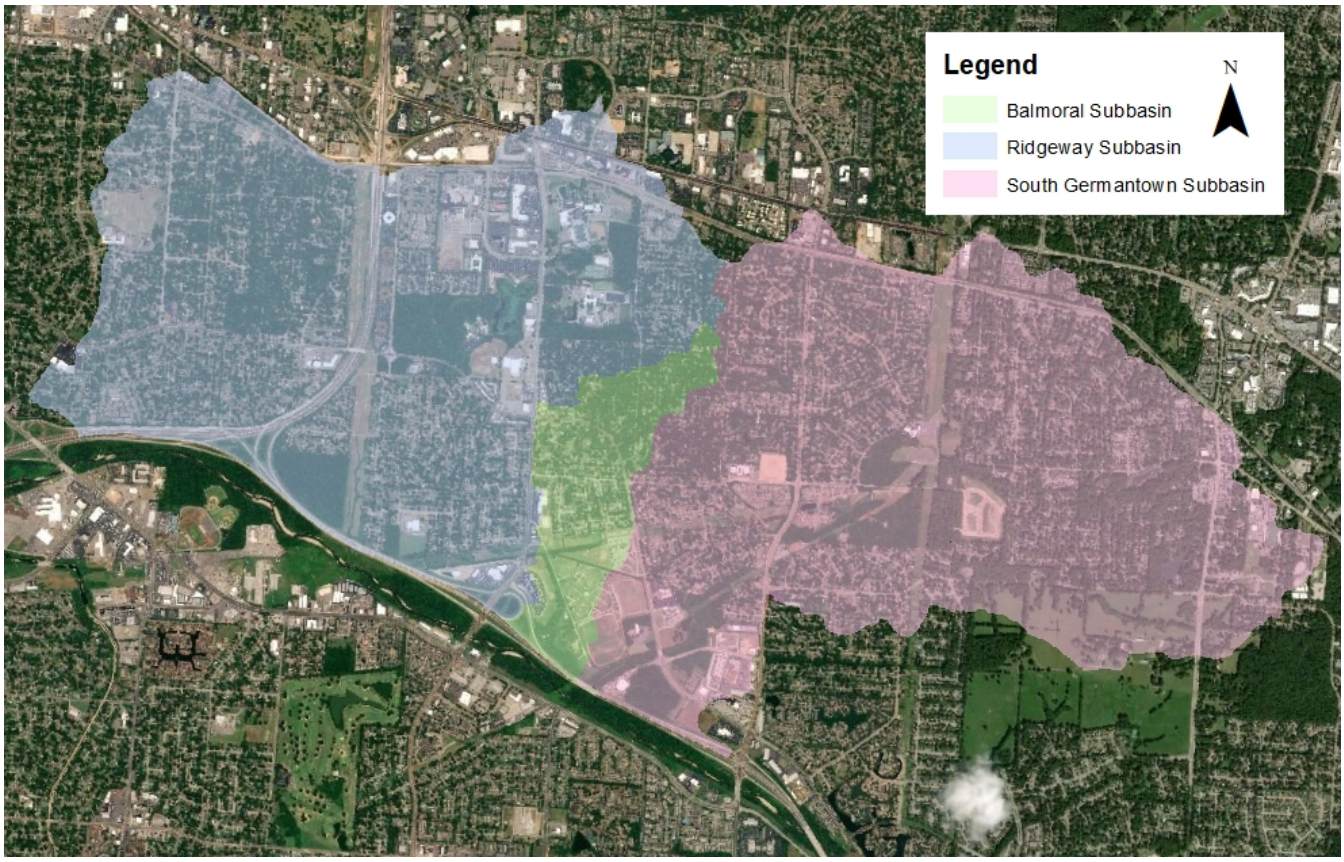


Figure 1: Ridgeway Drainage Basin

1.1 Data Collection

1.1.1 Topography

Multiple topographic resources were utilized during the study. Those sources included:

- 2012 light detection and ranging (LiDAR) data. Provided by the City of Memphis.
- Survey data. Although not an exhaustive list of collected survey data, the following key features were obtained:
  - Open channels
  - Pipes 24-inch and larger
  - Pipes downstream from an identified flooding concern

- All structures, such as headwalls, bridges, and inlets, along surveyed open channels and pipes
- Finish floor elevations for structures in stormwater inundation areas

The Ridgeway Basin study area is generally flat and drains from north to south. There is a 120-foot elevation difference (242.616'-359.06') between the uppermost reaches of Ridgeway Basin and the discharge locations along the Nonconnah Creek.

1.1.2 Land Use

Most of the basin consists of residential and mixed-use zoning classes with a small amount of industrial zoning in the far southeast and larger parcels of industrially zoned parcels in the northern portion of the basin. Figure 2 shows the zoning classifications based on parcel information provided by the City of Memphis.

To help estimate impervious area in the basin, the 2016 United States Geological Survey (USGS) National Land Cover Database (NLCD) was referenced. The NLCD provides spatially explicit, 16-class land cover classifications at a spatial resolution of 30 meters, as well as estimates of percent imperviousness on a per pixel basis. The NLCD data was augmented using aerial photography available through Google Maps/Earth.

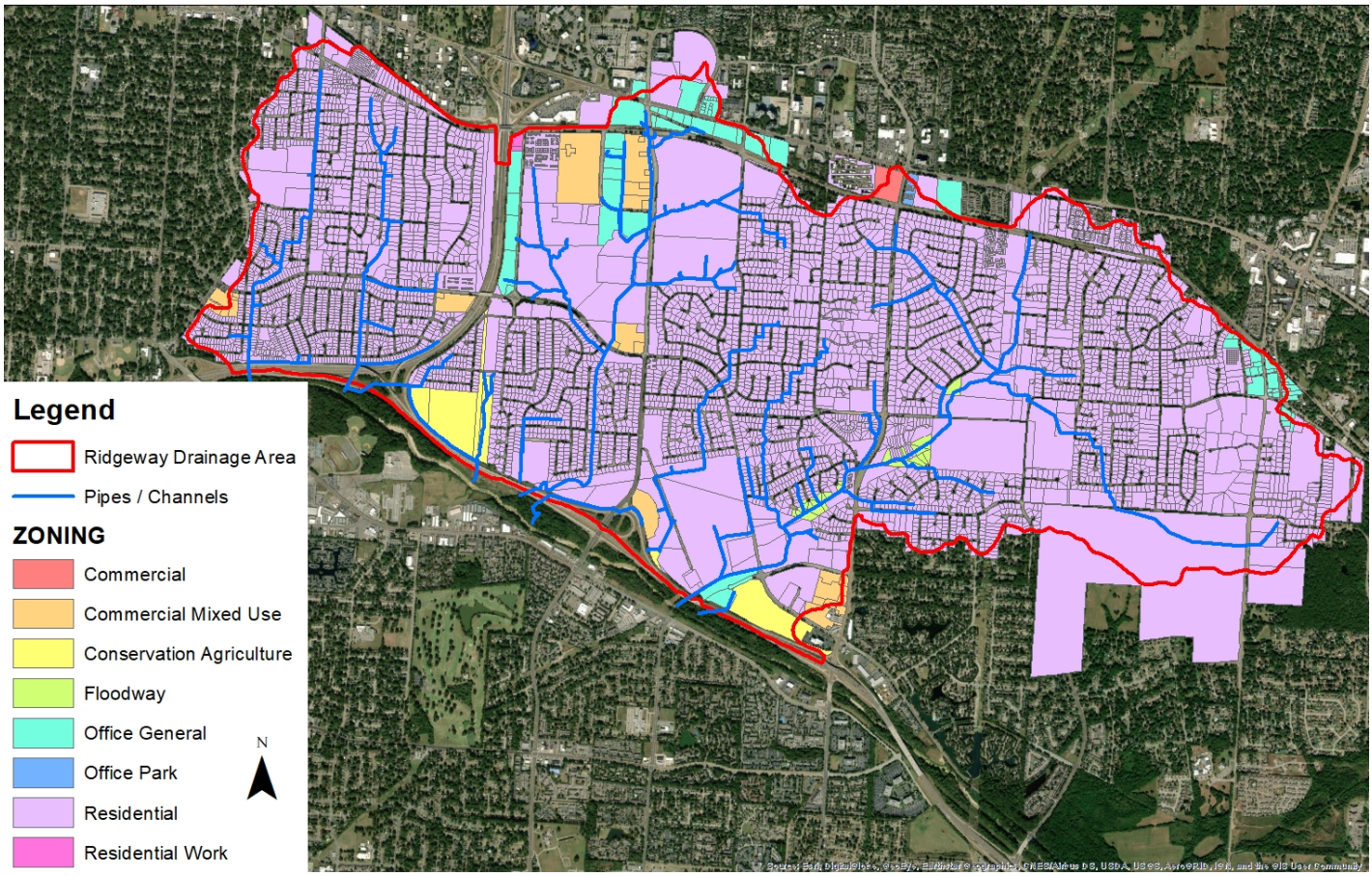


Figure 2. Land Use/Zoning Classification

1.1.3 Soils

Soil data for the Ridgeway Basin study area was obtained from the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey, as well as published Soil Surveys. Based upon the NRCS soil data, the dominant soil association for the three subbasins are as follows:

- Balmoral Subbasin – The dominant soil association is Henry silt loam which features poorly drained silty soil on broad flats.
- Ridgeway Subbasin – This area is primarily composed of filled land, silty which features somewhat poorly drained, strongly acid, mainly level silty soil on bottom lands.
- South Germantown – The main soil association is Grenada silt loam which features moderately well drained silty soil that has a fragipan.

Other large soil associations represented in the study area include Memphis silt loams, Collins silt loams and Falaya silt loams.

1.1.4 Precipitation

Three rain gauges were temporarily located within the Ridgeway basin. Five-minute rainfall data was recorded at the gauges from December 2017 to April 2018 and collected by the University of Memphis Research Foundation (UMRF) personnel on behalf of the City of Memphis for use in model calibration. The rain gauges were located as follows:

- EM28446: Fire Station No. 21 – S. Mendenhall Road, north of Poplar Avenue
- EM28449: Fire Station No. 25 – Willow Road, north of Overton High School
- EM28451: Fire Station No. 41 – Ridgeway Road, north of Quince Road

These locations as well as the basin area assigned to each rain gauge are shown in Figure 3**.**

Total rain over the monitoring period for each gauge is shown in Table 1**.**

Table 1: Rainfall Totals

Rain Gauge	Total Rain (in)
EM28446	26.8
EM 28449	27.3
EM 28451	29.6

1.1.5 Peak Stage Data

Two stream level meters were temporarily located within the Ridgeway Basin. Five-minute stream level data was recorded at the meters from October 2017 to April 2018 and collected by the UMRF personnel on behalf of the City of Memphis for use in model calibration. The stream level meters were located as follows:

- Cooperhill Drive (2030639) – Ridgeway, west of Copperfield Drive near Kirby Road
- Hawkhurst Street (2034477) – Ridgeway, east of Hawkhurst Street near Bill Morris Parkway

These locations are also shown in Figure 3**.** A thiessen polygon was used to determine which basin should received rain from the nearest gauge.

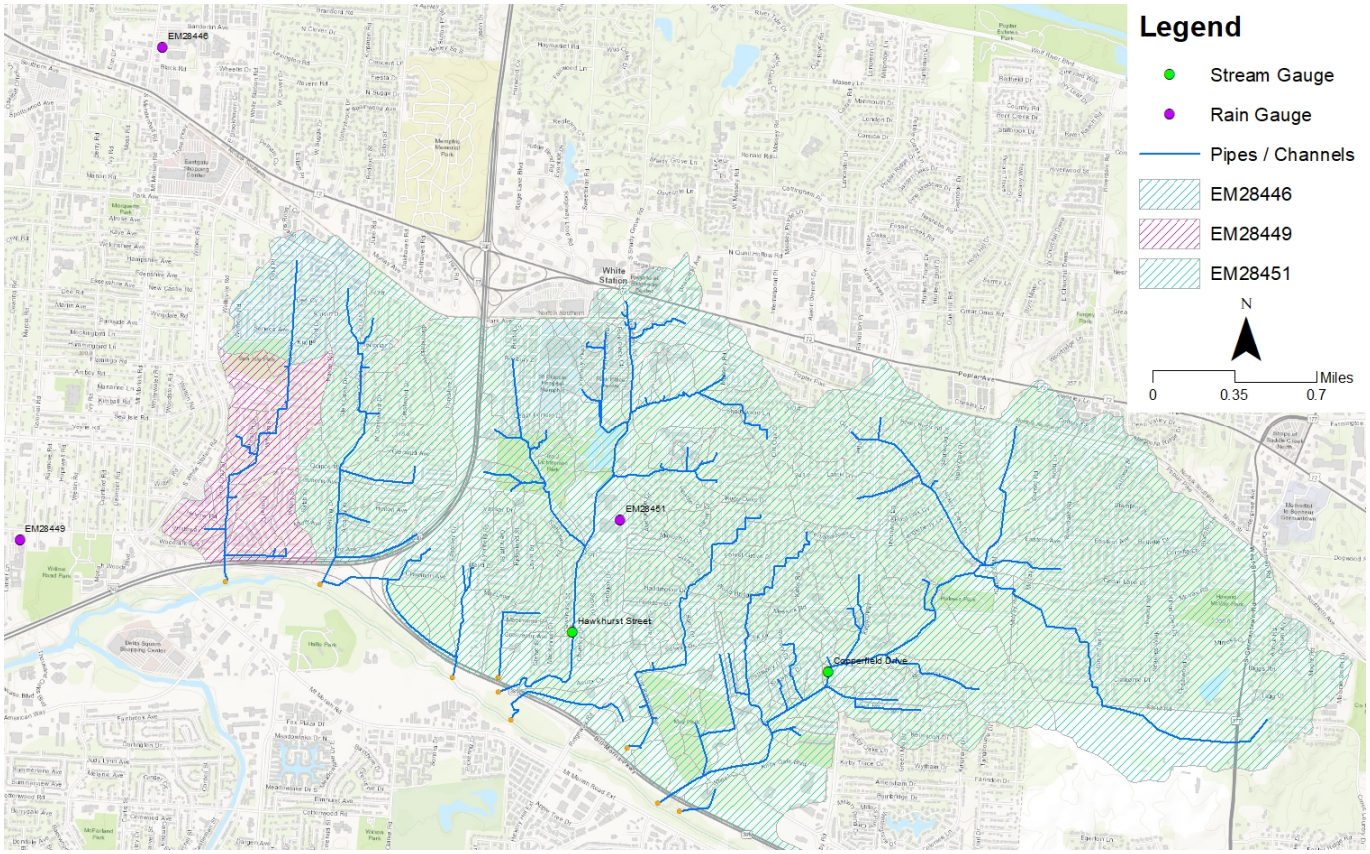


Figure 3: Rain and Stream Gauge Locations

Figure 4 shows the measured stage at each gauge and the response to rainfall. Both gauges show reasonable response to rainfall. Data was adjusted for the end of daylight savings time in November 2017. It should be noted that both level sensors use the rain data from EM 28451 because of the location as shown in Figure 3. The data in Figure 4 was used from this rain gauge. It should be noted that there are gaps in the data in Figure 4. This is because the temperature of the water was below freezing causing the level of water recorded to increase precipitously. Thus, all data was removed when the temperature was below freezing.

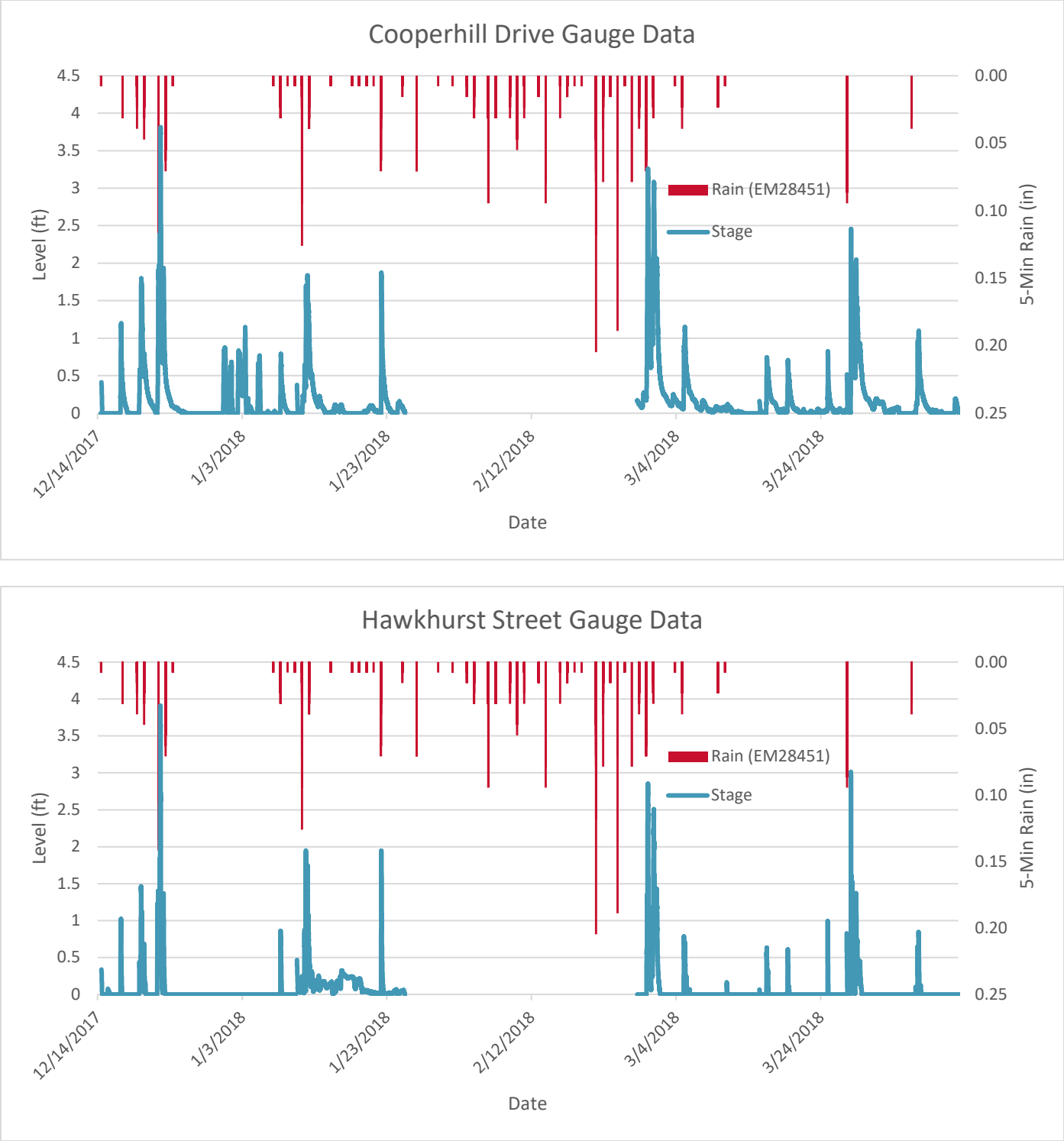


Figure 4. Measured Data of Rain at Cooperhill Drive and Hawkhurst Street Stream Gauges

1.1.6 Boundary Conditions

The Ridgeway drainage system discharges to Nonconnah Creek. The 2013 Federal Emergency Management Agency (FEMA) Flood Insurance Study (FIS) for Shelby County, Tennessee indicates that at the confluence of Ridgeway with Nonconnah Creek there is a low chance of backwater from Nonconnah Creek – Panel 79P shows that there will be no backwater effects from the confluence of Ridgeway with Nonconnah Creek. Thus, no impacts from Nonconnah Creek were assumed for this study.

1.2 Model Development

Innovyze's InfoSWMM Version 14.6 hydraulic modeling software was used for the evaluation. The hydraulic and hydrologic (H&H) model was prepared in accordance with protocols outlined in the *Hydraulics & Hydrology Modeling Protocols* (H&H Protocols), draft version dated 1/18/16.

1.2.1 Hydrology

This section describes the development of the hydrologic elements of the model. The hydrologic model was developed in accordance with both the H&H Protocols and the current version of the *City of Memphis/Shelby County Storm Water Management Manual*, *Volume 2* (SWMM).

Subcatchments

Preliminary drainage basin delineation was performed using topographic data and aerial photos. The delineation was reviewed for accuracy and modified to reflect field observations and additional as-built information. The Ridgeway Basin was subdivided into 102 distinct subcatchments for modeling purposes. Figure 5 shows the modeled subcatchments. Modeling parameters were assigned to subcatchments as discussed below. Table A-1 in Appendix A documents the specific parameters for each subcatchment.

Area, Length, and Width

Each subcatchment was drawn to reflect distinct drainage boundaries, as defined by topographic information and pipe and channel tributary drainage areas. The average area of subcatchments was approximately 46 acres, with a minimum area of just under two acres and maximum area of approximately 429 acres. Subcatchment representative length was determined by the approximate distance of the longest travel path of a drop of water falling to the subcatchment, usually along a major channel or the longest axis of the subcatchment. Width, traditionally considered a calibration parameter, was determined by dividing the subcatchment area by the representative length.

Slope

A representative subcatchment slope value was assigned to each subcatchment. This value was determined by analyzing LiDAR data. The slope of each LiDAR cell was determined by calculating the elevation difference between neighboring cells, using a geographic information system (GIS) slope tool. The average slope of all cells within the subcatchment was used as the representative subcatchment slope. Within all subcatchments, the average slope was 1.04%, minimum slope was 0.1%, and maximum slope was 7.5%.

Impervious Area & Runoff Routing

The percentages of impervious and pervious area were assigned to each subcatchment according to data from the 2016 United States Geological Survey (USGS) National Land Cover Dataset (NLCD). Landcover had been divided out into 16 different land types. Each land type was assigned a percent pervious area. The pervious percentages based on land type are shown in Table 2:

Table 2: NLCD Land Type Pervious Percentage

Land Type	Pervious Percentage
Open Water	0%
Perennial Ice/Snow	0%
Developed, Open Space	90%
Developed, Low Intensity	80%
Developed, Medium Intensity	70%
Developed, High Intensity	60%
Barren Land (Rock/Sand/Clay)	100%
Unconsolidated Shore	50%
Deciduous Forest	95%
Evergreen Forest	95%
Mixed Forest	95%
Shrub/Scrub	95%
Pasture/Hay	93%
Cultivated Crops	93%
Woody Wetlands	95%
Emergent Herbaceous Wetlands	50%

Source: 2016 United States Geological Survey (USGS) National Land Cover Dataset (NLCD)

The area of each land type was determined for each subcatchment. Then a weighted average of the pervious percentage was calculated for each subcatchment. The impervious percentage used in the model was calculated by taking 100 – weighted average pervious percentage. This impervious percentage was used in the model.

Runoff originating from impervious and pervious areas was routed internally within the subcatchment. The runoff was routed either from impervious to pervious area or from pervious to impervious area before reaching an outlet.

Manning's n Values

The runoff coefficient, Manning's n value, was assigned to impervious and pervious areas for each subcatchment. Because the limited monitoring data limits the ability to adjust values for each individual subcatchment, the same coefficient for impervious and pervious areas was applied across all subcatchments. For impervious area, a Manning's n value of 0.012 was used. This represents typical average conditions for concrete, asphalt and gravel surfaces based on SWMM Table 2-10.

From SWMM Table 2-10, typical Manning's n values for grassy or wooded surfaces range from a low of about 0.20 to 0.63. For this analysis the Manning's n identified through the calibration process tended toward the higher end of this range. Thus, for pervious areas, a Manning's n of 0.63 was applied in the model.

Depression Storage

The subcatchment parameter "depression storage" represents the ability to retain water in surface pits and depressions and is an estimate of the depth of storage available in each area before runoff is generated. Across all subcatchments, depression storage for impervious surfaces was 0.1 inches, and depression storage for pervious surfaces was 0.20 inches. These values are consistent with those shown in Table 4.4 of the H&H Protocols.

Infiltration

Infiltration of runoff was modeled using the Green-Ampt equation, which is a function of soil suction head, porosity, hydraulic conductivity, and time. These values were derived from USDA NRCS Soil Survey Reports. GIS tools were used to determine the distribution of soil types within each subcatchment. Analysis of the represented soil types revealed a consistent soil type of silt loam; therefore, the Green-Ampt parameters used were consistent across all subcatchments. Table 3 shows the Green-Ampt equation parameter values used in the H&H model, which are within the range of values for silt loam in Table 4.5 of the H&H Protocols.

Table 3: Green-Ampt Parameters

Parameter	Value
Hydraulic Conductivity (in/hr)	0.26
Capillary Suction Head (in)	6.57
Initial Moisture Deficit	0.217

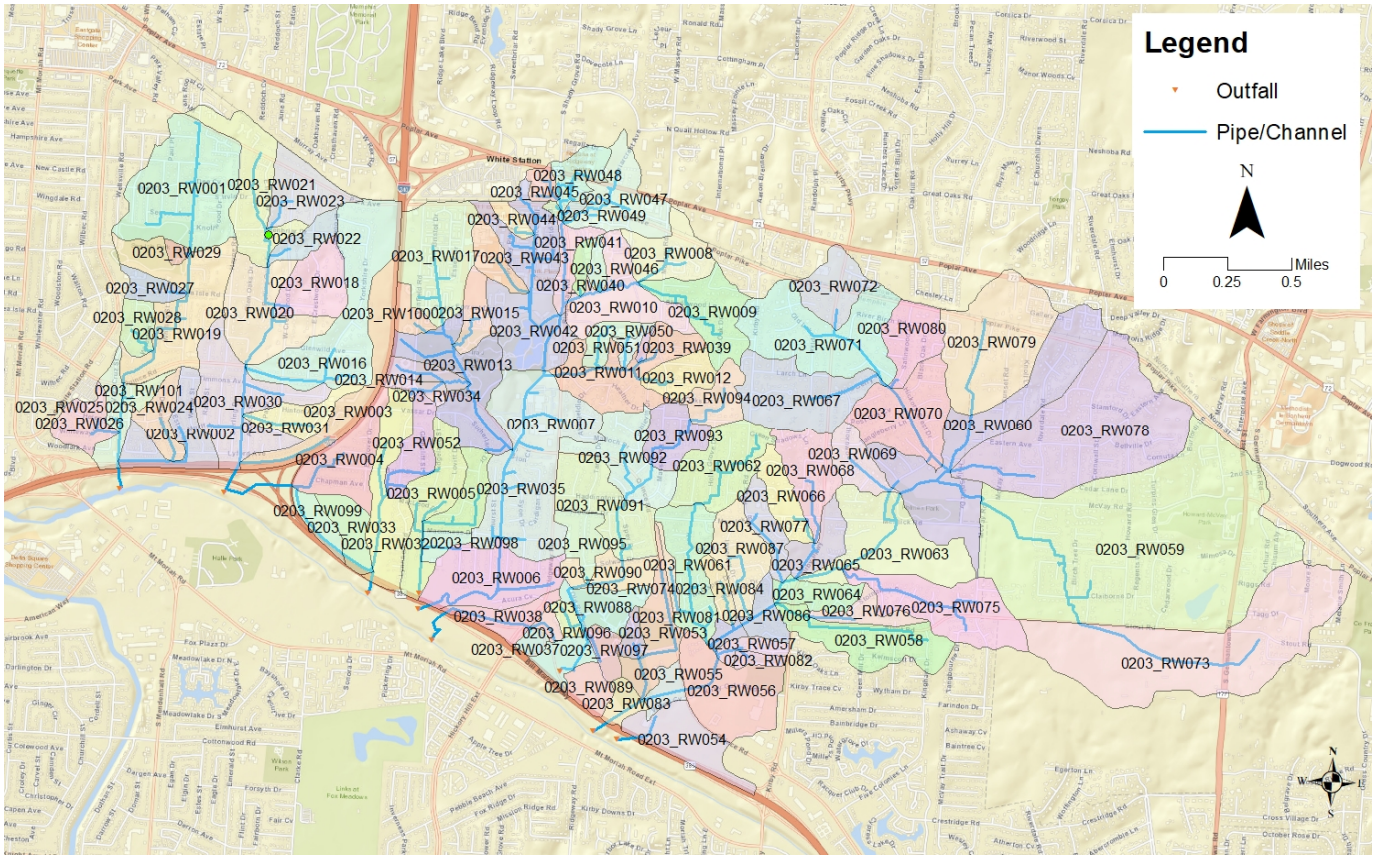


Figure 5. Model Subcatchments

1.2.2 Hydraulics

The Ridgeway system is comprised of combination of open channel and closed conduit features. The open channel features represent both natural and concrete lined sections and the closed conduits represent both circular pipe and rectangular box culverts. These open channel and closed conduit elements are represented as conduits/link in the modeled network. The connection points between individual links are represented by model nodes. These nodes are located at:

- Transition points between open channel and closed conduits
- Locations where conduit geometries change (i.e., changes in diameter or channel cross-section)
- Locations where multiple links meet
- Locations where additional storage is needed that is not represented in the pipe/conduit network
- Locations where loading is applied to the network
- Locations where flow is discharged from the system

The Ridgeway modeled system consists of 701 nodes, nine outfall node, and 705 conduits. Not all drainage channels have been included in the hydraulic model. Generally, significant open channels are included and storm drainage pipes larger than 24 inches. Smaller channels and pipes have been included for connectivity and where appropriate for system analysis and the overall goals of this study. The model generally includes pipe sizes 36 inches or larger, unless the pipe was needed for connectivity. Figure 6 shows the modeled network.

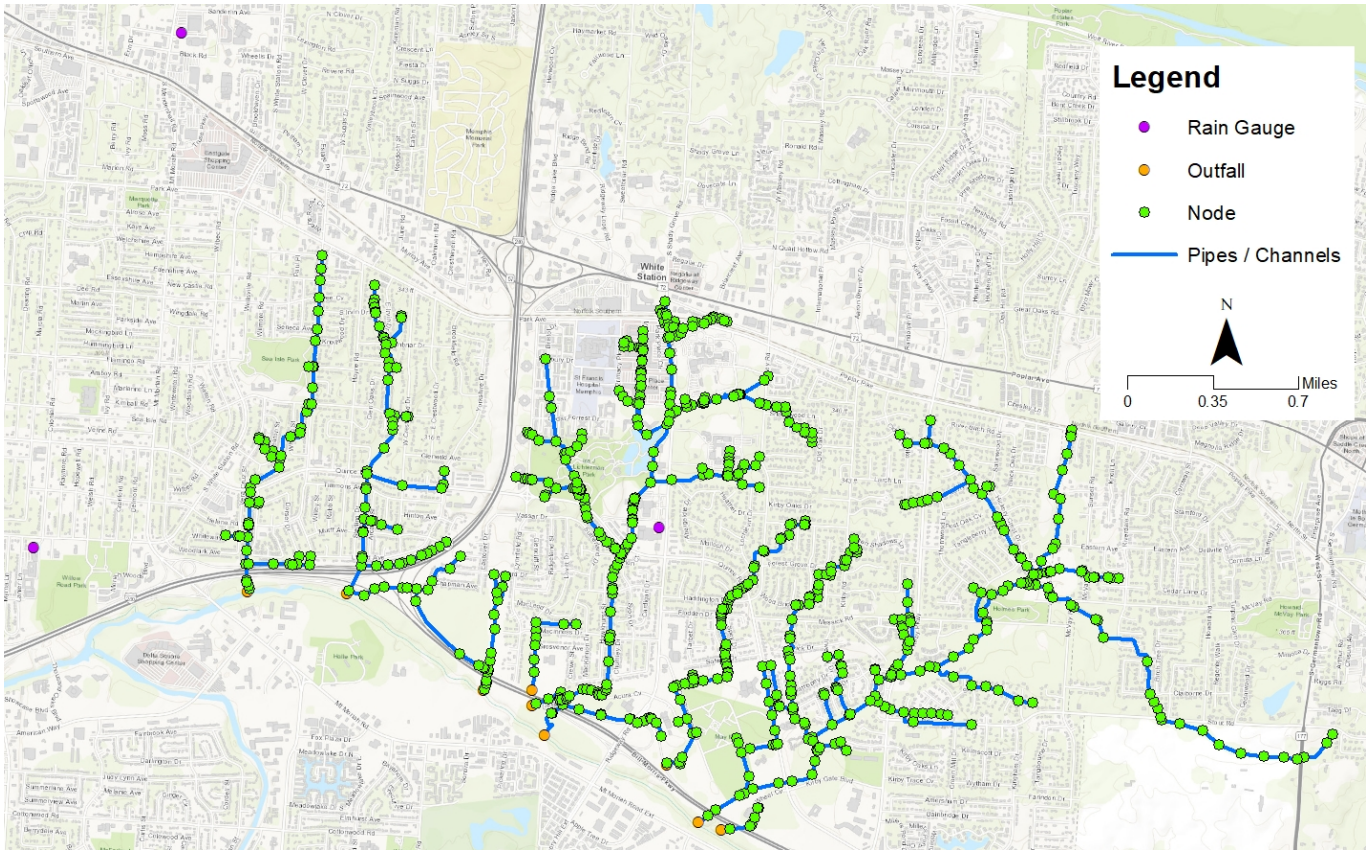


Figure 6. Modeled Network

Model Nodes

As noted above, model nodes represent points of connection or transition in the channel and pipe network. Generally, there are three types of nodes represented in the model – connection nodes, storage nodes, and outfall nodes.

Connection Nodes

The connection nodes are the most basic node feature in the model. The term "connection" is well earned since these nodes connect dissimilar or multiple links. Table A-2 in Appendix A shows a listing of modeled connection nodes and their associated parameters for the existing network. Nodes are defined by an invert elevation and a ground elevation. Connection nodes are points in the system where flow can enter or leave the network. Storm runoff from the subcatchments is introduced to the drainage network at these locations. Connection nodes receiving flow are noted in Table A-2 (Receiving Node ID).

Any system flooding resulting from the analysis is reported at connection node locations. To account for flooding at any location the model was set up to track flooding rates and volume at each node. This was done by assigning a Ponded Area for each node where flooding was anticipated. In the model this Ponded Area represents the area occupied by ponded water atop a node and is represented by a cylinder with a defined cross-sectional area. By using this parameter, the model can track flood volume and depth. Water ponded at a node can re-enter the system when capacity becomes available. For the Ridgeway Basin drainage area, a Ponded Area ranging from 0.003 to 153.98 acres was assigned to nodes where flooding was possible. This area provided enough volume to track flooded locations without over estimating depth.

Storage Nodes

There are no storage nodes used for the Ridgeway Model.

Outfall Node

Nine outfall nodes are used in the model and represent the discharge point of Ridgeway into Nonconnah Creek. The 2013 FEMA FIS for Shelby County indicates that backwater effects from Nonconnah Creek are infrequent occurrences. Thus, no backwater effects at the point of discharge were assumed. For the purposes of this analysis the discharge boundary condition at the outfall was set to "Normal" meaning the outfall stage is based on the normal flow depth in the pipe at the discharge location.

Modeled Conduits

All conduits are defined by cross-section geometry, length, and roughness coefficient Manning's n. Drainage channels in the model are represented by circular pipes and rectangular box culverts, as well as open channel sections. Some open channel sections are modeled as trapezoidal sections or triangular-rectangle (rectangular section with a triangular shaped trough at the bottom) sections. The natural channels are modeled using irregular channels sections whose cross sections are defined by station-elevation curves. An example cross section is shown in Figure 7. There are roughly 300 separate irregular channel cross sections used in the model. Several details for these are included in Appendix A, Figure A-2 through Figure A-8.

Manning's n for each conduit segment was estimated based on material. Generally, for all concrete lined channels or pipes a Manning's n of 0.013 was used. This value was used as a conservative estimate to account for channel/pipe deterioration, sediment deposition or other minor losses in the system. For natural channels, a Manning's n value of 0.040 was used.

A local entry loss of 0.5 and exit loss of 1.0 were assigned to each conduit segment. In addition, local losses were assigned to each conduit to account for bends and transitions in each individual segment. Losses were applied as entrance or exit losses – to account for energy losses expected at the entrance or exit of a conduit section – or as average losses along the length of the conduit. An average loss coefficient of 1.5 was used and represented energy losses due to excessive debris and/or bends in the alignment.

Table A-3 in Appendix A shows a listing of the conduits included in the model and their associated parameters for the existing system.

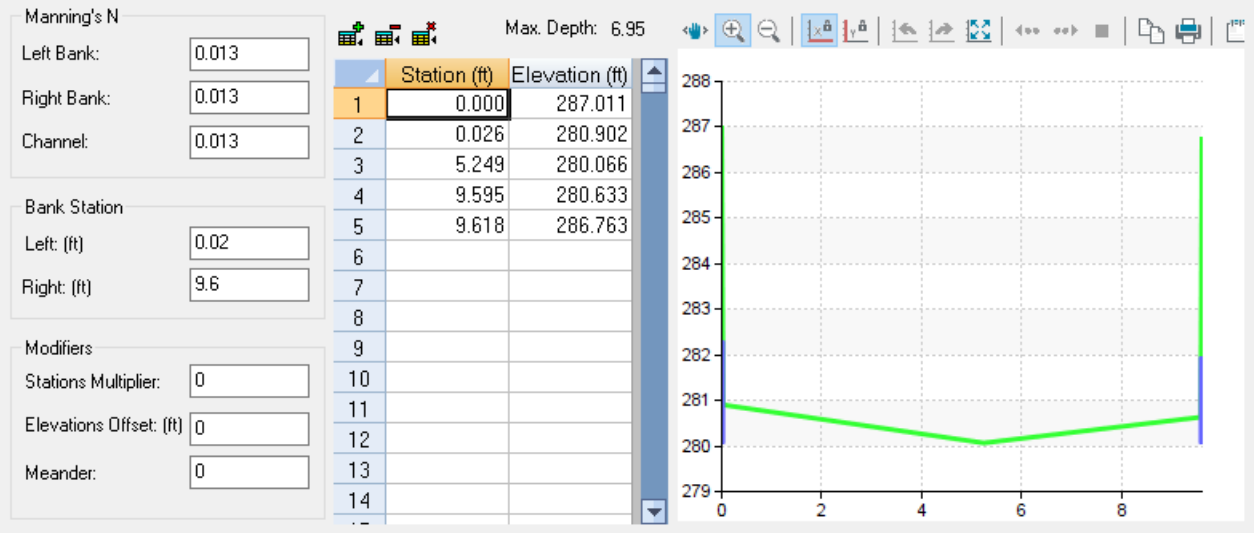


Figure 7: Irregular Channel Definition

Figure 8 shows an overall view of the modeled conduit network highlighting the different channel types.

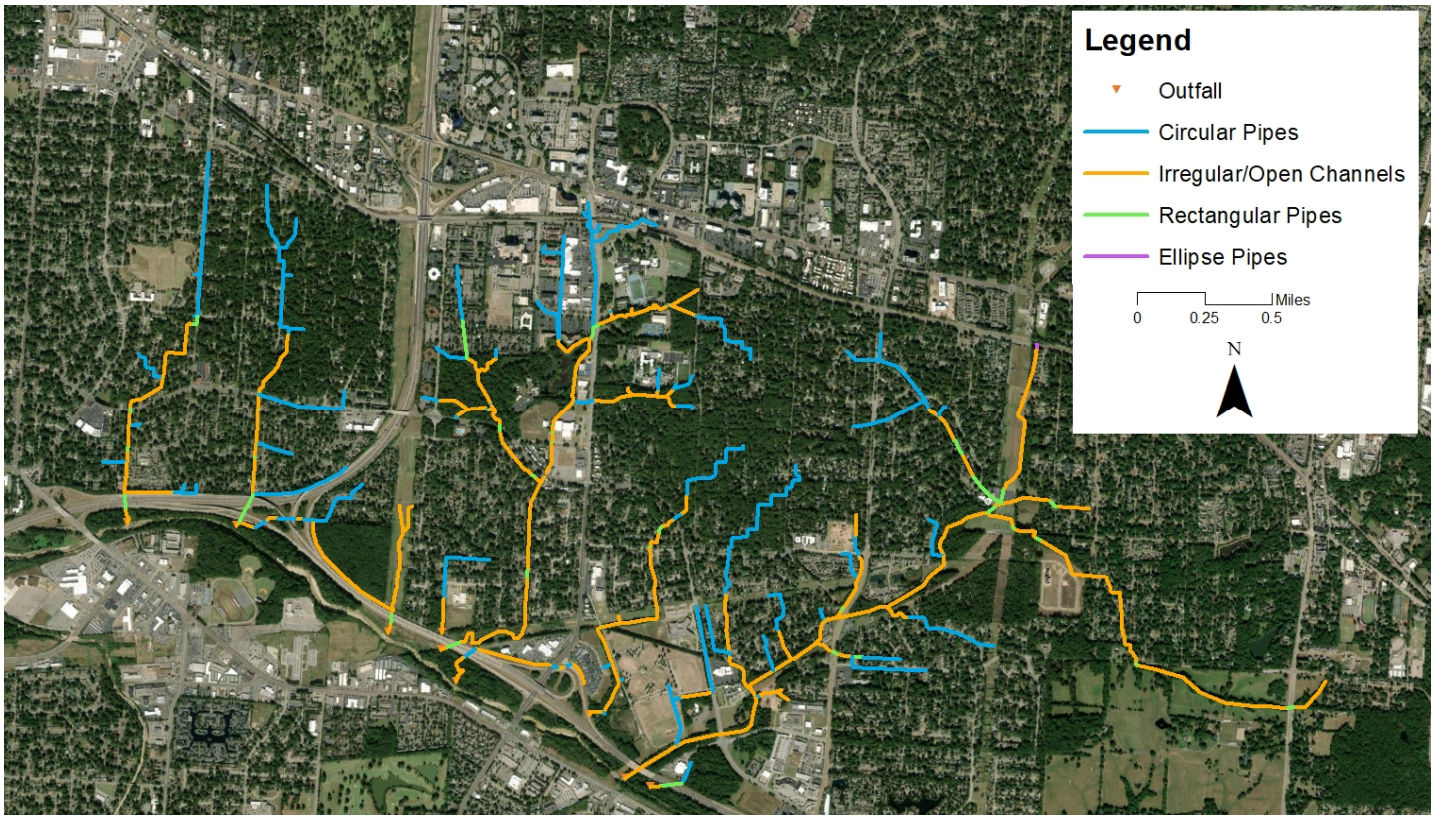


Figure 8: Modeled Network by Channel Type

1.3 Model Calibration

Models are simplified, theoretical representations of complex, real world systems. Model calibration strives to have the model to represent the actual system performance so the model can be used as a reliable predictor of future system performance. Calibration was performed by comparing modeled results against observed data for actual rain events.

The Cooperhill Drive gauge was in the main South Germantown channel just downstream (southwest) of Kirby Road. This location was just downstream of a road crossing and is located in a concrete channel. The channel upstream and downstream of Kirby Road was approximately 70-feet wide and 10-feet deep. Figure 9 shows the gauge location.

The Hawkhurst St gauge was in a Ridgeway channel just downstream (south) of Macinness Drive. This location was just downstream of a box culvert (road crossing) and a transition from concrete channel to concrete box to concrete channel. The channel upstream and downstream of the box was approximately 40-feet wide and 10-feet deep. Figure 10 shows the gauge location.

For the most part, both locations of the stream gauges had reliable depth readings throughout the monitoring period. The primary issue during the monitoring period occurred during the winter months when freezing temperatures were experienced. Temperature in degrees Celsius was recorded at each gage which enabled only gage data for temperatures above 0 degrees to be used for calibration.

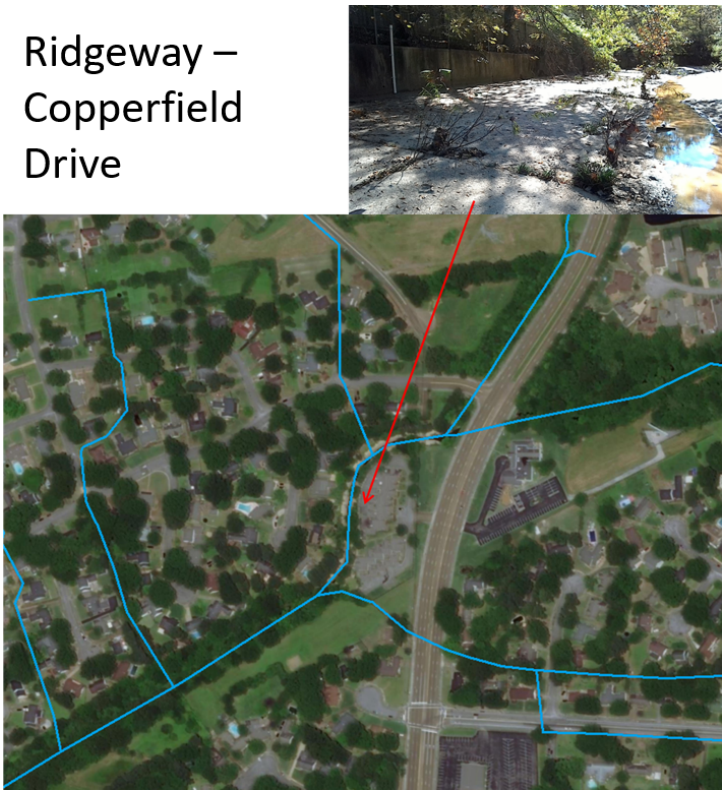


Figure 9: Copperfield Drive Stream Gauge Location

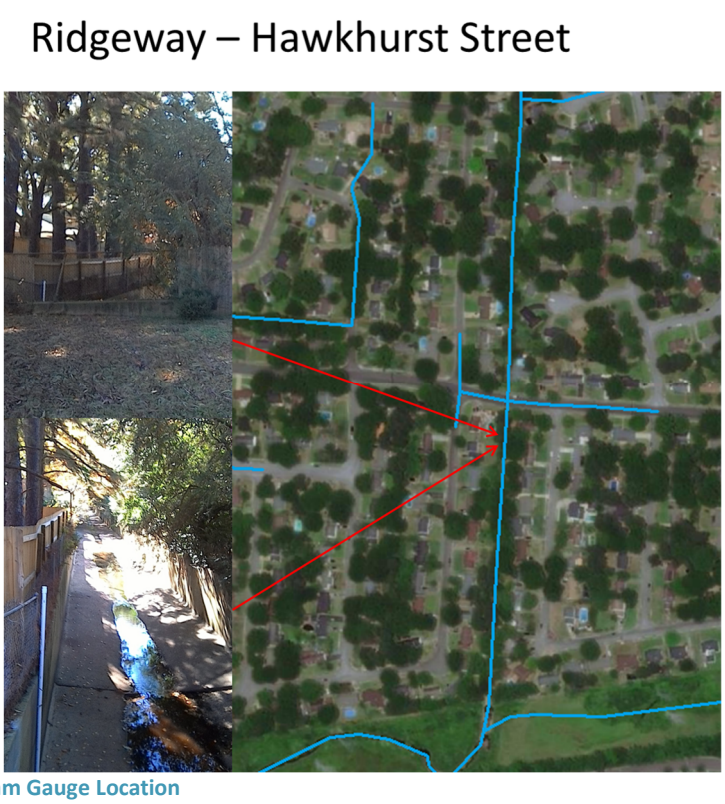


Figure 10: Hawkhurst Street Stream Gauge Location

Three storm events were selected from the monitoring period for use in the calibration and validation process. These are shown in Table 4.

Table 4: Calibration Storms

Calibration Storm	Start Date	Duration (hr)	Volume (in)	Approximate Recurrence Interval*
1	12/22/2017	27	4.0	~ 2 year
2**	2/27/2018	37	5.1	< 2 year
3	3/28/2018	19	2.1	< 2 year

**Note: Estimated from Memphis and Shelby County Storm Water Management Manual, Volume 2, Figure 2-2.*
***Note: This storm was used as a validation storm.*

Parameters adjusted during the calibration process include subcatchment depression storage, runoff routing destination, impervious area and Green-Ampt parameter values. Table A-1 in Appendix A shows the final calibrated values for each parameter.

Calibration comparison charts for each storm and each location are shown in Figure 11 through Figure 16. Overall, the calibration effort resulted in the model producing results that reasonably matched measured values for peak values and hydrograph shape. In addition, the model showed flooding for areas with known flooding issues based on field observations and anecdotal evidence.

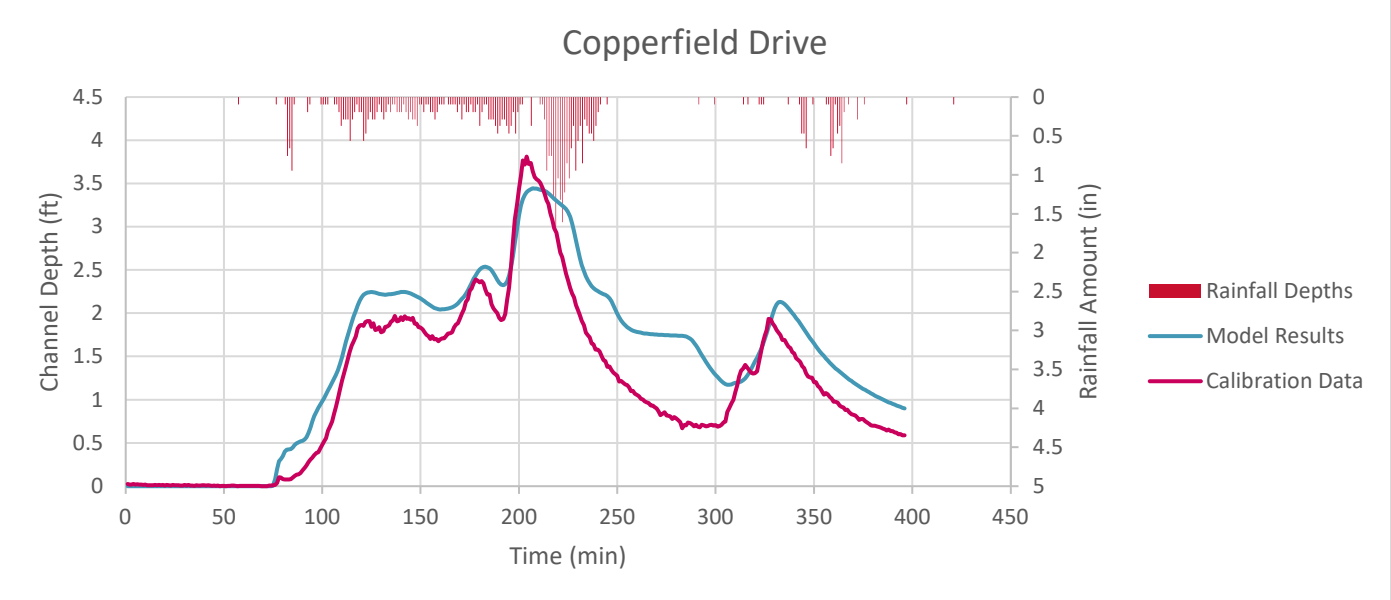


Figure 11: Calibration Comparison Copperfield Drive - Storm #1



Figure 12: Calibration Comparison Hawkhurst Street- Storm #1

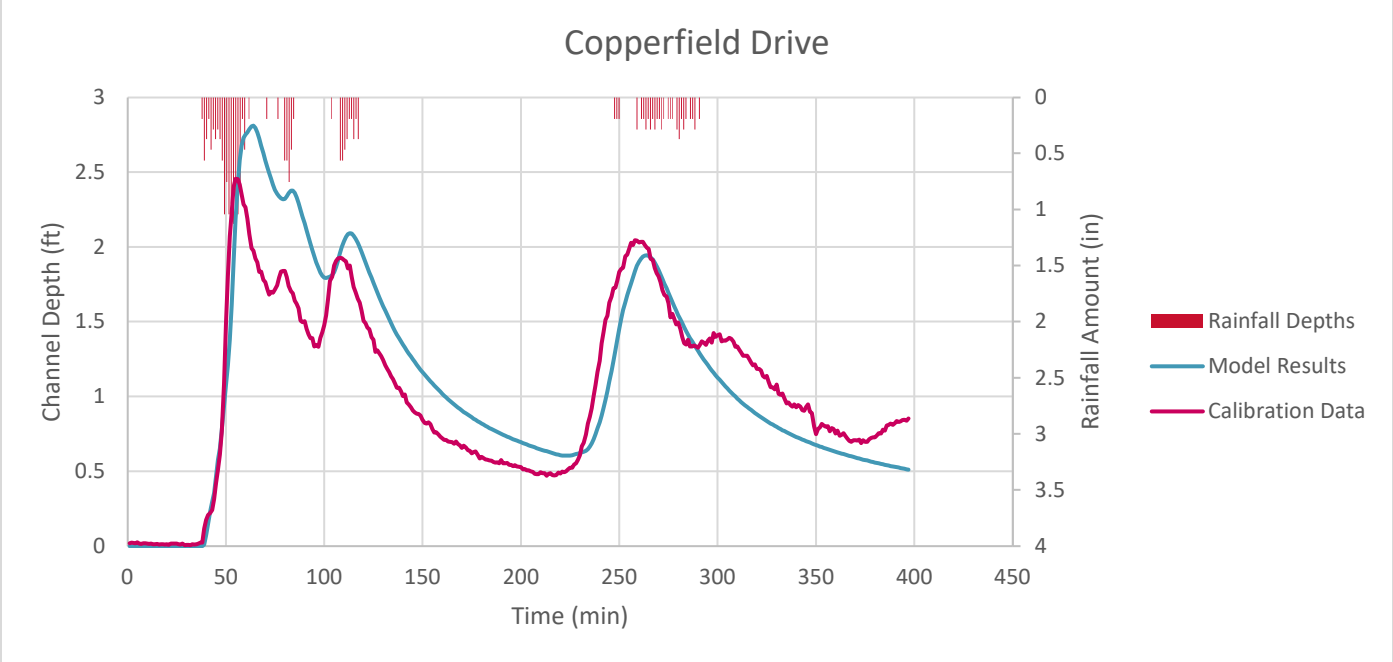


Figure 13: Validation Comparison Copperfield Drive - Storm #2

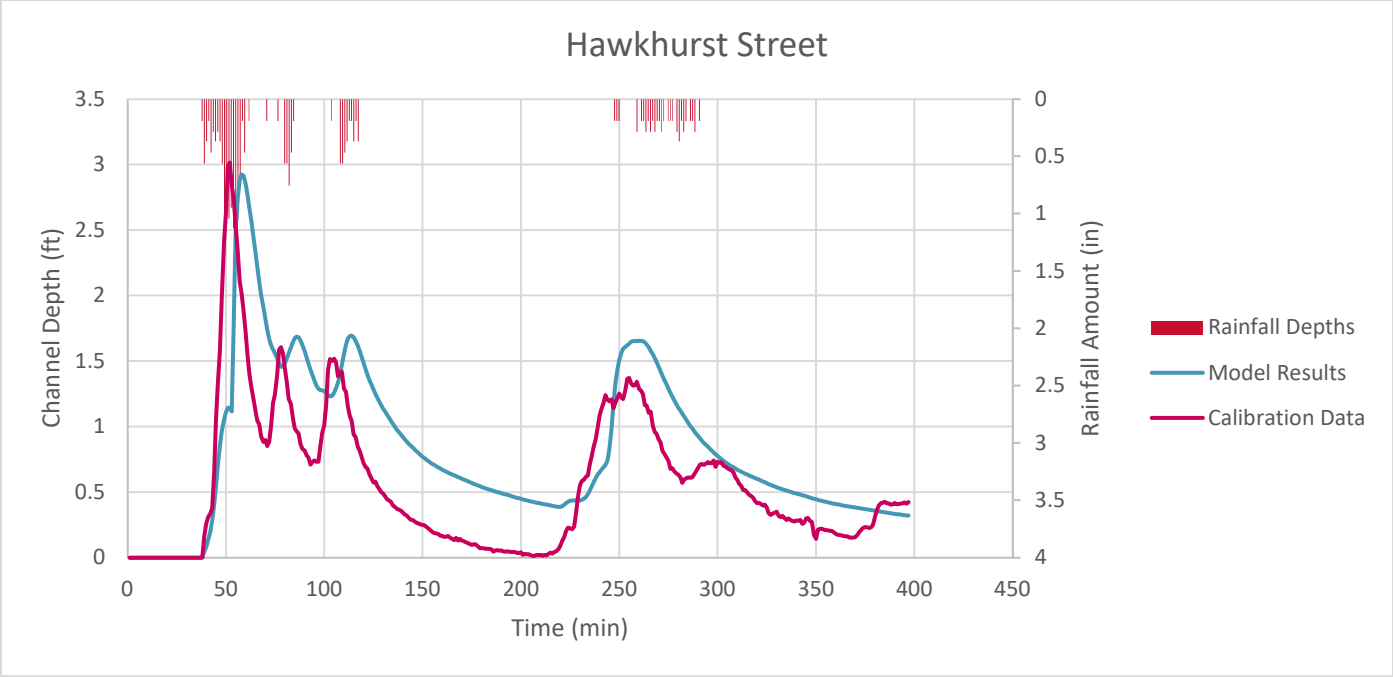


Figure 14: Validation Comparison Hawkhurst Street – Storm #2

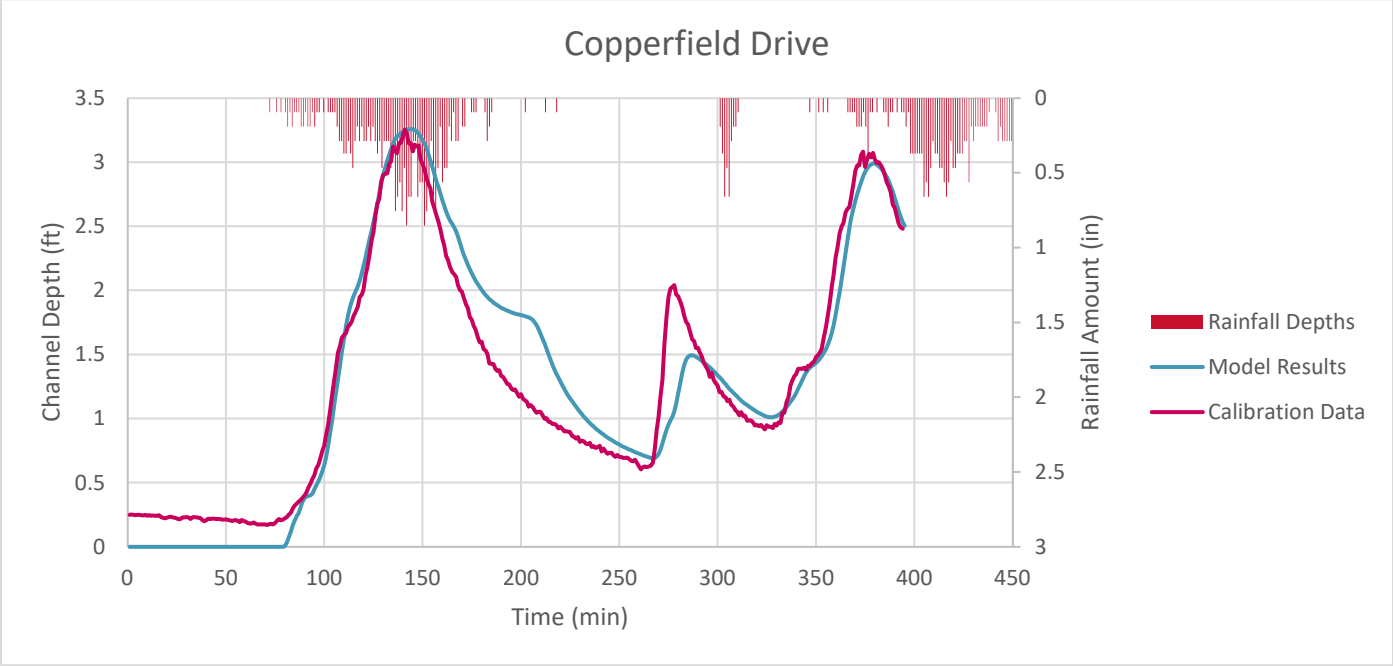


Figure 15: Calibration Comparison Copperfield Drive – Storm #3



Figure 16: Calibration Comparison Hawkhurst Street – Storm #3

Section 2 – Existing Conditions Results

This section describes the results of the hydraulic analysis performed to characterize the current performance of the Ridgeway drainage network and identify suggested improvements that may be needed.

2.1 Precipitation

Multiple design rain events were used to evaluate the performance of the stormwater system. Table 5 lists rain totals for each storm used in the evaluation.

Table 5: Rainfall Depths

Return Period	Total Depth (in)	Maximum 15-min Intensity (in/hr)
2-year, 24-hour	4.01	4.43
5-year, 24-hour	4.89	5.40
10-year, 24-hour	5.58	6.16
25-year, 24-hour	6.52	7.20
50-year, 24-hour	7.27	8.03
100-year, 24-hour	8.02	8.85

Source: Memphis and Shelby County Storm Water Management Manual, Volume 2, Figure 2-2.

The design storm rain was distributed using a NRCS Type II distribution with a 15-minute timestep. This distribution is shown in Figure 17.

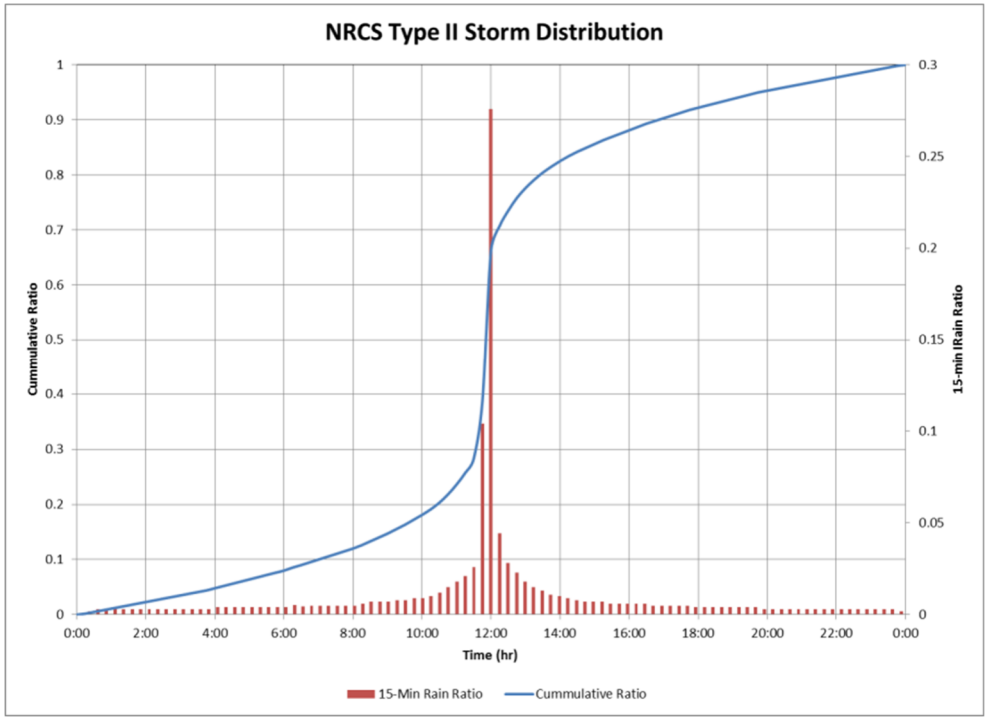


Figure 17: NRCS Type II Storm Distribution

2.2 Existing System Analysis

Using the hydraulic model system, performance was evaluated for each of the six design rain events. Tabular results for each of these design storms are included in Appendix B (Table B-1 through Table B-6), and inundation figures are included in Appendix C, Figure C-1. The inundation figures were generated using InfoSWMM's Risk Assessment Manager tool and display estimated flood extents based on the calculated hydraulic grade line (HGL) at model nodes for the time of maximum flood relative to topographic information (LiDAR elevation raster). The Risk Assessment Manager estimates the flood extent by interpolating the hydraulic grade line between flooded model nodes according to an inverse distance weighting scheme. The result of this interpolation is a flood elevation which may or may not rise above the ground surface as defined by the elevation raster layer. Any parts of the flood elevation above the surface elevation are designated flooded, and any below are dry.

Public outreach was conducted through public meetings and online surveys in the spring and early summer of 2018 to collect information on areas of significant flooding. In addition, during the collection of survey data, field observations were made regarding high water marks and maintenance issues.

Once the flood extents were mapped, each area was analyzed to identify any flooded areas. These flooded areas identified by the model (Figure 18) include:

1. Area between Quince Road to Sea Isle Road
    - The 100-year flood nearly reaches nearby houses
    - No flooding recorded in these nearby houses
    - No street flooding at these areas
2. Around Ridgeway Middle School along Quince Road
    - Model did not include the drainage system around the school
    - No observed flooding at the school building.
    - Flooding primarily in parking lot or grass in May Park
3. Open channel along Kirby Parkway between Sulgrave Drive and Messick Road
    - The 100-year flood nearly reaches nearby houses
    - Minor flooding occurs on Kirby Parkway at a low spot
    - Flooding occurs in nearby field

The areas detailed above are shown in Figure 19 through Figure 21.

For each of these areas, the model indicated that flooding resulted from limited capacity in the downstream channels and pipes. These facilities quickly become overwhelmed during the peak of the rain event, especially for the larger design storms.

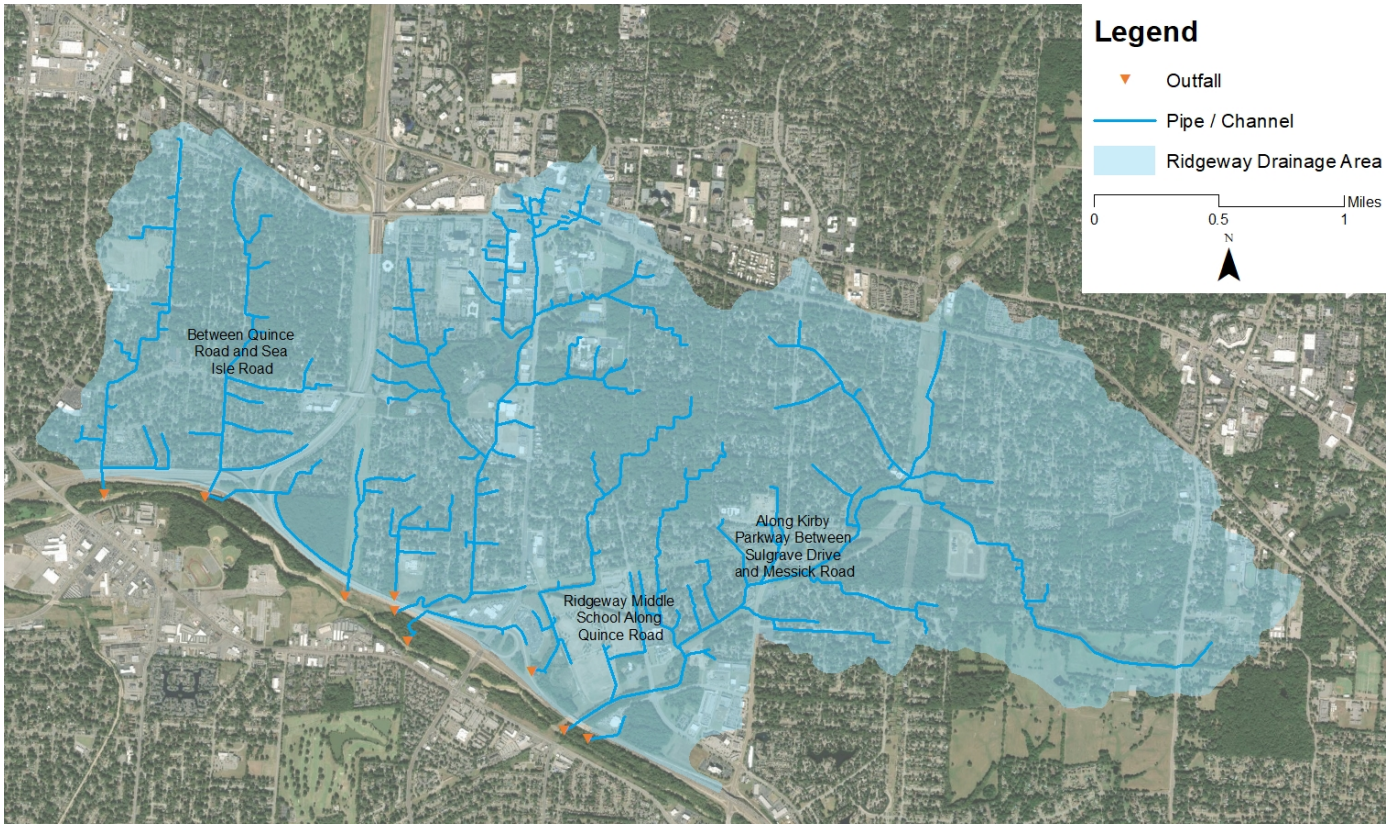


Figure 18: Areas of Flooding Concern

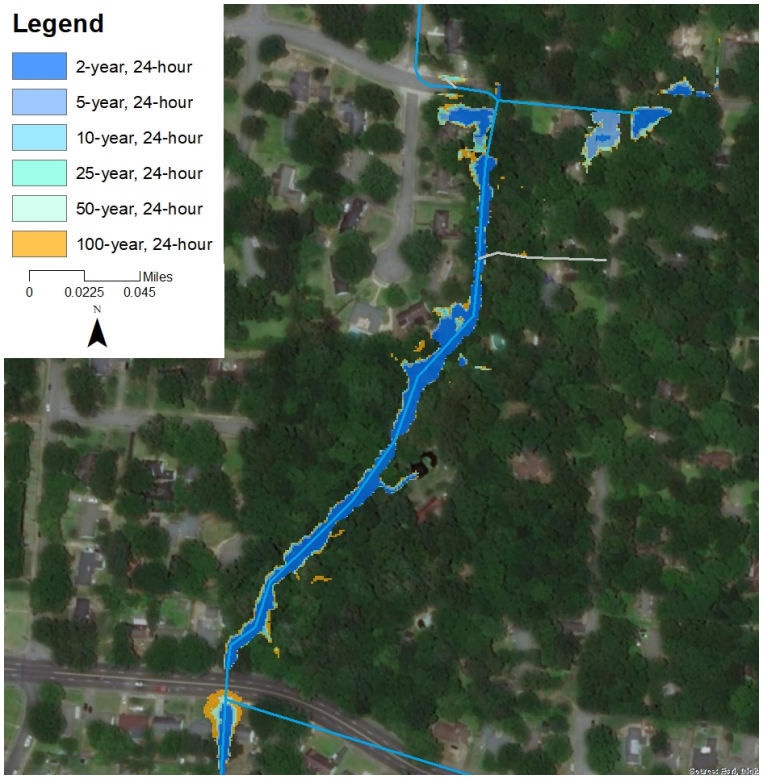


Figure 19: Between Quince Road and Sea Isle Road

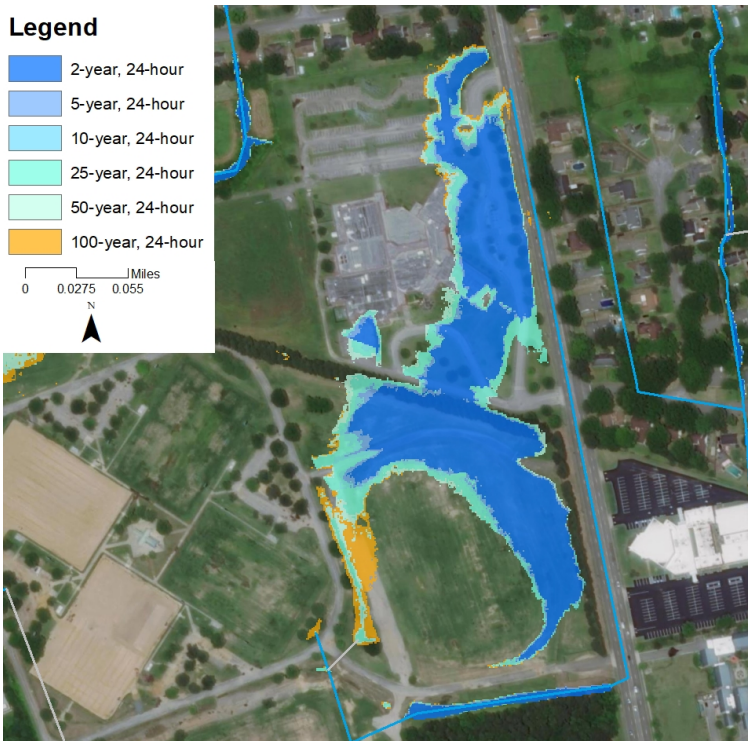


Figure 20: Ridgeway Middle School Along Quince Road

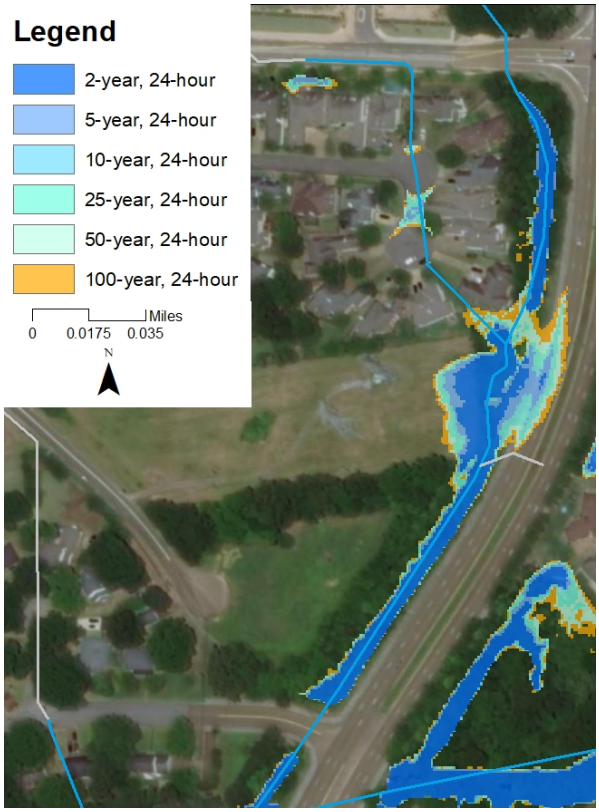


Figure 21: Along Kirby Parkway Between Sulgrave Drive and Messick Road

Section 3 – Proposed Scenario Results

After meeting met with the City of Memphis on 1/7/2021, each of the flooded areas were determined to be a lower priority and none of the areas discussed were modeled for a proposed improvement scenario. After completion of this project, should any area in the Ridgeway basin become an issue due to flooding, the following actions to reduce flooding in these areas include:

- Increase channel areas or box culverts as necessary
- Addition of underground storage/detention area
- Clean channels or create new ones as necessary
- Add inlets to the existing stormwater collection system

It should be noted that should other areas become an issue concerning flooding areas, additional modeling may be required. The current model has been developed to evaluate system performance at a basin level. If flooding occurs in neighborhoods, it is recommended that additional modeling be performed on a local level. Modeling done on a local level could help identify issues resulting in localized flooding at houses opposed to basin flooding identified by the current model.

Summary

Hydraulic modeling analysis of the Ridgeway drainage basin showed several capacity constraints in the system. However, none of the areas have been identified as a high priority or likely to cause significant damage to property. Should these areas need to be addressed in the future, potential solutions could include:

- Increase channel areas or box culverts as necessary
- Addition of underground storage/detention area
- Clean channels or create new ones as necessary
- Add inlets to the existing stormwater collection system

After discussing these recommendations with the city, it was decided not to model the proposed conditions.

References

Buchart Horn/HDR. (2016). *Hydraulics & Hydrology Modeling Protocols DRAFT.*

EnSafe Inc. (2006). *City of Memphis/Shelby County Storm Water Management Manual, Volume 2: Drainage Manual.* City of Memphis Devision of Public Works and Division of Engineering, Shelby County Public Works Department, Memphis, TN.

Federal Emergency Management Agency. (2013). *Flood Insurance Study: Shelby County, Tennessee, and Incorporated Areas Volume 1 of 3.* U.S. Department of Homeland Security.

United States Geological Survey (USGS) National Land Cover Dataset (NLCD) 2016, < https://www.mrlc.gov/data/nlcd-2016-land-cover-conus>

APPENDIX A: Model Parameters

Table A-1. Initial Subcatchment Parameters

Table A-2. Final Subcatchment Parameters

Table A-3. Existing System Junctions

Table A-4. Existing System Pipes/Channels

Figure A-1. Irregular cross-section Transect-25

Figure A-2. Irregular cross-section Transect-113

Figure A-3. Irregular cross-section Transect-143

Figure A-4. Irregular cross-section Transect-147

Figure A-5. Irregular cross-section Transect-151

Figure A-6. Irregular cross-section Transect-263

Figure A-7. Irregular cross-section Transect-303

Figure A-8. Irregular cross-section Transect-359

Figure A-9. Irregular cross-section Transect-417

Figure A-10. Irregular cross-section Transect-437

Figure A-11. Irregular cross-section Transect-515

Figure A-12. Irregular cross-section Transect-557

Figure A-13. Irregular cross-section Transect-619

Figure A-14. Irregular cross-section Transect-627

Table A-1. Initial Subcatchment Parameters

Subcatchment ID (Char)	Raingage ID (Char)	Receiving Node ID (Char)	Subcatchment Area (ac)	Subcatch. Imperviousness(%) (Double)	Subcatchment Width (ft)	Subcatchment Slope (Double)	Subcatchment Curb Length (Double)	Manning's N for Imperv. Portion (Double)	Manning's N for Pervious Portion (Double)	Depression Stor. for Imp. Portion (in)	Depression Stor. for Perv. Portion (in)	Runoff Routing Destination (Int)
0203_SB001	RAINGAGE-7	0203-481	113.992	16.4	1,532.56	5.30	0.053	0.012	0.6	0.1	0.2	0: Outlet
0203_SB002	RAINGAGE-9	0203-378	45.844	23.383	577.736	0.60	0.006	0.012	0.6	0.1	0.2	0: Outlet
0203_SB003	RAINGAGE-5	0203-510	75.881	23.916	534.219	0.50	0.005	0.012	0.6	0.1	0.2	0: Outlet
0203_SB004	RAINGAGE-5	0203-477	40.461	16.43	623.161	0.60	0.006	0.012	0.6	0.1	0.2	0: Outlet
0203_SB005	RAINGAGE-5	0203-494	54.403	16.815	585.666	0.40	0.004	0.012	0.6	0.1	0.2	0: Outlet
0203_SB006	RAINGAGE-5	0203-507	68.135	17.31	768.754	0.80	0.008	0.012	0.6	0.1	0.2	0: Outlet
0203_SB007	RAINGAGE-5	0203-195	138.442	21.415	1,261.58	0.40	0.004	0.012	0.6	0.1	0.2	0: Outlet
0203_SB008	RAINGAGE-5	0203-518	38.517	20.919	832.921	1.50	0.015	0.012	0.6	0.1	0.2	0: Outlet
0203_SB009	RAINGAGE-5	0203-431	49.206	12.43	690.394	0.50	0.005	0.012	0.6	0.1	0.2	0: Outlet
0203_SB010	RAINGAGE-5	0203-204	54.286	15.08	797.385	1.30	0.013	0.012	0.6	0.1	0.2	0: Outlet
0203_SB011	RAINGAGE-5	0203-502	61.462	11.532	792.472	0.40	0.004	0.012	0.6	0.1	0.2	0: Outlet
0203_SB012	RAINGAGE-5	0203-399	23.396	10.498	509.833	0.80	0.008	0.012	0.6	0.1	0.2	0: Outlet
0203_SB013	RAINGAGE-5	0203-339	68.71	13.51	730.879	0.30	0.003	0.012	0.6	0.1	0.2	0: Outlet
0203_SB014	RAINGAGE-5	0203-225	12.356	10.851	294.291	1.00	0.01	0.012	0.6	0.1	0.2	0: Outlet
0203_SB015	RAINGAGE-5	0203-415	19.327	26.148	412.907	2.60	0.026	0.012	0.6	0.1	0.2	0: Outlet
0203_SB016	RAINGAGE-5	0203-464	106.206	14.389	801.793	0.60	0.006	0.012	0.6	0.1	0.2	0: Outlet
0203_SB017	RAINGAGE-5	0203-343	85.426	25	1,239.87	1.00	0.01	0.012	0.6	0.1	0.2	0: Outlet
0203_SB018	RAINGAGE-5	0203-459	38.994	8.075	798.86	0.80	0.008	0.012	0.6	0.1	0.2	0: Outlet
0203_SB019	RAINGAGE-9	0203-488	89.649	9.77	819.126	0.60	0.006	0.012	0.6	0.1	0.2	0: Outlet
0203_SB020	RAINGAGE-5	0203-457	65.373	8.85	938.089	0.60	0.006	0.012	0.6	0.1	0.2	0: Outlet
0203_SB021	RAINGAGE-7	0203-439	61.464	15.119	619.714	1.00	0.01	0.012	0.6	0.1	0.2	0: Outlet
0203_SB022	RAINGAGE-5	0203-456	16.365	9.011	388.533	3.10	0.031	0.012	0.6	0.1	0.2	0: Outlet
0203_SB023	RAINGAGE-5	0203-449	38.29	20.106	647.554	1.10	0.011	0.012	0.6	0.1	0.2	0: Outlet
0203_SB024	RAINGAGE-9	0203-474	24.319	16.331	490.697	1.00	0.01	0.012	0.6	0.1	0.2	0: Outlet
0203_SB025	RAINGAGE-9	0203-356	29.14	16.454	432.05	0.90	0.009	0.012	0.6	0.1	0.2	0: Outlet
0203_SB026	RAINGAGE-9	0203-224	24.439	17.788	700.287	0.40	0.004	0.012	0.6	0.1	0.2	0: Outlet
0203_SB027	RAINGAGE-9	0203-492	13.658	19.97	349.522	0.50	0.005	0.012	0.6	0.1	0.2	0: Outlet
0203_SB028	RAINGAGE-9	0203-105	16.557	16.34	446.074	1.50	0.015	0.012	0.6	0.1	0.2	0: Outlet
0203_SB029	RAINGAGE-9	0203-490	4.187	8.9	294.172	1.40	0.014	0.012	0.6	0.1	0.2	0: Outlet
0203_SB030	RAINGAGE-5	0203-367	96.546	17.109	1,291.66	1.00	0.01	0.012	0.6	0.1	0.2	0: Outlet
0203_SB031	RAINGAGE-5	0203-468	24.207	20.5	362.412	0.50	0.005	0.012	0.6	0.1	0.2	0: Outlet
0203_SB032	RAINGAGE-5	0203-381	57.523	13.542	611.763	0.50	0.005	0.012	0.6	0.1	0.2	0: Outlet
0203_SB033	RAINGAGE-5	0203-128	40.412	7.846	721.141	0.40	0.004	0.012	0.6	0.1	0.2	0: Outlet
0203_SB034	RAINGAGE-5	0203-493	8.389	0.2	300.635	2.90	0.029	0.012	0.6	0.1	0.2	0: Outlet
0203_SB035	RAINGAGE-5	0203-506	30.276	16.861	439.689	0.40	0.004	0.012	0.6	0.1	0.2	0: Outlet
0203_SB036	RAINGAGE-5	0203-142	5.725	16.493	259.856	0.30	0.003	0.012	0.6	0.1	0.2	0: Outlet
0203_SB037	RAINGAGE-5	0203-253	6.329	21.217	455.663	0.10	0.001	0.012	0.6	0.1	0.2	0: Outlet
0203_SB038	RAINGAGE-5	0203-434	22.839	14.224	360.877	0.10	0.001	0.012	0.6	0.1	0.2	0: Outlet
0203_SB039	RAINGAGE-5	0203-505	2.651	31.742	125.183	0.10	0.001	0.012	0.6	0.1	0.2	0: Outlet
0203_SB040	RAINGAGE-5	0203-216	7.614	19.236	273.139	4.40	0.044	0.012	0.6	0.1	0.2	0: Outlet
0203_SB041	RAINGAGE-5	0203-396	7.067	22.653	247.233	7.50	0.075	0.012	0.6	0.1	0.2	0: Outlet
0203_SB042	RAINGAGE-5	0203-226	98.301	13.86	879.072	0.80	0.008	0.012	0.6	0.1	0.2	0: Outlet
0203_SB043	RAINGAGE-5	0203-088	18.701	21.323	410.575	1.00	0.01	0.012	0.6	0.1	0.2	0: Outlet
0203_SB044	RAINGAGE-5	0203-072	7.775	20.958	247.392	0.10	0.001	0.012	0.6	0.1	0.2	0: Outlet
0203_SB045	RAINGAGE-5	0203-052	8.635	33.157	363.061	0.90	0.009	0.012	0.6	0.1	0.2	0: Outlet
0203_SB046	RAINGAGE-5	0203-238	16.879	26.269	284.077	0.40	0.004	0.012	0.6	0.1	0.2	0: Outlet
0203_SB047	RAINGAGE-5	0203-523	51.055	29.142	843.545	1.30	0.013	0.012	0.6	0.1	0.2	0: Outlet
0203_SB048	RAINGAGE-5	0203-531	24.351	30.884	462.183	1.90	0.019	0.012	0.6	0.1	0.2	0: Outlet
0203_SB049	RAINGAGE-5	0203-388	2.666	26.816	184.283	0.70	0.007	0.012	0.6	0.1	0.2	0: Outlet
0203_SB050	RAINGAGE-5	0203-496	6.087	31.182	200.368	0.60	0.006	0.012	0.6	0.1	0.2	0: Outlet
0203_SB051	RAINGAGE-5	0203-249	14.171	27.549	374.506	3.80	0.038	0.012	0.6	0.1	0.2	0: Outlet
0203_SB052	RAINGAGE-5	0203-326	28.39	33.894	301.935	2.50	0.025	0.012	0.6	0.1	0.2	0: Outlet
0203_SB053	RAINGAGE-5	0203-263	39.529	16.114	398.027	0.10	0.001	0.012	0.6	0.1	0.2	0: Outlet
0203_SB054	RAINGAGE-5	0203-660	43.682	14.43	687.49	0.90	0.009	0.012	0.6	0.1	0.2	0: Outlet
0203_SB055	RAINGAGE-5	0203-642	12.563	16.791	626.185	0.40	0.004	0.012	0.6	0.1	0.2	0: Outlet
0203_SB056	RAINGAGE-5	0203-639	69.633	22.858	1,354.66	0.50	0.005	0.012	0.6	0.1	0.2	0: Outlet
0203_SB057	RAINGAGE-5	0203-648	11.164	16.213	325.138	0.40	0.004	0.012	0.6	0.1	0.2	0: Outlet
0203_SB058	RAINGAGE-5	0203-678	57.718	16.906	588.209	0.50	0.005	0.012	0.6	0.1	0.2	0: Outlet
0203_SB059	RAINGAGE-5	0203-573	429.269	14.961	2,519.72	0.10	0.001	0.012	0.6	0.1	0.2	0: Outlet
0203_SB060	RAINGAGE-5	0203-600	141.507	11.114	1,059.96	1.70	0.017	0.012	0.6	0.1	0.2	0: Outlet
0203_SB061	RAINGAGE-5	0203-536	50.326	17.569	718.321	0.50	0.005	0.012	0.6	0.1	0.2	0: Outlet
0203_SB062	RAINGAGE-5	0203-284	56.765	10.147	865.837	0.10	0.001	0.012	0.6	0.1	0.2	0: Outlet
0203_SB063	RAINGAGE-5	0203-612	84.893	12.555	897.16	0.10	0.001	0.012	0.6	0.1	0.2	0: Outlet
0203_SB064	RAINGAGE-5	0203-622	21.878	19.87	440.381	0.10	0.001	0.012	0.6	0.1	0.2	0: Outlet
0203_SB065	RAINGAGE-5	0203-626	23.717	21.217	525.56	0.50	0.005	0.012	0.6	0.1	0.2	0: Outlet
0203_SB066	RAINGAGE-5	0203-666	24.803	17.439	446.51	0.10	0.001	0.012	0.6	0.1	0.2	0: Outlet
0203_SB067	RAINGAGE-5	0203-300	73.384	13.088	1,062.20	1.00	0.01	0.012	0.6	0.1	0.2	0: Outlet
0203_SB068	RAINGAGE-5	0203-271	40.782	17.251	669.071	0.20	0.002	0.012	0.6	0.1	0.2	0: Outlet
0203_SB069	RAINGAGE-5	0203-581	24.006	15.5	559.408	1.20	0.012	0.012	0.6	0.1	0.2	0: Outlet
0203_SB070	RAINGAGE-5	0203-302	67.029	14.209	955.703	1.00	0.01	0.012	0.6	0.1	0.2	0: Outlet
0203_SB071	RAINGAGE-5	0203-316	96.936	14.802	1,120.08	1.00	0.01	0.012	0.6	0.1	0.2	0: Outlet
0203_SB072	RAINGAGE-5	0203-299	34.544	25.241	847.592	1.00	0.01	0.012	0.6	0.1	0.2	0: Outlet
0203_SB073	RAINGAGE-5	0203-560	214.418	10.459	1,442.47	1.00	0.01	0.012	0.6	0.1	0.2	0: Outlet
0203_SB074	RAINGAGE-5	0203-264	6.514	19.2	144.29	1.10	0.011	0.012	0.6	0.1	0.2	0: Outlet
0203_SB075	RAINGAGE-5	0203-652	74.994	14.135	708.525	0.80	0.008	0.012	0.6	0.1	0.2	0: Outlet
0203_SB076	RAINGAGE-5	0203-282	16.4	15.65	286.8	0.80	0.008	0.012	0.6	0.1	0.2	0: Outlet
0203_SB077	RAINGAGE-5	0203-674	21.804	19.258	381.092	0.30	0.003	0.012	0.6	0.1	0.2	0: Outlet
0203_SB078	RAINGAGE-5	0203-603	192.523	14.99	1,440.18	0.70	0.007	0.012	0.6	0.1	0.2	0: Outlet
0203_SB079	RAINGAGE-5	0203-563	108.982	16.267	1,457.40	1.30	0.013	0.012	0.6	0.1	0.2	0: Outlet
0203_SB080	RAINGAGE-5	0203-303	34.156	16.506	783.573	1.00	0.01	0.012	0.6	0.1	0.2	0: Outlet
0203_SB081	RAINGAGE-5	0203-554	8.542	16.114	337.475	0.20	0.002	0.012	0.6	0.1	0.2	0: Outlet

Table A-1. Initial Subcatchment Parameters

Subcatchment ID (Char)	Raingage ID (Char)	Receiving Node ID (Char)	Subcatchment Area (ac)	Subcatch. Imperviousness(%) (Double)	Subcatchment Width (ft)	Subcatchment Slope (Double)	Subcatchment Curb Length (Double)	Manning's N for Imperv. Portion (Double)	Manning's N for Pervious Portion (Double)	Depression Stor. for Imp. Portion (in)	Depression Stor. for Perv. Portion (in)	Runoff Routing Destination (Int)
0203_SB082	RAINGAGE-5	0203-649	6.358	16.213	257.555	0.40	0.004	0.012	0.6	0.1	0.2	0: Outlet
0203_SB083	RAINGAGE-5	0203-558	12.022	16.114	372.903	7.00	0.07	0.012	0.6	0.1	0.2	0: Outlet
0203_SB084	RAINGAGE-5	0203-688	12.187	16.132	348.566	0.20	0.002	0.012	0.6	0.1	0.2	0: Outlet
0203_SB085	RAINGAGE-5	0203-631	6.525	16.132	316.161	0.10	0.001	0.012	0.6	0.1	0.2	0: Outlet
0203_SB086	RAINGAGE-5	0203-629	17.092	14.708	949.652	0.80	0.008	0.012	0.6	0.1	0.2	0: Outlet
0203_SB087	RAINGAGE-5	0203-680	39.746	14.707	599.909	0.40	0.004	0.012	0.6	0.1	0.2	0: Outlet
0203_SB088	RAINGAGE-5	0203-004	45.94	15.519	913.116	0.20	0.002	0.012	0.6	0.1	0.2	0: Outlet
0203_SB089	RAINGAGE-5	0203-032	17.001	12.228	594.358	4.20	0.042	0.012	0.6	0.1	0.2	0: Outlet
0203_SB090	RAINGAGE-5	0203-005	24.432	20.325	726.438	0.30	0.003	0.012	0.6	0.1	0.2	0: Outlet
0203_SB091	RAINGAGE-5	0203-005	57.57	17.54	1,809.77	1.30	0.013	0.012	0.6	0.1	0.2	0: Outlet
0203_SB092	RAINGAGE-5	0203-037	51.392	12.601	2,187.30	1.10	0.011	0.012	0.6	0.1	0.2	0: Outlet
0203_SB093	RAINGAGE-5	0203-024	30.264	8.044	829.429	1.00	0.01	0.012	0.6	0.1	0.2	0: Outlet
0203_SB094	RAINGAGE-5	0203-019	25.102	7.975	562.578	0.70	0.007	0.012	0.6	0.1	0.2	0: Outlet
0203_SB095	RAINGAGE-5	0203-508	21.294	22.658	614.991	1.70	0.017	0.012	0.6	0.1	0.2	0: Outlet
0203_SB096	RAINGAGE-5	0203-002	7.113	20.997	736.805	1.20	0.012	0.012	0.6	0.1	0.2	0: Outlet
0203_SB097	RAINGAGE-5	0203-031	12.348	12.303	712.93	0.10	0.001	0.012	0.6	0.1	0.2	0: Outlet
0203_SB098	RAINGAGE-5	0203-495	9.87	16.861	271.82	0.10	0.001	0.012	0.6	0.1	0.2	0: Outlet
0203_SB099	RAINGAGE-5	0203-129	14.93	7.846	453.96	0.10	0.001	0.012	0.6	0.1	0.2	0: Outlet
0203_SB100	RAINGAGE-5	0203-411	12.022	25	551.745	1.00	0.01	0.012	0.6	0.1	0.2	0: Outlet

Table A-2. Final Subcatchment Parameters

Subcatchment ID (Char)	Raingage ID (Char)	Receiving Node ID (Char)	Subcatchment Area (ac)	Subcatch. Imperviousness(%) (Double)	Subcatchment Width (ft)	Subcatchment Slope (Double)	Subcatchment Curb Length (Double)	Manning's N for Imperv. Portion (Double)	Manning's N for Pervious Portion (Double)	Depression Stor. for Imp. Portion (in)	Depression Stor. for Perv. Portion (in)	Runoff Routing Destination (Int)
0203_SB001	RAINGAGE-7	0203-481	113.99	66.4	1,532.56	5.3	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB002	RAINGAGE-9	0203-378	45.844	73.383	577.736	0.6	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB003	RAINGAGE-5	0203-510	75.881	73.916	534.219	0.5	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB004	RAINGAGE-5	0203-477	40.461	66.43	623.161	0.6	0	0.013	0.3	0.1	0.2	0: Outlet
0203_SB005	RAINGAGE-5	0203-494	54.403	66.815	585.666	0.4	0	0.013	0.3	0.1	0.2	0: Outlet
0203_SB006	RAINGAGE-5	0203-507	68.135	17.3	768.754	0.8	0	0.013	0.3	0.1	0.2	0: Outlet
0203_SB007	RAINGAGE-5	0203-195	138.44	21.4	1,261.58	0.4	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB008	RAINGAGE-5	0203-518	38.517	20.919	832.921	1.5	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB009	RAINGAGE-5	0203-431	49.206	12.43	690.394	0.5	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB010	RAINGAGE-5	0203-204	54.286	15	797.385	1.3	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB011	RAINGAGE-5	0203-502	61.462	11.5	792.472	0.4	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB012	RAINGAGE-5	0203-399	23.396	10.5	509.833	0.8	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB013	RAINGAGE-5	0203-339	68.71	13.5	730.879	0.3	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB014	RAINGAGE-5	0203-225	12.356	10.8	294.291	1	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB015	RAINGAGE-5	0203-415	19.327	16.2	412.907	2.6	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB016	RAINGAGE-5	0203-464	106.206	64.389	801.793	0.6	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB017	RAINGAGE-5	0203-343	85.43	25	1,239.87	1	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB018	RAINGAGE-5	0203-459	38.994	58.075	798.86	0.8	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB019	RAINGAGE-9	0203-488	89.649	59.77	819.126	0.6	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB020	RAINGAGE-5	0203-457	65.373	58.85	938.089	0.6	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB021	RAINGAGE-7	0203-439	61.464	65.119	619.714	1	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB022	RAINGAGE-5	0203-456	16.365	59.011	388.533	3.1	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB023	RAINGAGE-5	0203-449	38.29	70.106	647.554	1.1	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB024	RAINGAGE-9	0203-474	22.08	66.331	490.697	1	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB025	RAINGAGE-9	0203-356	21.88	66.454	432.05	0.9	0	0.013	0.3	0.1	0.2	0: Outlet
0203_SB026	RAINGAGE-9	0203-224	24.439	67.788	700.287	0.4	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB027	RAINGAGE-9	0203-492	13.658	69.97	349.522	0.5	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB028	RAINGAGE-9	0203-105	16.557	66.34	446.074	1.5	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB029	RAINGAGE-9	0203-490	4.187	58.9	294.172	1.4	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB030	RAINGAGE-5	0203-367	96.55	67.109	1,291.66	1	0	0.013	0.3	0.1	0.2	0: Outlet
0203_SB031	RAINGAGE-5	0203-468	24.207	70.5	362.412	0.5	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB032	RAINGAGE-5	0203-381	57.523	63.542	611.763	0.5	0	0.013	0.3	0.1	0.2	0: Outlet
0203_SB033	RAINGAGE-5	0203-128	40.412	57.846	721.141	0.4	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB034	RAINGAGE-5	0203-493	8.389	10	300.635	2.9	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB035	RAINGAGE-5	0203-506	30.276	66.861	439.689	0.4	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB036	RAINGAGE-5	0203-142	5.725	66.493	259.856	0.3	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB037	RAINGAGE-5	0203-253	6.329	71.217	455.663	0.1	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB038	RAINGAGE-5	0203-434	22.839	64.224	360.877	0.1	0	0.013	0.63	0.1	0.2	0: Outlet
0203_SB039	RAINGAGE-5	0203-505	2.651	31	125.183	0.1	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB040	RAINGAGE-5	0203-216	7.614	19.2	273.139	4.4	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB041	RAINGAGE-5	0203-396	7.067	22.7	247.233	7.5	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB042	RAINGAGE-5	0203-226	98.301	13	879.072	0.8	0	0.013	0.3	0.1	0.15	1: Impervious
0203_SB043	RAINGAGE-5	0203-088	18.701	21	410.575	1	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB044	RAINGAGE-5	0203-072	7.775	20	247.392	0.1	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB045	RAINGAGE-5	0203-052	8.635	33	363.061	0.9	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB046	RAINGAGE-5	0203-238	16.879	26.3	284.077	0.4	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB047	RAINGAGE-5	0203-523	51.055	29	843.545	1.3	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB048	RAINGAGE-5	0203-531	22.66	30	462.183	1.9	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB049	RAINGAGE-5	0203-388	2.666	76.816	184.283	0.7	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB050	RAINGAGE-5	0203-496	6.087	31	200.368	0.6	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB051	RAINGAGE-5	0203-249	14.171	27	374.506	3.8	0	0.013	0.3	0.1	0.15	1: Impervious
0203_SB052	RAINGAGE-5	0203-326	28.39	83.894	301.935	2.5	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB053	RAINGAGE-5	0203-263	39.529	66.114	398.027	0.1	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB054	RAINGAGE-5	0203-660	43.682	64.43	687.49	0.9	0	0.013	0.63	0.1	0.2	0: Outlet
0203_SB055	RAINGAGE-5	0203-642	12.563	66.791	626.185	0.4	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB056	RAINGAGE-5	0203-639	69.63	72.858	1,354.66	0.5	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB057	RAINGAGE-5	0203-648	11.164	66.213	325.138	0.4	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB058	RAINGAGE-5	0203-678	57.718	66.906	588.209	0.5	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB059	RAINGAGE-5	0203-573	429.27	64.961	2,519.72	0.1	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB060	RAINGAGE-5	0203-600	141.51	61.114	1,059.96	1.7	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB061	RAINGAGE-5	0203-536	50.326	67.569	718.321	0.5	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB062	RAINGAGE-5	0203-284	56.765	60.147	865.837	0.1	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB063	RAINGAGE-5	0203-612	84.893	62.555	897.16	0.1	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB064	RAINGAGE-5	0203-622	21.878	69.87	440.381	0.1	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB065	RAINGAGE-5	0203-626	23.717	71.217	525.56	0.5	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB066	RAINGAGE-5	0203-666	24.803	67.439	446.51	0.1	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB067	RAINGAGE-5	0203-300	73.38	63.088	1,062.20	1	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB068	RAINGAGE-5	0203-271	40.782	67.251	669.071	0.2	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB069	RAINGAGE-5	0203-581	24.006	65.5	559.408	1.2	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB070	RAINGAGE-5	0203-302	67.029	64.209	955.703	1	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB071	RAINGAGE-5	0203-316	96.94	64.802	1,120.08	1	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB072	RAINGAGE-5	0203-299	34.544	75.241	847.592	1	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB073	RAINGAGE-5	0203-560	214.42	60.459	1,442.47	1	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB074	RAINGAGE-5	0203-264	6.514	69.2	144.29	1.1	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB075	RAINGAGE-5	0203-652	74.994	64.135	708.525	0.8	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB076	RAINGAGE-5	0203-282	16.4	65.65	286.8	0.8	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB077	RAINGAGE-5	0203-674	21.804	69.258	381.092	0.3	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB078	RAINGAGE-5	0203-603	192.52	64.99	1,440.18	0.7	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB079	RAINGAGE-5	0203-563	108.98	66.267	1,457.40	1.3	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB080	RAINGAGE-5	0203-303	34.156	66.506	783.573	1	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB081	RAINGAGE-5	0203-554	8.542	66.114	337.475	0.2	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB082	RAINGAGE-5	0203-649	6.358	66.213	257.555	0.4	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB083	RAINGAGE-5	0203-558	12.022	66.114	372.903	7	0	0.013	0.63	0.1	0.2	0: Outlet
0203_SB084	RAINGAGE-5	0203-688	12.187	66.132	348.566	0.2	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB085	RAINGAGE-5	0203-631	6.525	66.132	316.161	0.1	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB086	RAINGAGE-5	0203-629	17.092	64.708	949.652	0.8	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB087	RAINGAGE-5	0203-680	39.746	64.707	599.909	0.4	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB088	RAINGAGE-5	0203-004	45.94	65.519	913.116	0.2	0	0.013	0.63	0.1	0.2	0: Outlet
0203_SB089	RAINGAGE-5	0203-032	17.001	62.228	594.358	4.2	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB090	RAINGAGE-5	0203-005	24.432	70.325	726.438	0.3	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB091	RAINGAGE-5	0203-005	57.57	67.54	1,809.77	1.3	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB092	RAINGAGE-5	0203-037	51.39	62.601	2,187.30	1.1	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB093	RAINGAGE-5	0203-024	30.264	58.044	829.429	1	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB094	RAINGAGE-5	0203-019	25.102	57.975	562.578	0.7	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB095	RAINGAGE-5	0203-508	21.294	72.658	614.991	1.7	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB096	RAINGAGE-5	0203-002	7.113	70.997	736.805	1.2	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB097	RAINGAGE-5	0203-031	12.348	62.303	712.93	0.1	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB098	RAINGAGE-5	0203-495	9.87	66.861	271.82	0.1	0	0.013	0.63	0.1	0.2	1: Impervious
0203_SB099	RAINGAGE-5	0203-129	14.93	57.846	453.96	0.1	0	0.013	0.3	0.1	0.2	1: Impervious

Table A-2. Final Subcatchment Parameters

Subcatchment ID (Char)	Raingage ID (Char)	Receiving Node ID (Char)	Subcatchment Area (ac)	Subcatch. Imperviousness(%) (Double)	Subcatchment Width (ft)	Subcatchment Slope (Double)	Subcatchment Curb Length (Double)	Manning's N for Imperv. Portion (Double)	Manning's N for Pervious Portion (Double)	Depression Stor. for Imp. Portion (in)	Depression Stor. for Perv. Portion (in)	Runoff Routing Destination (Int)
0203_SB100	RAINGAGE-5	0203-411	12.022	25	551.745	1	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB101	RAINGAGE-9	0203-390	8.67	66	288	1	0	0.013	0.3	0.1	0.2	1: Impervious
0203_SB102	RAINGAGE-5	0203-386	1.69	30	218	1	0	0.013	0.3	0.1	0.2	1: Impervious

Table A-3. Existing System Junctions

Junction ID (Char)	Invert Elevation (ft)	Rim Elevation (ft)	Ponded Area (ft^2)
0203-001	266.39	278.18	
0203-002	268.36	277.46	401.043
0203-003	268.96	278.83	
0203-004	270.34	278.97	
0203-005	274.35	278.6	53,071.36
0203-006	274.95	279.1	2,673.62
0203-007	281.58	285.33	8,956.63
0203-008	282.08	288.05	
0203-009	275.6	279.94	3,743.07
0203-010	282.2	287.6	88,095.78
0203-011	289.71	293.63	38,232.77
0203-012	290.14	295.69	14,972.27
0203-013	290.76	294.8	247,577.21
0203-014	291.61	298.81	
0203-015	293.5	301.74	
0203-016	307.48	319.8	
0203-017	291.41	296.91	67,909.95
0203-018	291.12	295.5	104,404.86
0203-019	315.92	321.32	118,307.69
0203-020	314.51	320.86	22,859.45
0203-021	314.44	320.66	5,480.92
0203-022	268.99	280	
0203-023	312.41	319.2	59,755.41
0203-024	311.89	319.17	84,486.39
0203-025	305.93	310.87	16,309.08
0203-026	305.48	310.7	
0203-027	300.18	307.71	
0203-028	299.83	307.52	
0203-029	296.89	303.34	133,012.60
0203-030	296.81	304.5	16,710.13
0203-031	269	277.33	
0203-032	268.13	274.26	58,151.24
0203-033	262.01	279	
0203-034	276.37	280.45	972,662.96
0203-035	285.19	290.58	
0203-036	286.42	291.76	
0203-037	295.94	303.6	52,937.68
0203-038	294.67	299.7	264,554.70
0203-039	288.25	292.13	11,362.89
0203-040	280.36	284.48	
0203-041	274.2	278.26	116,436.15
0203-042	273.68	277.84	148,519.59
0203-043	271.87	280.5	
0203-044	271.48	280.15	
0203-045	271.51	282.43	
0203-046	270.77	287.7	

Table A-3. Existing System Junctions

Junction ID (Char)	Invert Elevation (ft)	Rim Elevation (ft)	Ponded Area (ft^2)
0203-047	271.49	288.4	
0203-048	270.93	279.95	
0203-049	270.39	278.45	17,512.21
0203-050	270.37	278.43	4,545.15
0203-051	268.18	277.71	
0203-052	309.793	317.8	668.405
0203-053	309.013	316.7	
0203-054	308.9	315.689	
0203-055	307.467	313	82,213.82
0203-056	305.95	312.3	9,223.99
0203-057	304.598	310.65	30,479.27
0203-058	303.621	310.269	267.362
0203-059	304.77	310.6	267.362
0203-060	307.91	317.481	
0203-061	306.368	314.801	
0203-062	300.89	315.315	
0203-063	299.265	323.014	
0203-064	298.374	320.58	
0203-065	296.031	310.3	
0203-066	295.756	308.541	
0203-067	295.044	303.9	
0203-068	303.743	306.9	
0203-069	304.488	307.6	
0203-070	292.977	305.9	
0203-071	309.511	313.986	
0203-072	308.529	315.7	
0203-073	306.895	315.466	
0203-074	306.895	314.012	
0203-075	305.692	313.664	
0203-076	303.311	310.61	134,082.04
0203-077	307.651	314.6	
0203-078	303.072	310.072	802.086
0203-079	301.389	309.861	
0203-080	301.293	309.323	
0203-081	299.7	307.254	
0203-082	299.547	306.423	
0203-083	299.547	304.5	
0203-084	298.253	306.744	
0203-085	297.637	306.85	
0203-086	297.078	305.235	
0203-087	295.483	302.6	
0203-088	303.112	309.308	935.767
0203-089	300.288	307.635	
0203-090	299.093	306.345	
0203-091	297.08	304.337	
0203-092	295.389	303.2	

Table A-3. Existing System Junctions

Junction ID (Char)	Invert Elevation (ft)	Rim Elevation (ft)	Ponded Area (ft^2)
0203-093	294.419	300.4	
0203-094	294.053	300.7	
0203-095	267.8	275.3	
0203-096	266.4	273.1	
0203-097	264.65	271.3	
0203-098	263.88	270.5	
0203-099	263.32	269.6	
0203-100	262.1	268.9	
0203-101	261.43	268.5	
0203-102	260.66	267.3	
0203-103	259.39	266.77	
0203-104	258.447	265.84	
0203-105	289.02	291.9	126,595.91
0203-106	288.418	293.28	
0203-107	281.39	285.59	
0203-108	279.37	284.7	
0203-109	243.233	264.1	
0203-110	244.819	265.7	
0203-111	247.397	264.1	
0203-112	255.102	262.5	940,713.20
0203-113	261.766	270.6	17,645.89
0203-114	270.407	277.361	
0203-115	275.807	284.957	
0203-116	279.13	289.09	
0203-117	280.066	287.011	
0203-118	266.663	275.266	
0203-119	280.255	287.591	
0203-120	248.782	271.3	
0203-121	252.085	269.9	
0203-122	252.3	277.64	
0203-123	252.4	277.64	
0203-124	253.133	261.1	
0203-125	264.03	270.648	
0203-126	264.898	270.934	
0203-127	267.777	272.2	
0203-128	267.54	272.5	
0203-129	267.538	273	
0203-130	254.486	262.422	
0203-131	254.936	263.1	
0203-132	257.902	266	
0203-133	260.09	266.905	
0203-134	264.7	269.233	258,405.37
0203-135	263.24	272.4	
0203-136	270.14	277	
0203-137	270.14	277	
0203-138	270.68	277	

Table A-3. Existing System Junctions

Junction ID (Char)	Invert Elevation (ft)	Rim Elevation (ft)	Ponded Area (ft^2)
0203-139	272.05	281.1	
0203-140	272.16	281.2	
0203-141	272.94	281.6	
0203-142	274.208	282.81	
0203-143	251.27	277.612	
0203-144	251.27	277.612	
0203-145	251.61	270.3	
0203-146	251.61	261.8	
0203-147	251.86	267.4	
0203-148	251.86	267.4	
0203-149	252.01	267.104	
0203-150	252.01	260.4	
0203-151	252.79	269.9	
0203-152	253.25	270	
0203-153	253.33	261.338	
0203-154	253.33	263.5	
0203-155	253.33	263.6	
0203-156	254.13	265.5	
0203-157	254.13	273.6	
0203-158	254.13	273.6	
0203-159	254.13	264.1	
0203-160	255.238	263.1	
0203-161	259.598	267.5	
0203-162	263.611	275.8	
0203-163	268.002	276.56	
0203-164	270.502	278.572	
0203-165	271	282.75	
0203-166	272.911	281.1	
0203-167	273	281.2	7,218.77
0203-168	274.658	282.9	10,026.08
0203-169	278.49	283.722	545,017.44
0203-170	278.649	289	
0203-171	279.15	286.1	
0203-172	279.772	286.7	
0203-173	282.374	286.9	280,730.10
0203-174	278.493	283.1	17,111.17
0203-175	279.678	284.204	100,000.00
0203-176	279.764	284.269	336,341.40
0203-177	278.889	283.4	170,978.00
0203-178	280.526	285.009	66,439.46
0203-179	281.676	293.2	
0203-180	281.676	293.2	
0203-181	282.629	291.2	
0203-182	282.772	291.302	
0203-183	282.563	291.134	
0203-184	283.543	291.111	

Table A-3. Existing System Junctions

Junction ID (Char)	Invert Elevation (ft)	Rim Elevation (ft)	Ponded Area (ft^2)
0203-185	283.773	291.111	
0203-186	285.848	292.5	
0203-187	285.843	295.4	
0203-188	287.166	297.3	
0203-189	287.566	297.7	
0203-190	289.306	300.4	
0203-191	298.436	309.5	
0203-192	292.08	298.2	
0203-193	297.891	302.328	
0203-194	301.362	304.977	
0203-195	284.597	294.3	
0203-196	295.12	299.98	
0203-197	297.382	302.8	
0203-198	306.605	309.7	24,730.99
0203-199	300.776	307.7	
0203-200	300.68	307.6	
0203-201	307.898	322	
0203-202	305.5	319.6	
0203-203	306.226	311.4	
0203-204	305.491	310.9	5,881.96
0203-205	305.1	310.68	10,000.00
0203-206	303.67	309.49	
0203-207	299.192	307.842	
0203-208	297.604	299.5	1,604.17
0203-209	298.278	307	787,247.41
0203-210	299.8	305.5	228,059.79
0203-211	299.952	305.9	66,038.41
0203-212	296.45	304.08	
0203-213	295.821	301.8	
0203-214	295.9	301.947	
0203-215	298.597	304.7	
0203-216	305.7	308.767	
0203-217	295.34	301.289	
0203-218	253.93	261.3	
0203-219	253.93	266.316	
0203-220	256.881	263.536	
0203-221	283	292.62	
0203-222	283.92	290.98	
0203-223	261.2	269.13	668.405
0203-224	261.08	267.46	152,396.34
0203-225	306.66	314.73	
0203-226	304.02	318.03	51,868.23
0203-227	303.62	314.25	5,748.28
0203-228	308	317.27	
0203-229	326.59	336.81	
0203-230	324.5	330.15	

Table A-3. Existing System Junctions

Junction ID (Char)	Invert Elevation (ft)	Rim Elevation (ft)	Ponded Area (ft^2)
0203-231	321.38	327.84	
0203-232	316.86	325.13	
0203-233	314.5	323.29	
0203-234	315.75	321.34	
0203-235	315.25	321.06	
0203-236	315	319.36	
0203-237	311	318.01	
0203-238	302	316.42	
0203-239	293.5	304.69	
0203-240	267.45	276.86	401.043
0203-241	266	277.29	
0203-242	257.35	265.61	179,533.58
0203-243	256.97	266.32	14,437.55
0203-244	283.121	288.857	1,222,913.79
0203-245	293	303.47	
0203-246	285.653	293.1	
0203-247	293.756	309.72	
0203-248	279.462	285.59	
0203-249	302.6	306.2	
0203-250	280.75	284.8	31,682.40
0203-251	279.978	286.63	
0203-252	292.49	299	
0203-253	270.77	279.13	
0203-254	264.387	275.82	
0203-255	275.948	285.898	
0203-256	297.61	306.76	
0203-257	278.23	282.675	
0203-258	278.23	286.02	
0203-259	279.48	285.51	
0203-260	280.55	286.83	
0203-261	281.5	287.78	
0203-262	283.22	289.01	10,694.48
0203-263	284.39	290.62	186,618.68
0203-264	287	289.6	17,512.21
0203-265	281.22	286.4	
0203-266	280.9	285.92	
0203-267	280.78	285.95	
0203-268	273.014	285.49	
0203-269	280.164	287.5	
0203-270	282.52	294.7	
0203-271	302.59	308.15	78,604.43
0203-272	291.13	300.02	
0203-273	286.87	297.8	
0203-274	285.86	292.41	
0203-275	284.18	293.38	
0203-276	283.27	293.38	

Table A-3. Existing System Junctions

Junction ID (Char)	Invert Elevation (ft)	Rim Elevation (ft)	Ponded Area (ft^2)
0203-277	282.92	287.2	
0203-278	286	292.48	
0203-279	287.56	292.88	
0203-280	288.14	292.85	
0203-281	289.04	294.69	
0203-282	289.65	294.17	56,680.74
0203-283	287.58	292.45	138,627.20
0203-284	325.71	335.42	103,736.46
0203-285	304.5	310	
0203-286	306	310.84	
0203-287	307.7	311.09	
0203-288	308.34	312.45	
0203-289	309	314.54	
0203-290	312	320.53	
0203-291	313.3	319.42	
0203-292	317.81	325.88	
0203-293	319.74	324.53	
0203-294	323.23	327.29	
0203-295	324	334.04	
0203-296	324.05	333.34	
0203-297	325.71	329.13	268,565.13
0203-298	309.53	316.22	
0203-299	313.84	319.57	216,563.22
0203-300	314.98	320.21	502,373.20
0203-301	300	308.46	123,120.20
0203-302	295.19	305.12	578,972.41
0203-303	300.75	306.57	243,299.42
0203-304	311.35	314.54	
0203-305	312.33	315.56	133.681
0203-306	320.33	324.44	396,497.85
0203-307	314.2	320.23	
0203-308	312.5	320.85	
0203-309	310.67	317.85	
0203-310	309.14	317.66	
0203-311	305.56	312.91	
0203-312	302	309.6	284,606.85
0203-313	304.25	311.81	18,447.98
0203-314	305.49	313.1	27,538.29
0203-315	314.63	321.05	
0203-316	316.05	322.47	693,938.07
0203-317	298.12	306.53	305,060.04
0203-318	279.139	285.59	
0203-319	267.7	283.48	
0203-320	277.992	284.241	
0203-321	278.292	286.602	
0203-322	270.135	276	

Table A-3. Existing System Junctions

Junction ID (Char)	Invert Elevation (ft)	Rim Elevation (ft)	Ponded Area (ft^2)
0203-323	269.109	302.62	
0203-324	272.915	302.62	
0203-325	286.144	300.76	
0203-326	270.948	277.8	
0203-327	267.1	277.1	
0203-328	263.204	273.3	
0203-329	285.426	296.36	
0203-330	304.862	308.7	9,758.71
0203-331	294	301.35	1,871.53
0203-332	293.5	299.6	
0203-333	295	301.28	85,422.16
0203-334	299.64	306.38	2,005.22
0203-335	264.387	279.1	
0203-336	286.21	294.56	
0203-337	300.89	308	
0203-338	293.63	298.27	
0203-339	295.05	304.1	
0203-340	310.13	316.15	68,444.67
0203-341	257.022	268.5	
0203-342	265.728	270.6	668.405
0203-343	301.286	314.91	133.681
0203-344	299.111	308.2	481,117.92
0203-345	254.037	264.646	
0203-346	256.953	264.799	
0203-347	258.696	265.911	
0203-348	260.514	267.8	
0203-349	261.395	269.037	
0203-350	262.615	269.802	
0203-351	275.48	282.76	
0203-352	282.133	289.078	
0203-353	276.565	283.595	
0203-354	275.717	282.747	
0203-355	268.519	274.519	534.724
0203-356	267.754	276.3	
0203-357	261.414	270.13	140,097.69
0203-358	261.032	268.4	5,480.92
0203-359	259.75	267.1	
0203-360	250.807	267.5	
0203-361	256.859	266.63	
0203-362	275.32	280.31	
0203-363	280.46	287.405	
0203-364	273.966	279.64	
0203-365	286.4	295.6	65,236.33
0203-366	273.284	285.2	529,510.44
0203-367	272.449	283.012	1,871.53
0203-368	266.661	276.317	724,149.98

Table A-3. Existing System Junctions

Junction ID (Char)	Invert Elevation (ft)	Rim Elevation (ft)	Ponded Area (ft^2)
0203-369	277.661	285.319	
0203-370	266.897	275.121	354,789.37
0203-371	270.605	275.2	
0203-372	264.294	273.01	
0203-373	257.563	270	668.405
0203-374	257.492	270	246,641.45
0203-375	259.366	270.7	
0203-376	259.383	271.415	
0203-377	257.496	270	31,682.40
0203-378	260.9	271.213	310,959.00
0203-379	258.472	271.213	
0203-380	287	297.3	
0203-381	269.488	273.6	
0203-382	298	308.2	
0203-383	311.07	317.7	123,387.56
0203-384	309	316.37	
0203-385	305.598	310.55	
0203-386	306.598	310.49	
0203-387	305.771	310.39	
0203-388	306.771	310.61	
0203-389	262.766	272.76	
0203-390	263.2	272.91	
0203-391	252.485	263.308	
0203-392	252.283	270.1	
0203-393	310.878	325	
0203-394	304.237	309.91	24,329.94
0203-395	304.13	311.206	
0203-396	304.197	310.1	
0203-397	294.633	301.289	
0203-398	294.633	300.995	
0203-399	308.643	312.847	
0203-400	305.408	309.2	4,277.79
0203-401	292.214	299.4	
0203-402	282.497	287	273,645.01
0203-403	282.101	288.475	
0203-404	282.101	289	
0203-405	281.632	288.5	
0203-406	281.407	287.9	
0203-407	280.157	286.5	39,435.90
0203-408	280.065	286.1	281,398.51
0203-409	280	286.1	481,250.00
0203-410	278.85	286.9	
0203-411	307.608	312.25	3,208.34
0203-412	305.811	312.7	
0203-413	304.783	312.6	
0203-414	302.204	306.29	

Table A-3. Existing System Junctions

Junction ID (Char)	Invert Elevation (ft)	Rim Elevation (ft)	Ponded Area (ft^2)
0203-415	303.605	309.3	22,993.13
0203-416	302.755	307.7	
0203-417	284.57	291.831	
0203-418	283.364	291.831	
0203-419	289.924	296.1	20,052.15
0203-420	287.721	292.583	
0203-421	300.142	306	
0203-422	305.75	309.2	133.681
0203-423	305.406	312.6	
0203-424	282.629	290.4	
0203-425	282.339	293.5	
0203-426	279.084	287	
0203-427	278.929	286.9	
0203-428	264.646	278.489	
0203-429	264.467	276.615	
0203-430	269.896	276.45	30,078.23
0203-431	330.78	334.94	101,330.20
0203-432	271.24	277.68	
0203-433	270.93	278.87	
0203-434	270.77	279.06	
0203-435	271.03	279.52	
0203-436	269.45	272.98	
0203-437	270.14	276.1	
0203-438	264.95	274.2	
0203-439	325.445	329.918	362,409.19
0203-440	320.136	324.158	457,590.06
0203-441	318.8	323.46	11,362.89
0203-442	318.645	322.4	668.405
0203-443	317.953	321.8	
0203-444	317.391	321.7	
0203-445	311.33	315.866	
0203-446	307.54	311.68	
0203-447	307.322	312.241	
0203-448	303.811	311.75	
0203-449	312.718	317.8	224,584.08
0203-450	310.868	318	
0203-451	303.931	308.9	110,153.14
0203-452	302.27	311.252	
0203-453	299.71	305.4	2,138.90
0203-454	295.195	301.6	20,586.87
0203-455	293.57	300.71	104,137.50
0203-456	299.133	302.268	122,050.75
0203-457	291.645	299.131	289,018.32
0203-458	286.509	295.978	137,424.07
0203-459	291.73	298.52	177,795.73
0203-460	290.134	298.097	

Table A-3. Existing System Junctions

Junction ID (Char)	Invert Elevation (ft)	Rim Elevation (ft)	Ponded Area (ft^2)
0203-461	283.176	291.95	39,970.62
0203-462	282.572	289.67	
0203-463	292.227	299.5	
0203-464	295.528	302.964	778,558.14
0203-465	291.625	299.025	
0203-466	286.608	293.452	
0203-467	275.41	279.5	110,955.23
0203-468	270.908	275.2	147,583.82
0203-469	270.351	276.1	
0203-470	268.769	278.244	
0203-471	268.146	275.1	
0203-472	290.961	294.99	199,853.10
0203-473	267.507	274.9	
0203-474	258.976	268.6	100,661.79
0203-475	260.304	267.3	31,949.76
0203-476	259.962	267.6	
0203-477	272.041	278.7	270,169.30
0203-478	269.384	276.748	5,480.92
0203-479	265.743	274.827	
0203-480	265.735	273.44	
0203-481	321.033	328.508	1,162,623.66
0203-482	315.665	322.698	
0203-483	311.773	318.152	
0203-484	305.119	311.44	
0203-485	275.18	279.82	31,548.72
0203-486	296.279	305.074	
0203-487	293.503	303.188	
0203-488	288.021	296.591	
0203-489	290.579	295.1	590,736.34
0203-490	291.663	297.06	
0203-491	287.077	293.1	
0203-492	285.998	291.942	935.767
0203-493	300.918	316.6	
0203-494	266.073	276.01	132,477.87
0203-495	266.938	276.132	1,871.53
0203-496	305.247	309.45	
0203-497	304.414	308.3	
0203-498	304.372	311.9	
0203-499	304.169	310.6	
0203-500	303.19	310.1	
0203-501	303.351	307.3	
0203-502	312.359	318.2	6,416.69
0203-503	311.285	319.915	
0203-504	307.796	311.843	
0203-505	308.602	316.022	
0203-506	271.264	276.817	274,447.09

Table A-3. Existing System Junctions

Junction ID (Char)	Invert Elevation (ft)	Rim Elevation (ft)	Ponded Area (ft^2)
0203-507	264.5	276.615	
0203-508	272.24	279.58	
0203-509	271.3	279.24	4,946.20
0203-510	270.793	275.259	567,743.21
0203-511	325.354	329.3	
0203-512	324.159	330.251	
0203-513	329.08	332.71	401.043
0203-514	319.617	322.7	
0203-515	318.651	323.592	
0203-516	312.068	318.98	
0203-517	270.61	279.53	
0203-518	316.311	319.8	72,588.78
0203-519	315.411	320.6	
0203-520	259.95	273.86	
0203-521	317.8	324.144	
0203-522	318	324.673	
0203-523	318.5	324.2	203,061.44
0203-524	318.25	323.9	12,833.38
0203-525	264.31	281.3	
0203-526	317.546	323	
0203-527	317.491	322.771	
0203-528	316.586	322.297	
0203-529	315.5	320.688	
0203-530	266.86	276.86	
0203-531	312.734	324.611	16,977.49
0203-532	292.83	302.85	
0203-533	300.59	305.44	
0203-534	303.471	309.207	
0203-535	303.298	308.968	
0203-536	297.171	305.232	239,556.35
0203-537	297.171	305.823	
0203-538	299.84	306.28	
0203-539	294.66	300.6	
0203-540	290.99	297.55	
0203-541	290.14	296.44	
0203-542	300.882	307.506	
0203-543	284.46	291.14	
0203-544	283.1	293.85	
0203-545	279.978	283.9	588,062.72
0203-546	279.95	287.07	
0203-547	294.71	302.8	
0203-548	279.92	287.28	
0203-549	278.84	285.59	
0203-550	266.915	277.2	32,217.12
0203-551	275.45	282.5	
0203-552	273.06	280.85	

Table A-3. Existing System Junctions

Junction ID (Char)	Invert Elevation (ft)	Rim Elevation (ft)	Ponded Area (ft^2)
0203-553	271.02	280.7	
0203-554	271.82	276.04	534.724
0203-555	268.07	275.51	
0203-556	266.85	276.2	
0203-557	289.02	303.1	
0203-558	261.402	281.13	
0203-559	294.71	302.8	
0203-560	345.22	350.65	488,069.33
0203-561	335.66	342.52	
0203-562	326	331.7	320,032.31
0203-563	328.07	334.08	784,039.07
0203-564	341.1	345.7	581,779.71
0203-565	333.38	339.51	
0203-566	329.36	337.14	
0203-567	324.41	332.19	
0203-568	321.67	329.94	
0203-569	320.28	327	
0203-570	317.96	324	504,645.78
0203-571	312.66	320.2	62,696.39
0203-572	310.61	320.7	85,689.52
0203-573	310.61	320.7	165,764.44
0203-574	310.61	319	1,186,819.92
0203-575	310.61	317.1	6,707,176.81
0203-576	308.49	321.7	
0203-577	295.059	308.2	
0203-578	295.13	307.67	
0203-579	292.848	309.72	
0203-580	290.81	302.32	
0203-581	292.65	299.32	64,166.88
0203-582	291.26	301.2	
0203-583	288.12	299.9	
0203-584	286.18	300.2	
0203-585	286.14	299.5	
0203-586	285.95	300.2	
0203-587	284.62	298.8	
0203-588	282.83	298.07	
0203-589	285.06	301.4	
0203-590	325.93	330.4	
0203-591	321.05	323.67	20,453.19
0203-592	290.53	296.83	
0203-593	316.18	319.8	
0203-594	308.93	312.6	528,173.63
0203-595	307.99	311.1	7,218.77
0203-596	306.36	309.5	1,611,658.14
0203-597	297.53	304.7	
0203-598	296.91	304	

Table A-3. Existing System Junctions

Junction ID (Char)	Invert Elevation (ft)	Rim Elevation (ft)	Ponded Area (ft^2)
0203-599	294.03	303.29	
0203-600	291.7	300.86	
0203-601	291.02	301.35	
0203-602	293.09	305.5	
0203-603	304.74	309.3	1,444,957.93
0203-604	304.045	308.58	2,673.62
0203-605	304.03	308.6	
0203-606	302	306.6	
0203-607	301.75	305.2	
0203-608	298.14	304.37	
0203-609	295.03	303.12	
0203-610	294.71	303	
0203-611	282.35	297.5	
0203-612	284.67	301	
0203-613	281.74	295.6	
0203-614	280.14	294.23	
0203-615	280.14	296.8	
0203-616	279.96	296.7	
0203-617	280.13	292.2	
0203-618	279.55	290.5	27,404.61
0203-619	279	290.8	
0203-620	279.43	293.83	
0203-621	282.5	297.62	
0203-622	279.72	293.83	
0203-623	279.55	286.9	
0203-624	280.69	290.02	
0203-625	283.66	294.9	
0203-626	287.67	294.2	10,293.44
0203-627	293.33	299.78	
0203-628	278.72	286.1	
0203-629	277.015	285.43	
0203-630	273.076	285.5	
0203-631	272.075	284.5	
0203-632	271.89	284	
0203-633	278.91	283.5	
0203-634	278.36	282.92	
0203-635	275.52	282.58	
0203-636	271.83	283.04	
0203-637	272.77	284.1	
0203-638	265.72	283	
0203-639	267.96	285.2	
0203-640	268.08	280.4	
0203-641	265.9	278.3	
0203-642	264.66	281.87	
0203-643	264.71	282	
0203-644	259.72	281.75	

Table A-3. Existing System Junctions

Junction ID (Char)	Invert Elevation (ft)	Rim Elevation (ft)	Ponded Area (ft^2)
0203-645	255.64	278.8	
0203-646	256.21	279.3	
0203-647	277.014	281.89	
0203-648	277.57	282.6	
0203-649	278.15	284.15	
0203-650	282.42	286.89	27,538.29
0203-651	279.8	286.14	
0203-652	308.228	314.754	388,476.99
0203-653	302.65	308.94	
0203-654	298.72	302.8	
0203-655	294.49	301.28	71,786.70
0203-656	293.82	300.08	
0203-657	285.6	291.7	121,114.99
0203-658	283.06	295.55	
0203-659	282.23	294.09	
0203-660	273.28	279	335,940.35
0203-661	294.44	301.35	66,172.10
0203-662	297.19	302.08	142,236.58
0203-663	295.77	301.66	
0203-664	294.3	300.97	
0203-665	292.46	298.87	
0203-666	296.63	304.16	54,007.12
0203-667	295.24	302.95	
0203-668	293.44	298.73	43,446.33
0203-669	292.68	298.17	
0203-670	292.49	296	668.405
0203-671	282.6	295.55	
0203-672	282.35	294.09	
0203-673	292.4	298.71	
0203-674	282.6	289.24	14,303.87
0203-675	282.48	288.77	
0203-676	279.18	287.53	
0203-677	291.93	298.98	
0203-678	294.32	300.03	256,266.48
0203-679	291.8	300.02	
0203-680	285.883	290.734	260,009.55
0203-681	284.81	292.45	
0203-682	283	288.32	
0203-683	282.89	288.25	
0203-684	281.84	287.97	
0203-685	280.44	287.511	
0203-686	280.164	287.095	
0203-687	280.164	287.46	
0203-688	281.071	285.668	6,416.69
0203-689	281.033	285.663	

Table A-4. Existing System Pipe/Channels

Conduit ID (Char)	From Node ID (Char)	To Node ID (Char)	LENGTH (ft)	Manning's N (Double)	Upstream Invert (ft)	Downstream Invert (ft)	Entry Loss Coeff. (Double)	Exit Loss Coeff. (Double)	Average Loss Coeff. (Double)	SHAPE_TYPE (Int)	Max Depth (ft)	GEOM2 (ft)	GEOM3 (ft)	GEOM4 (ft)	Number of Barrels (Long)	TRANSECT (Char)
0203-001-022	0203-001	0203-022	322.308	0.04	266.39	268.99	0.5	1	1.5	21: Irregular	3.883					TRANSECT-15
0203-002-001	0203-002	0203-001	185.68	0.013	268.36	266.39	0.5	1	1.5	0: Circular	3				1	
0203-003-051	0203-003	0203-051	66.491	0.04	268.96	268.18	0.5	1	1.5	21: Irregular	7.47					TRANSECT-57
0203-004-003	0203-004	0203-003	25.119	0.04	271.14	270.96	0.5	1	1.5	2: Rect-Closed	3.5	6			1	TRANSECT-57
0203-005-041	0203-005	0203-041	26.602	0.013	274.35	274.2	0.5	1	1.5	21: Irregular	4					TRANSECT-35
0203-006-005	0203-006	0203-005	112.132	0.013	274.95	274.35	0.5	1	1.5	21: Irregular	4.17					TRANSECT-33
0203-007-040	0203-007	0203-040	160.394	0.013	281.58	280.36	0.5	1	1.5	21: Irregular	3.06					TRANSECT-23
0203-008-007	0203-008	0203-007	71.081	0.013	282.08	281.58	0.5	1	1.5	21: Irregular	3.75					TRANSECT-21
0203-009-467	0203-009	0203-467	39.757	0.04	275.6	275.41	0.5	1	1.5	21: Irregular	4.08					TRANSECT-27
0203-010-008	0203-010	0203-008	39.737	0.013	282.2	282.08	0.5	1	1.5	2: Rect-Closed	3.5	6.5			1	TRANSECT-21
0203-011-039	0203-011	0203-039	152.51	0.013	289.71	288.25	0.5	1	1.5	21: Irregular	3.82					TRANSECT-13
0203-012-011	0203-012	0203-011	98.443	0.013	290.14	289.71	0.5	1	1.5	2: Rect-Closed	3.4	6.5			1	TRANSECT-11
0203-013-012	0203-013	0203-012	68.835	0.013	290.76	290.14	0.5	1	1.5	2: Rect-Closed	3	6.5			1	
0203-014-017	0203-014	0203-017	55.917	0.013	291.61	291.41	0.5	1	1.5	0: Circular	5.5				1	
0203-015-014	0203-015	0203-014	62.443	0.013	293.5	291.61	0.5	1	1.5	0: Circular	5.5				1	
0203-016-025	0203-016	0203-025	209.146	0.013	307.48	305.93	0.5	1	1.5	0: Circular	3.5				1	
0203-017-018	0203-017	0203-018	87.379	0.013	291.41	291.12	0.5	1	1.5	21: Irregular	4.035					TRANSECT-7
0203-018-472	0203-018	0203-472	57.514	0.013	291.12	290.961	0.5	1	1.5	21: Irregular	4.035					TRANSECT-7
0203-019-020	0203-019	0203-020	68.44	0.013	315.92	314.51	0.5	1	1.5	0: Circular	3				1	
0203-020-021	0203-020	0203-021	32.811	0.013	314.51	314.51	0.5	1	1.5	0: Circular	3				1	
0203-021-023	0203-021	0203-023	271.657	0.013	314.44	312.56	0.5	1	1.5	0: Circular	3				1	
0203-022-525	0203-022	0203-525	567.773	0.04	268.99	264.31	0.5	1	1.5	21: Irregular	10.92					TRANSECT-45
0203-023-024	0203-023	0203-024	40.214	0.013	312.41	312.1	0.5	1	1.5	0: Circular	3				1	
0203-024-016	0203-024	0203-016	239.133	0.013	311.89	308.41	0.5	1	1.5	0: Circular	3				1	
0203-025-026	0203-025	0203-026	36.109	0.013	305.93	305.49	0.5	1	1.5	0: Circular	3.5				1	
0203-026-027	0203-026	0203-027	538.873	0.013	305.48	300.18	0.5	1	1.5	0: Circular	3.5				1	
0203-027-028	0203-027	0203-028	40.34	0.013	300.18	299.83	0.5	1	1.5	0: Circular	4				1	
0203-028-029	0203-028	0203-029	450.495	0.013	299.83	296.89	0.5	1	1.5	0: Circular	4.5				1	
0203-029-030	0203-029	0203-030	42.094	0.013	296.89	296.81	0.5	1	1.5	0: Circular	4.5				1	
0203-030-037	0203-030	0203-037	281.857	0.013	296.81	295.94	0.5	1	1.5	21: Irregular	7.66					TRANSECT-1
0203-031-022	0203-031	0203-022	76.696	0.013	269	268.99	0.5	1	1.5	0: Circular	4.5				1	
0203-032-033	0203-032	0203-033	25.035	0.013	268.13	267.09	0.5	1	1.5	0: Circular	2.5				1	
0203-033-520	0203-033	0203-520	267.219	0.04	262.01	259.95	0.5	1	1.5	21: Irregular	8.14					TRANSECT-49
0203-034-009	0203-034	0203-009	93.445	0.04	276.37	275.6	0.5	1	1.5	21: Irregular	4.08					TRANSECT-27
0203-035-010	0203-035	0203-010	90.043	0.013	285.19	282.2	0.5	1	1.5	21: Irregular	5.391					TRANSECT-19
0203-036-035	0203-036	0203-035	50.305	0.013	286.43	285.19	0.5	1	1.5	21: Irregular	5.33					TRANSECT-69
0203-037-038	0203-037	0203-038	130.531	0.013	295.94	294.67	0.5	1	1.5	21: Irregular	3.923					TRANSECT-3
0203-038-015	0203-038	0203-015	66.684	0.013	294.67	293.65	0.5	1	1.5	0: Circular	5				1	
0203-039-036	0203-039	0203-036	57.919	0.013	288.25	286.43	0.5	1	1.5	21: Irregular	3.883					TRANSECT-15
0203-040-034	0203-040	0203-034	414.414	0.013	280.36	276.37	0.5	1	1.5	21: Irregular	3.98					TRANSECT-25
0203-041-042	0203-041	0203-042	78.276	0.013	274.2	273.68	0.5	1	1.5	21: Irregular	4.06					TRANSECT-37
0203-042-043	0203-042	0203-043	118.507	0.04	273.68	271.87	0.5	1	1.5	21: Irregular	4.16					TRANSECT-39
0203-043-044	0203-043	0203-044	19.066	0.04	271.87	271.48	0.5	1	1.5	21: Irregular	8.63					TRANSECT-43
0203-044-045	0203-044	0203-045	95.073	0.04	271.48	271.51	0.5	1	1.5	21: Irregular	8.63					TRANSECT-67
0203-045-046	0203-045	0203-046	196.177	0.04	271.51	270.77	0.5	1	1.5	21: Irregular	10.92					TRANSECT-45
0203-046-047	0203-046	0203-047	323.242	0.04	270.77	271.49	0.5	1	1.5	21: Irregular	16.9					TRANSECT-47
0203-047-048	0203-047	0203-048	206.687	0.04	271.49	270.93	0.5	1	1.5	21: Irregular	8.14					TRANSECT-49
0203-048-049	0203-048	0203-049	97.052	0.04	270.93	270.39	0.5	1	1.5	21: Irregular	7.17					TRANSECT-51
0203-049-050	0203-049	0203-050	87.679	0.04	270.39	270.37	0.5	1	1.5	21: Irregular	8.06					TRANSECT-53
0203-050-004	0203-050	0203-004	156.754	0.04	270.37	270.34	0.5	1	1.5	21: Irregular	8.06					TRANSECT-53
0203-051-530	0203-051	0203-530	311.943	0.04	268.18	266.86	0.5	1	1.5	21: Irregular	9.53					TRANSECT-61
0203-052-053	0203-052	0203-053	71.514	0.013	309.793	309.143	0.5	1	1.5	0: Circular	3				1	
0203-053-054	0203-053	0203-054	21.799	0.013	309.013	308.9	0.5	1	1.5	0: Circular	3				1	
0203-054-055	0203-054	0203-055	85.171	0.013	308.9	307.533	0.5	1	1.5	0: Circular	3				1	
0203-055-056	0203-055	0203-056	48.121	0.013	307.467	306.121	0.5	1	1.5	0: Circular	3.5				1	
0203-056-057	0203-056	0203-057	174.441	0.013	305.95	304.748	0.5	1	1.5	0: Circular	3.5				1	
0203-057-058	0203-057	0203-058	78.871	0.013	304.598	303.621	0.5	1	1.5	0: Circular	3				1	
0203-058-238	0203-058	0203-238	198.665	0.013	303.621	302	0.5	1	1.5	0: Circular	3.5				1	
0203-059-058	0203-059	0203-058	105.615	0.013	304.827	304.118	0.5	1	1.5	0: Circular	3				1	
0203-060-061	0203-060	0203-061	77.096	0.013	307.91	306.368	0.5	1	1.5	0: Circular	3.5				1	
0203-061-238	0203-061	0203-238	149.304	0.013	306.368	302	0.5	1	1.5	0: Circular	3.5				1	
0203-062-063	0203-062	0203-063	334.169	0.013	300.89	299.583	0.5	1	1.5	0: Circular	5				1	
0203-063-064	0203-063	0203-064	351.006	0.013	299.365	298.487	0.5	1	1.5	0: Circular	5				1	
0203-064-065	0203-064	0203-065	473.349	0.013	298.374	296.031	0.5	1	1.5	0: Circular	5				1	
0203-065-066	0203-065	0203-066	72.88	0.013	296.031	295.756	0.5	1	1.5	0: Circular	5				1	
0203-066-067	0203-066	0203-067	185.489	0.013	295.756	295.044	0.5	1	1.5	0: Circular	5				1	
0203-067-239	0203-067	0203-239	240.245	0.013	295.044	293.53	0.5	1	1.5	0: Circular	5				1	
0203-068-215	0203-068	0203-215	25.993	0.04	303.743	298.597	0.5	1	1.5	21: Irregular	3.066					TRANSECT-343
0203-069-068	0203-069	0203-068	58.845	0.013	304.488	303.743	0.5	1	1.5	0: Circular	2				2	
0203-070-325	0203-070	0203-325	689.077	0.04	292.977	286.144	0.5	1	1.5	21: Irregular	12.854				1	TRANSECT-583
0203-071-060	0203-071	0203-060	43.263	0.013	309.511	308.003	0.5	1	1.5	0: Circular	3.5				1	
0203-072-228	0203-072	0203-228	58.798	0.013	308.529	308	0.5	1	1.5	0: Circular	4.5				1	
0203-073-074	0203-073	0203-074	221.031	0.013	306.895	306.895	0.5	1	1.5	0: Circular	4.5				1	
0203-074-075	0203-074	0203-075	43.873	0.013	306.895	306.339	0.5	1	1.5	0: Circular	4.5				1	
0203-075-076	0203-075	0203-076	28.828	0.013	305.692	304.901	0.5	1	1.5	0: Circular	4.5				1	
0203-076-078	0203-076	0203-078	50.884	0.013	303.311	303.072	0.5	1	1.5	0: Circular	3.5				1	
0203-077-073	0203-077	0203-073	113.574	0.013	307.651	306.895	0.5	1	1.5	0: Circular	4.5				1	
0203-078-079	0203-078	0203-079	195.326	0.013	303.072	301.389	0.5	1	1.5	0: Circular	3.5				1	
0203-079-080	0203-079	0203-080	33.113	0.013	301.389	301.293	0.5	1	1.5	0: Circular	3.5				1	
0203-080-081	0203-080	0203-081	209.723	0.013	301.293	299.706	0.5	1	1.5	0: Circular	3.5				1	
0203-081-082	0203-081	0203-082	25.754	0.013	299.7	299.577	0.5	1	1.5	0: Circular	3.5				1	
0203-082-083	0203-082	0203-083	21.1	0.013	299.547	299.547	0.5	1	1.5	0: Circular	3.5				1	
0203-083-084	0203-083	0203-084	139.7	0.013	299.547	298.379	0.5	1	1.5	0: Circular	4				1	
0203-084-256	0203-084	0203-256	129.9	0.013	298.253	297.61	0.5	1	1.5	0: Circular	4				1	
0203-085-086	0203-085	0203-086	185.5	0.013	297.637	297.187	0.5	1	1.5	0: Circular	4				1	
0203-086-087	0203-086	0203-087	119.6	0.013	297.078	295.686	0.5	1	1.5	0: Circular	4				1	
0203-087-092	0203-087	0203-092	51.4	0.013	295.483	295.389	0.5	1	1.5	0: Circular	4.5				1	
0203-088-089	0203-088	0203-089	154.4	0.013	303.112	300.773	0.5	1	1.5	0: Circular	3				1	
0203-089-090	0203-089	0203-090	147.5	0.013	300.288	299.093	0.5	1	1.5	0: Circular	3				1	
0203-090-091	0203-090	0203-091	207	0.013	299.093	297.123	0.5	1	1.5	0: Circular	3				1	
0203-091-087	0203-091	0203-087	56.9	0.013	297.08	296.085	0.5	1	1.5	0: Circular	3				1	

Table A-4. Existing System Pipe/Channels

Conduit ID (Char)	From Node ID (Char)	To Node ID (Char)	LENGTH (ft)	Manning's N (Double)	Upstream Invert (ft)	Downstream Invert (ft)	Entry Loss Coeff. (Double)	Exit Loss Coeff. (Double)	Average Loss Coeff. (Double)	SHAPE_TYPE (Int)	Max Depth (ft)	GEOM2 (ft)	GEOM3 (ft)	GEOM4 (ft)	Number of Barrels (Long)	TRANSECT (Char)
0203-091-093	0203-091	0203-093	335.4	0.013	297.08	295.197	0.5	1	1.5	0: Circular	3				1	
0203-092-094	0203-092	0203-094	472.7	0.013	295.389	294.196	0.5	1	1.5	0: Circular	5				1	
0203-093-094	0203-093	0203-094	154.9	0.013	294.419	294.053	0.5	1	1.5	0: Circular	3				1	
0203-094-338	0203-094	0203-338	321.474	0.04	294.053	293.63	0.5	1	1.5	21: Irregular	2.97				1	TRANSECT-611
0203-095-096	0203-095	0203-096	167.562	0.013	267.8	266.43	0.5	1	1.5	0: Circular	3.5				1	
0203-096-097	0203-096	0203-097	172.199	0.013	266.4	264.65	0.5	1	1.5	0: Circular	3.5				1	
0203-097-098	0203-097	0203-098	135.291	0.013	264.65	263.95	0.5	1	1.5	0: Circular	4				1	
0203-098-099	0203-098	0203-099	120.091	0.013	263.88	263.33	0.5	1	1.5	0: Circular	4				1	
0203-099-100	0203-099	0203-100	250.166	0.013	263.32	262.1	0.5	1	1.5	0: Circular	4				1	
0203-100-101	0203-100	0203-101	193.356	0.013	262.1	261.44	0.5	1	1.5	0: Circular	4				1	
0203-101-102	0203-101	0203-102	64.378	0.04	261.43	260.69	0.5	1	1.5	0: Circular	5				1	
0203-102-103	0203-102	0203-103	251.132	0.013	260.66	259.39	0.5	1	1.5	0: Circular	5				1	
0203-103-104	0203-103	0203-104	251.51	0.013	259.39	258.447	0.5	1	1.5	0: Circular	5				1	
0203-104-341	0203-104	0203-341	320	0.013	258.447	257.226	0.5	1	1.5	0: Circular	5.5				1	
0203-105-106	0203-105	0203-106	34.1	0.013	289.02	288.418	0.5	1	1.5	0: Circular	2				1	
0203-106-336	0203-106	0203-336	137.288	0.013	288.418	286.21	0.5	1	1.5	0: Circular	2				1	
0203-107-108	0203-107	0203-108	128.719	0.013	281.39	279.37	0.5	1	1.5	0: Circular	2				1	
0203-108-353	0203-108	0203-353	178.939	0.013	279.37	276.565	0.5	1	1.5	0: Circular	2.5				1	
0203-109-001	0203-109	0203_OF01	76.977	0.013	243.233	242.616	0.5	1	1.5	21: Irregular	13.779					TRANSECT-451
0203-110-109	0203-110	0203-109	30.398	0.04	244.819	243.233	0.5	1	1.5	21: Irregular	16.67					TRANSECT-279
0203-111-110	0203-111	0203-110	87.887	0.04	247.397	244.819	0.5	1	1.5	21: Irregular	16.67					TRANSECT-279
0203-112-218	0203-112	0203-218	276.997	0.04	255.102	253.93	0.5	1	1.5	21: Irregular	7.321					TRANSECT-289
0203-113-357	0203-113	0203-357	431	0.013	261.766	261.414	0.5	1	1.5	21: Irregular	8.464					TRANSECT-273
0203-114-355	0203-114	0203-355	237.695	0.013	270.407	268.519	0.5	1	1.5	21: Irregular	6.954					TRANSECT-269
0203-115-353	0203-115	0203-353	61.896	0.013	275.807	276.565	0.5	1	1.5	21: Irregular	7.03					TRANSECT-267
0203-116-115	0203-116	0203-115	467.243	0.013	279.13	275.807	0.5	1	1.5	21: Irregular	9.15					TRANSECT-265
0203-117-116	0203-117	0203-116	234.812	0.013	280.066	279.13	0.5	1	1.5	21: Irregular	6.945					TRANSECT-263
0203-118-372	0203-118	0203-372	249.329	0.04	266.663	264.294	0.5	1	1.5	21: Irregular	8.563					TRANSECT-305
0203-119-366	0203-119	0203-366	623.499	0.04	280.255	277.849	0.5	1	1.5	21: Irregular	7.336				1	TRANSECT-297
0203-120-003	0203-120	0203_OF03	40.919	0.04	248.782	248.409	0.5	1	1.5	21: Irregular	22.5					TRANSECT-443
0203-121-120	0203-121	0203-120	125.546	0.04	252.085	248.782	0.5	1	1.5	21: Irregular	17.772					TRANSECT-441
0203-122-392	0203-122	0203-392	31.919	0.04	252.3	252.283	0.5	1	1.5	21: Irregular	17.772				1	TRANSECT-441
0203-123-122	0203-123	0203-122	198.834	0.013	252.4	252.3	0.5	1	1.5	2: Rect-Closed	20	18			1	
0203-124-391	0203-124	0203-391	36.302	0.04	253.133	252.485	0.5	1	1.5	21: Irregular	6.887					TRANSECT-437
0203-125-124	0203-125	0203-124	98.46	0.04	264.03	253.133	0.5	1	1.5	21: Irregular	6.724					TRANSECT-435
0203-126-125	0203-126	0203-125	23.737	0.04	264.898	264.03	0.5	1	1.5	21: Irregular	6.174					TRANSECT-433
0203-127-126	0203-127	0203-126	121.109	0.04	267.777	264.898	0.5	1	1.5	21: Irregular	4.532					TRANSECT-431
0203-128-127	0203-128	0203-127	458.146	0.04	269.639	267.777	0.5	1	1.5	21: Irregular	2.699					TRANSECT-429
0203-128-129	0203-128	0203-129	1,476.42	0.04	267.54	267.538	0.5	1	1.5	21: Irregular	4.861					TRANSECT-427
0203-129-342	0203-129	0203-342	269.053	0.013	267.538	265.728	0.5	1	1.5	21: Irregular	4.861				1	TRANSECT-427
0203-130-124	0203-130	0203-124	200.4	0.013	254.486	253.133	0.5	1	1.5	21: Irregular	7.936					TRANSECT-457
0203-131-130	0203-131	0203-130	151.2	0.04	254.936	254.486	0.5	1	1.5	21: Irregular	7.259					TRANSECT-459
0203-132-131	0203-132	0203-131	527.2	0.04	257.902	254.936	0.5	1	1.5	21: Irregular	8.018				1	TRANSECT-461
0203-133-132	0203-133	0203-132	307.4	0.04	260.09	257.902	0.5	1	1.5	21: Irregular	6.815					TRANSECT-463
0203-134-328	0203-134	0203-328	160.827	0.04	264.7	263.204	0.5	1	1.5	21: Irregular	4.533					TRANSECT-465
0203-135-005	0203-135	0203_OF05	486.4	0.04	263.24	252.68	0.5	1	1.5	21: Irregular	9.15					TRANSECT-545
0203-136-437	0203-136	0203-437	345.7	0.04	270.14	270.14	0.5	1	1.5	21: Irregular	5.947					TRANSECT-547
0203-137-136	0203-137	0203-136	498.03	0.04	270.14	270.14	0.5	1	1.5	21: Irregular	6.797					TRANSECT-549
0203-138-137	0203-138	0203-137	619.2	0.04	270.68	270.14	0.5	1	1.5	21: Irregular	6.268					TRANSECT-551
0203-139-432	0203-139	0203-432	27.9	0.04	272.05	271.24	0.5	1	1.5	21: Irregular	4.941					TRANSECT-557
0203-140-139	0203-140	0203-139	22.8	0.04	272.16	272.05	0.5	1	1.5	21: Irregular	9.026					TRANSECT-559
0203-141-140	0203-141	0203-140	138.6	0.04	272.94	272.16	0.5	1	1.5	21: Irregular	8.612					TRANSECT-561
0203-142-141	0203-142	0203-141	440.7	0.04	274.21	272.94	0.5	1	1.5	21: Irregular	6.92					TRANSECT-563
0203-143-004	0203-143	0203_OF04	91.236	0.04	251.27	250.36	0.5	1	1.5	21: Irregular	17.323					TRANSECT-425
0203-144-143	0203-144	0203-143	289.16	0.013	251.27	251.27	0.5	1	1.5	2: Rect-Closed	19	65			1	
0203-145-144	0203-145	0203-144	361.154	0.04	251.61	251.27	0.5	1	1.5	21: Irregular	18.74				1	TRANSECT-417
0203-146-145	0203-146	0203-145	135.28	0.04	251.61	251.61	0.5	1	1.5	21: Irregular	10.21					TRANSECT-413
0203-147-146	0203-147	0203-146	37.975	0.04	251.86	251.61	0.5	1	1.5	21: Irregular	9.691					TRANSECT-411
0203-148-147	0203-148	0203-147	47.358	0.04	251.86	251.86	0.5	1	1.5	21: Irregular	15.381					TRANSECT-409
0203-149-148	0203-149	0203-148	90.867	0.04	252.01	251.86	0.5	1	1.5	21: Irregular	14.554					TRANSECT-407
0203-150-149	0203-150	0203-149	43.181	0.04	252.01	252.01	0.5	1	1.5	21: Irregular	8.225					TRANSECT-403
0203-151-150	0203-151	0203-150	53.489	0.04	252.79	252.01	0.5	1	1.5	21: Irregular	8.225					TRANSECT-401
0203-152-151	0203-152	0203-151	318.433	0.04	253.25	252.79	0.5	1	1.5	21: Irregular	16.837					TRANSECT-399
0203-153-152	0203-153	0203-152	97.073	0.04	253.33	253.25	0.5	1	1.5	21: Irregular	8.005					TRANSECT-397
0203-154-153	0203-154	0203-153	102.596	0.04	253.33	253.33	0.5	1	1.5	21: Irregular	7.008					TRANSECT-395
0203-155-154	0203-155	0203-154	138.743	0.04	253.33	253.33	0.5	1	1.5	21: Irregular	10.079					TRANSECT-393
0203-156-155	0203-156	0203-155	31.967	0.04	254.13	253.33	0.5	1	1.5	21: Irregular	9.089					TRANSECT-391
0203-157-156	0203-157	0203-156	44.281	0.04	254.13	254.13	0.5	1	1.5	21: Irregular	11.338					TRANSECT-389
0203-158-157	0203-158	0203-157	50.917	0.04	254.13	254.13	0.5	1	1.5	21: Irregular	19.416					TRANSECT-387
0203-159-158	0203-159	0203-158	137.504	0.04	254.13	254.13	0.5	1	1.5	21: Irregular	9.951					TRANSECT-385
0203-160-159	0203-160	0203-159	47.478	0.04	255.24	254.13	0.5	1	1.5	21: Irregular	7.221					TRANSECT-383
0203-161-160	0203-161	0203-160	90.562	0.04	259.598	255.24	0.5	1	1.5	21: Irregular	7.818					TRANSECT-381
0203-162-161	0203-162	0203-161	490.532	0.04	263.611	259.598	0.5	1	1.5	21: Irregular	7.818					TRANSECT-381
0203-163-428	0203-163	0203-428	488.2	0.04	268.002	264.646	0.5	1	1.5	21: Irregular	7.946					TRANSECT-473
0203-164-163	0203-164	0203-163	398	0.04	270.502	268.002		1	1.5	21: Irregular	8.07					TRANSECT-477
0203-165-364	0203-165	0203-364	51.91	0.04	271	270.502	0.5		1.5	21: Irregular	8.07					TRANSECT-477
0203-166-362	0203-166	0203-362	164.13	0.04	272.911	271.395	0.5	1	1.5	21: Irregular	7.943					TRANSECT-479
0203-167-166	0203-167	0203-166	124.9	0.04	273	272.911	0.5	1	1.5	21: Irregular	8.144					TRANSECT-483
0203-168-167	0203-168	0203-167	153.4	0.04	274.658	273	0.5	1	1.5	21: Irregular	8.144					TRANSECT-483
0203-169-168	0203-169	0203-168	88.8	0.04	278.49	274.658	0.5	1	1.5	21: Irregular	4.473					TRANSECT-377
0203-170-169	0203-170	0203-169	133.023	0.04	278.649	278.49	0.5	1	1.5	21: Irregular	4.473					TRANSECT-377
0203-171-410	0203-171	0203-410	45.044	0.04	279.15	278.85	0.5	1	1.5	21: Irregular	6.907					TRANSECT-371
0203-172-171	0203-172	0203-171	156.742	0.04	279.772	279.15	0.5	1	1.5	21: Irregular	6.907					TRANSECT-371
0203-173-403	0203-173	0203-403	96.348	0.04	282.374	282.101	0.5	1	1.5	21: Irregular	4.414					TRANSECT-543
0203-174-169	0203-174	0203-169	34.4	0.04	278.493	278.493	0.5	1	1.5	21: Irregular	4.533					TRANSECT-489
0203-175-426	0203-175	0203-426	148.748	0.04	279.678	279.084	0.5	1	1.5	21: Irregular	4.526					TRANSECT-491
0203-176-175	0203-176	0203-175	61	0.04	279.764	279.678	0.5	1	1.5	21: Irregular	4.505					TRANSECT-493
0203-177-176	0203-177	0203-176	183.218	0.04	278.889	279.764	0.5	1	1.5	21: Irregular	4.26					TRANSECT-497
0203-178-177	0203-178	0203-177	81.209	0.013	280.526	278.889	0.5	1	1.5	21: Irregular	4.484				1	TRANSECT-495
0203-179-178	0203-179	0203-178	403.9	0.04	281.676	280.526	0.5	1	1.5	21: Irregular	4.423					TRANSECT-499
0203-180-179	0203-180	0203-179	46.3	0.04	281.676	281.676	0.5	1	1.5	21: Irregular	11.458					TRANSECT-501

Table A-4. Existing System Pipe/Channels

Conduit ID (Char)	From Node ID (Char)	To Node ID (Char)	LENGTH (ft)	Manning's N (Double)	Upstream Invert (ft)	Downstream Invert (ft)	Entry Loss Coeff. (Double)	Exit Loss Coeff. (Double)	Average Loss Coeff. (Double)	SHAPE_TYPE (Int)	Max Depth (ft)	GEOM2 (ft)	GEOM3 (ft)	GEOM4 (ft)	Number of Barrels (Long)	TRANSECT (Char)
0203-181-424	0203-181	0203-424	119.4	0.04	282.629	282.629	0.5	1	1.5	21: Irregular	7.728					TRANSECT-505
0203-182-181	0203-182	0203-181	147.1	0.04	282.772	282.629	0.5	1	1.5	21: Irregular	8.53					TRANSECT-507
0203-183-182	0203-183	0203-182	101.7	0.04	282.563	282.772	0.5	1	1.5	21: Irregular	8.571					TRANSECT-509
0203-184-183	0203-184	0203-183	30.3	0.04	283.543	282.563	0.5	1	1.5	21: Irregular	7.568					TRANSECT-511
0203-185-184	0203-185	0203-184	15.6	0.04	283.773	283.543	0.5	1	1.5	21: Irregular	7.408					TRANSECT-513
0203-186-185	0203-186	0203-185	68.2	0.04	285.848	283.773	0.5	1	1.5	21: Irregular	6.59					TRANSECT-515
0203-187-246	0203-187	0203-246	169.521	0.04	285.843	285.653	0.5	1	1.5	21: Irregular	7.439					TRANSECT-539
0203-188-380	0203-188	0203-380	509.802	0.04	287.166	285.843	0.5	1	1.5	21: Irregular	9.535					TRANSECT-537
0203-189-188	0203-189	0203-188	28.956	0.04	287.566	287.166	0.5	1	1.5	21: Irregular	10.121					TRANSECT-535
0203-190-189	0203-190	0203-189	89.435	0.04	289.306	287.566	0.5	1	1.5	21: Irregular	9.496					TRANSECT-533
0203-191-190	0203-191	0203-190	198.395	0.04	298.436	289.306	0.5	1	1.5	21: Irregular	11.035					TRANSECT-531
0203-192-419	0203-192	0203-419	385.3	0.04	292.08	289.924	0.5	1	1.5	21: Irregular	6.08					TRANSECT-519
0203-193-192	0203-193	0203-192	190.916	0.04	297.891	292.737	0.5	1	1.5	21: Irregular	4.437					TRANSECT-523
0203-194-193	0203-194	0203-193	358.8	0.04	301.362	297.891	0.5	1	1.5	21: Irregular	3.615					TRANSECT-525
0203-195-402	0203-195	0203-402	462.204	0.04	284.597	282.497	0.5	1	1.5	21: Irregular	4.497				1	TRANSECT-363
0203-196-401	0203-196	0203-401	718.846	0.04	295.12	292.214	0.5	1	1.5	21: Irregular	3.568				1	TRANSECT-361
0203-197-196	0203-197	0203-196	118.626	0.04	297.382	295.12	0.5	1	1.5	21: Irregular	3.568					TRANSECT-361
0203-198-330	0203-198	0203-330	256.193	0.04	306.605	304.862	0.5	1	1.5	21: Irregular	2.169					TRANSECT-357
0203-199-197	0203-199	0203-197	396.892	0.04	300.776	297.382	0.5	1	1.5	21: Irregular	5.362					TRANSECT-359
0203-200-199	0203-200	0203-199	17.1	0.04	300.68	300.776	0.5	1	1.5	21: Irregular	6.864					TRANSECT-353
0203-201-202	0203-201	0203-202	446.803	0.04	307.898	305.5	0.5	1	1.5	21: Irregular	14.057					TRANSECT-317
0203-202-204	0203-202	0203-204	27.586	0.04	305.5	305.491	0.5	1	1.5	21: Irregular	4.551					TRANSECT-319
0203-203-204	0203-203	0203-204	24.485	0.04	306.226	306.2	0.5	1	1.5	21: Irregular	4.685					TRANSECT-321
0203-204-205	0203-204	0203-205	10.449	0.04	305.491	305.1	0.5	1	1.5	21: Irregular	4.769					TRANSECT-323
0203-205-394	0203-205	0203-394	31.81	0.04	305.1	304.99	0.5	1	1.5	21: Irregular	4.769					TRANSECT-323
0203-206-207	0203-206	0203-207	364.667	0.04	303.67	299.192	0.5	1	1.5	21: Irregular	5.829					TRANSECT-329
0203-207-209	0203-207	0203-209	286.571	0.04	299.192	298.278	0.5	1	1.5	21: Irregular	8.65					TRANSECT-331
0203-208-212	0203-208	0203-212	220.593	0.04	297.604	296.45	0.5	1	1.5	21: Irregular	1.777					TRANSECT-341
0203-209-208	0203-209	0203-208	43.312	0.04	298.278	297.604	0.5	1	1.5	21: Irregular	1.163					TRANSECT-339
0203-210-209	0203-210	0203-209	28.128	0.04	299.8	298.278	0.5	1	1.5	21: Irregular	5.187					TRANSECT-337
0203-211-210	0203-211	0203-210	26.023	0.04	299.952	299.8	0.5	1	1.5	21: Irregular	3.936					TRANSECT-335
0203-212-213	0203-212	0203-213	161.709	0.04	296.45	295.821	0.5	1	1.5	21: Irregular	1.777					TRANSECT-341
0203-213-217	0203-213	0203-217	237.585	0.04	295.821	295.34	0.5	1	1.5	21: Irregular	5.579					TRANSECT-349
0203-214-213	0203-214	0203-213	15.024	0.013	295.9	295.821	0.5	1	1.5	21: Irregular	6.004					TRANSECT-345
0203-215-214	0203-215	0203-214	69.28	0.04	298.597	295.9	0.5	1	1.5	21: Irregular	6.004					TRANSECT-345
0203-216-069	0203-216	0203-069	13.941	0.04	305.701	304.488	0.5	1	1.5	21: Irregular	3.066					TRANSECT-343
0203-217-397	0203-217	0203-397	33.817	0.04	295.34	294.633	0.5	1	1.5	2: Rect-Closed	4	9				TRANSECT-351
0203-218-360	0203-218	0203-360	335.584	0.04	253.93	250.807	0.5	1	1.5	2: Rect-Closed	8	12				TRANSECT-289
0203-219-218	0203-219	0203-218	62.481	0.04	253.93	254.053	0.5	1	1.5	21: Irregular	15.742					TRANSECT-293
0203-220-219	0203-220	0203-219	527.502	0.04	256.881	253.93	0.5	1	1.5	21: Irregular	7.957					TRANSECT-291
0203-221-352	0203-221	0203-352	240.243	0.013	283	282.133	0.5	1	1.5	2: Rect-Closed	6	8			1	
0203-222-107	0203-222	0203-107	174.942	0.013	283.92	281.39	0.5	1	1.5	0: Circular	2				1	
0203-223-358	0203-223	0203-358	29.929	0.013	261.2	261.032	0.5	1	1.5	2: Rect-Closed	6	10			1	
0203-224-475	0203-224	0203-475	276.674	0.013	261.08	260.448	0.5	1	1.5	0: Circular	3				1	
0203-225-422	0203-225	0203-422	186.215	0.013	306.66	305.75	0.5	1	1.5	0: Circular	2.5				1	
0203-226-227	0203-226	0203-227	169.895	0.013	304.02	303.62	0.5	1	1.5	0: Circular	3.5				1	
0203-227-076	0203-227	0203-076	194.435	0.013	303.62	303.311	0.5	1	1.5	0: Circular	3.5				1	
0203-228-077	0203-228	0203-077	88.415	0.013	308	307.651	0.5	1	1.5	0: Circular	4.5				1	
0203-229-511	0203-229	0203-511	158.681	0.013	326.59	325.354	0.5	1	1.5	0: Circular	2.25				1	
0203-230-512	0203-230	0203-512	112.675	0.013	324.5	324.159	0.5	1	1.5	0: Circular	2.5				1	
0203-231-514	0203-231	0203-514	247.153	0.013	321.38	319.617	0.5	1	1.5	0: Circular	3				1	
0203-232-233	0203-232	0203-233	184.054	0.013	316.86	314.5	0.5	1	1.5	0: Circular	3.5				1	
0203-233-516	0203-233	0203-516	244.875	0.013	314.5	312.068	0.5	1	1.5	0: Circular	3.5				1	
0203-234-529	0203-234	0203-529	160.045	0.013	315.75	315.5	0.5	1	1.5	0: Circular	4				1	
0203-235-236	0203-235	0203-236	84.663	0.013	315.25	315	0.5	1	1.5	0: Circular	3.5				1	
0203-236-237	0203-236	0203-237	203.976	0.013	315	311	0.5	1	1.5	0: Circular	3.5				1	
0203-237-071	0203-237	0203-071	118.021	0.013	311	309.511	0.5	1	1.5	0: Circular	3.5				1	
0203-238-062	0203-238	0203-062	42.207	0.013	302	301.1	0.5	1	1.5	0: Circular	5				1	
0203-239-245	0203-239	0203-245	134.903	0.04	293.53	293	0.5	1	1.5	2: Rect-Closed	5	10			1	
0203-240-494	0203-240	0203-494	183.192	0.013	267.45	266.073	0.5	1	1.5	0: Circular	4				1	
0203-241-254	0203-241	0203-254	309.7	0.013	266	264.951	0.5	1	1.5	0: Circular	3				1	
0203-242-243	0203-242	0203-243	91.29	0.013	257.35	256.97	0.5	1	1.5	0: Circular	4.333				1	
0203-243-361	0203-243	0203-361	63.745	0.013	256.97	256.859	0.5	1	1.5	0: Circular	4.333				1	
0203-244-462	0203-244	0203-462	105.416	0.04	283.121	282.572	0.5	1	1.5	21: Irregular	5.737				1	TRANSECT-295
0203-245-070	0203-245	0203-070	98.36	0.04	293	292.977	0.5	1	1.5	2: Rect-Closed	5	10			1	
0203-246-417	0203-246	0203-417	14.072	0.04	285.653	284.57	0.5	1	1.5	21: Irregular	7.439					TRANSECT-539
0203-247-602	0203-247	0203-602	566.609	0.04	293.756	293.09	0.5	1	1.5	21: Irregular	12.356					TRANSECT-445
0203-248-318	0203-248	0203-318	31.483	0.013	279.462	279.139	0.5	1	1.5	0: Circular	3				1	
0203-249-196	0203-249	0203-196	196.768	0.04	302.6	295.12	0.5	1	1.5	21: Irregular	2.151				1	TRANSECT-607
0203-250-545	0203-250	0203-545	205.995	0.013	280.75	279.978	0.5	1	1.5	21: Irregular	3.91				1	TRANSECT-221
0203-251-546	0203-251	0203-546	7.761	0.04	279.978	279.95	0.5	1	1.5	21: Irregular	5.09				1	TRANSECT-223
0203-252-626	0203-252	0203-626	106.285	0.013	292.49	287.67	0.5	1	1.5	21: Irregular	6.45				1	TRANSECT-195
0203-253-434	0203-253	0203-434	9.4	0.04	270.77	270.77	0.5	1	1.5	21: Irregular	5.141					TRANSECT-553
0203-254-335	0203-254	0203-335	256.61	0.04	264.387	264.387	0.5	1	1.5	21: Irregular	10.591				1	TRANSECT-597
0203-255-635	0203-255	0203-635	39.365	0.04	275.948	275.52	0.5	1	1.5	21: Irregular	4.56				1	TRANSECT-233
0203-256-085	0203-256	0203-085	49	0.013	297.61	297.637	0.5	1	1.5	0: Circular	4				1	
0203-257-321	0203-257	0203-321	62.338	0.04	278.23	278.292	0.5	1	1.5	21: Irregular	4.392				1	TRANSECT-605
0203-258-257	0203-258	0203-257	51.693	0.013	278.23	278.23	0.5	1	1.5	0: Circular	3				1	
0203-259-258	0203-259	0203-258	287.144	0.013	279.48	278.23	0.5	1	1.5	0: Circular	3				1	
0203-260-259	0203-260	0203-259	500	0.01	280.55	279.48	0.5	1	1.5	0: Circular	3				1	
0203-261-260	0203-261	0203-260	285.155	0.013	281.5	280.55	0.5	1	1.5	0: Circular	3				1	
0203-262-261	0203-262	0203-261	397.848	0.013	283.22	281.5	0.5	1	1.5	0: Circular	2.5				1	
0203-263-262	0203-263	0203-262	371.722	0.013	284.39	283.22	0.5	1	1.5	0: Circular	3				1	
0203-264-265	0203-264	0203-265	656.777	0.013	287	282.12	0.5	1	1.5	0: Circular	2				1	
0203-265-266	0203-265	0203-266	221.359	0.013	281.22	280.96	0.5	1	1.5	0: Circular	3				1	
0203-266-267	0203-266	0203-267	18.656	0.013	280.9	280.78	0.5	1	1.5	0: Circular	3				1	
0203-267-318	0203-267	0203-318	303.544	0.013	280.78	279.139	0.5	1	1.5	0: Circular	3				1	
0203-268-631	0203-268	0203-631	421.494	0.04	273.014	272.075	0.5	1	1.5	21: Irregular	12.401					TRANSECT-213
0203-269-268	0203-269	0203-268	530.674	0.04	280.164	279.143	0.5	1	1.5	21: Irregular	3.496					TRANSECT-211
0203-270-658	0203-270	0203-658	28.953	0.04	282.52	283.06	0.5	1	1.5	21: Irregular	12.11					TRANSECT-199
0203-271-662	0203-271	0203-662	392.404	0.04	302.59	297.19	0.5	1	1.5	21: Irregular	2.89				1	TRANSECT-453

Table A-4. Existing System Pipe/Channels

Conduit ID (Char)	From Node ID (Char)	To Node ID (Char)	LENGTH (ft)	Manning's N (Double)	Upstream Invert (ft)	Downstream Invert (ft)	Entry Loss Coeff. (Double)	Exit Loss Coeff. (Double)	Average Loss Coeff. (Double)	SHAPE_TYPE (Int)	Max Depth (ft)	GEOM2 (ft)	GEOM3 (ft)	GEOM4 (ft)	Number of Barrels (Long)	TRANSECT (Char)
0203-272-273	0203-272	0203-273	536.63	0.013	291.13	286.87	0.5	1	1.5	0: Circular	4				1	
0203-273-617	0203-273	0203-617	547.699	0.04	286.87	280.13	0.5	1	1.5	21: Irregular	10.9				1	TRANSECT-455
0203-274-275	0203-274	0203-275	293.501	0.04	285.86	284.18	0.5	1	1.5	21: Irregular	3.92				1	TRANSECT-571
0203-275-276	0203-275	0203-276	500	0.01	284.18	283.27	0.5	1	1.5	2: Rect-Closed	4	7			1	
0203-276-277	0203-276	0203-277	177.2	0.04	283.27	282.92	0.5	1	1.5	21: Irregular	4.1				1	TRANSECT-569
0203-277-629	0203-277	0203-629	171.02	0.04	282.92	277.015	0.5	1	1.5	21: Irregular	4.23				1	TRANSECT-567
0203-278-274	0203-278	0203-274	223.492	0.013	286	285.88	0.5	1	1.5	2: Rect-Closed	4	5			1	
0203-279-278	0203-279	0203-278	200.196	0.013	287.56	286	0.5	1	1.5	0: Circular	3.5				1	
0203-280-279	0203-280	0203-279	185.225	0.013	288.14	287.56	0.5	1	1.5	0: Circular	3.5				1	
0203-281-280	0203-281	0203-280	209.096	0.013	289.04	288.14	0.5	1	1.5	0: Circular	3				1	
0203-282-281	0203-282	0203-281	141.01	0.013	289.65	289.29	0.5	1	1.5	0: Circular	3				1	
0203-283-274	0203-283	0203-274	388.411	0.013	287.58	285.86	0.5	1	1.5	0: Circular	3.5				1	
0203-284-297	0203-284	0203-297	180.013	0.013	325.71	325.71	0.5	1	1.5	0: Circular	3.5				1	
0203-285-534	0203-285	0203-534	75.867	0.013	304.5	303.471	0.5	1	1.5	0: Circular	3				1	
0203-286-285	0203-286	0203-285	81.103	0.013	306	304.5	0.5	1	1.5	0: Circular	3				1	
0203-287-286	0203-287	0203-286	159.214	0.013	307.7	306	0.5	1	1.5	0: Circular	3				1	
0203-288-287	0203-288	0203-287	95.813	0.013	308.34	307.74	0.5	1	1.5	0: Circular	3				1	
0203-289-288	0203-289	0203-288	228.811	0.013	309	308.34	0.5	1	1.5	0: Circular	3				1	
0203-290-304	0203-290	0203-304	84.876	0.013	312	311.45	0.5	1	1.5	0: Circular	2.5				1	
0203-291-305	0203-291	0203-305	110.659	0.013	313.3	312.33	0.5	1	1.5	0: Circular	2.5				1	
0203-292-291	0203-292	0203-291	282.69	0.013	317.81	313.33	0.5	1	1.5	0: Circular	2				1	
0203-293-292	0203-293	0203-292	132.274	0.013	319.74	317.81	0.5	1	1.5	0: Circular	2				1	
0203-294-306	0203-294	0203-306	236.563	0.013	323.23	320.33	0.5	1	1.5	0: Circular	3.5				1	
0203-295-294	0203-295	0203-294	130.571	0.013	324	323.23	0.5	1	1.5	0: Circular	3.5				1	
0203-296-295	0203-296	0203-295	71.202	0.013	324.05	324	0.5	1	1.5	0: Circular	3.5				1	
0203-297-296	0203-297	0203-296	74.9	0.013	325.71	324.05	0.5	1	1.5	0: Circular	3.5				1	
0203-298-314	0203-298	0203-314	500	0.01	309.53	305.49	0.5	1	1.5	0: Circular	4.5				1	
0203-299-298	0203-299	0203-298	526.5	0.013	313.84	310.84	0.5	1	1.5	0: Circular	3				1	
0203-300-307	0203-300	0203-307	31.128	0.013	314.98	314.63	0.5	1	1.5	0: Circular	3				1	
0203-301-317	0203-301	0203-317	198.839	0.013	300	298.12	0.5	1	1.5	0: Circular	5				1	
0203-302-333	0203-302	0203-333	601.213	0.04	295.19	295	0.5	1	1.5	21: Irregular	5.08				1	TRANSECT-595
0203-303-334	0203-303	0203-334	56.325	0.013	300.75	300.17	0.5	1	1.5	0: Circular	3				1	
0203-304-289	0203-304	0203-289	152.304	0.013	311.35	309	0.5	1	1.5	0: Circular	2.5				1	
0203-305-290	0203-305	0203-290	67.703	0.013	312.33	312	0.5	1	1.5	0: Circular	2.5				1	
0203-306-293	0203-306	0203-293	29.76	0.013	320.33	319.97	0.5	1	1.5	0: Circular	2.5				1	
0203-307-308	0203-307	0203-308	145.577	0.013	314.2	312.5	0.5	1	1.5	0: Circular	3.5				1	
0203-308-309	0203-308	0203-309	190.086	0.013	312.5	310.77	0.5	1	1.5	0: Circular	3.5				1	
0203-309-310	0203-309	0203-310	130.59	0.013	310.67	309.21	0.5	1	1.5	0: Circular	3.5				1	
0203-310-311	0203-310	0203-311	223.39	0.013	309.14	305.88	0.5	1	1.5	0: Circular	3.5				1	
0203-311-301	0203-311	0203-301	808.156	0.013	305.56	300	0.5	1	1.5	0: Circular	4				1	
0203-312-301	0203-312	0203-301	400.124	0.013	302	300	0.5	1	1.5	0: Circular	5				1	
0203-313-312	0203-313	0203-312	294.86	0.013	304.25	302	0.5	1	1.5	0: Circular	5				1	
0203-314-313	0203-314	0203-313	192.116	0.013	305.49	304.25	0.5	1	1.5	0: Circular	5				1	
0203-315-340	0203-315	0203-340	363.565	0.013	314.63	310.59	0.5	1	1.5	0: Circular	3.5				1	
0203-316-315	0203-316	0203-315	268.756	0.013	316.05	314.77	0.5	1	1.5	0: Circular	3.5				1	
0203-317-302	0203-317	0203-302	211.995	0.04	298.12	295.19	0.5	1	1.5	21: Irregular	5.08				1	TRANSECT-595
0203-318-549	0203-318	0203-549	29.151	0.013	279.139	278.84	0.5	1	1.5	0: Circular	3				1	
0203-319-556	0203-319	0203-556	551.19	0.013	267.7	266.85	0.5	1	1.5	0: Circular	4				1	
0203-320-319	0203-320	0203-319	208.093	0.04	277.992	267.7	0.5	1	1.5	0: Circular	3				1	
0203-321-320	0203-321	0203-320	489.266	0.04	278.292	277.992	0.5	1	1.5	21: Irregular	4.392				1	TRANSECT-605
0203-322-323	0203-322	0203-323	56.206	0.013	270.135	269.109	0.5	1	1.5	0: Circular	4				1	
0203-323-324	0203-323	0203-324	444.943	0.013	269.109	272.915	0.5	1	1.5	2: Rect-Closed	6	6			1	
0203-324-008	0203-324	0203_OF08	184.286	0.04	272.915	271.182	0.5	1	1.5	21: Irregular	11.346				1	TRANSECT-581
0203-325-329	0203-325	0203-329	680.174	0.04	286.144	285.426	0.5	1	1.5	21: Irregular	9.647				1	TRANSECT-585
0203-326-327	0203-326	0203-327	267.755	0.04	270.948	267.1	0.5	1	1.5	21: Irregular	6.218				1	TRANSECT-589
0203-327-328	0203-327	0203-328	321.665	0.04	267.1	263.204	0.5	1	1.5	21: Irregular	10				1	TRANSECT-591
0203-328-133	0203-328	0203-133	335.909	0.04	263.204	260.09	0.5	1	1.5	21: Irregular	4.533					TRANSECT-465
0203-329-195	0203-329	0203-195	680.174	0.04	285.426	284.597	0.5	1	1.5	21: Irregular	9.647				1	TRANSECT-585
0203-330-199	0203-330	0203-199	256.193	0.04	304.862	300.776	0.5	1	1.5	21: Irregular	2.169					TRANSECT-357
0203-331-332	0203-331	0203-332	464.394	0.04	294	293.5	0.5	1	1.5	21: Irregular	5.08				1	TRANSECT-595
0203-332-665	0203-332	0203-665	210.687	0.013	293.5	292.46	0.5	1	1.5	2: Rect-Closed	6	12			1	
0203-333-655	0203-333	0203-655	158.586	0.04	295	294.49	0.5	1	1.5	2: Rect-Closed	6	12			1	
0203-334-302	0203-334	0203-302	192.362	0.013	299.64	295.19	0.5	1	1.5	0: Circular	3.5				1	
0203-335-009	0203-335	0203_OF09	404.754	0.04	264.387	255.918	0.5	1	1.5	21: Irregular	10.591				1	TRANSECT-597
0203-336-222	0203-336	0203-222	172.593	0.013	286.21	283.92	0.5	1	1.5	0: Circular	2				1	
0203-337-486	0203-337	0203-486	384.677	0.013	300.89	296.371	0.5	1	1.5	0: Circular	4.5				1	
0203-338-070	0203-338	0203-070	495.251	0.04	293.63	292.977	0.5	1	1.5	21: Irregular	4.647				1	TRANSECT-609
0203-339-189	0203-339	0203-189	371.851	0.04	295.051	287.566	0.5	1	1.5	21: Irregular	4.819				1	TRANSECT-613
0203-340-298	0203-340	0203-298	70.83	0.013	310.13	309.53	0.5	1	1.5	0: Circular	4				1	
0203-341-345	0203-341	0203-345	603.59	0.013	257.022	254.037	0.5	1	1.5	2: Rect-Closed	8	12			1	
0203-342-350	0203-342	0203-350	193.903	0.013	265.728	262.615	0.5	1	1.5	0: Circular	3				1	
0203-343-344	0203-343	0203-344	809.74	0.013	301.286	299.256	0.5	1	1.5	0: Circular	6				1	
0203-344-382	0203-344	0203-382	260	0.013	299.111	298	0.5	1	1.5	0: Circular	2	4			1	
0203-345-002	0203-345	0203_OF02	10	0.04	254.037	250.288	0.5	1	1.5	21: Irregular	10.792					TRANSECT-621
0203-346-345	0203-346	0203-345	339.225	0.04	256.953	254.037	0.5	1	1.5	21: Irregular	7.846					TRANSECT-619
0203-347-346	0203-347	0203-346	270.06	0.013	258.696	256.953	0.5	1	1.5	0: Circular	3				1	
0203-348-347	0203-348	0203-347	226.817	0.04	260.514	258.696	0.5	1	1.5	21: Irregular	7.846					TRANSECT-617
0203-349-348	0203-349	0203-348	384.459	0.013	261.395	260.514	0.5	1	1.5	0: Circular	3				1	
0203-350-349	0203-350	0203-349	120.222	0.04	262.615	261.395	0.5	1	1.5	21: Irregular	7.191					TRANSECT-615
0203-351-551	0203-351	0203-551	14.813	0.04	275.48	275.45	0.5	1	1.5	21: Irregular	7.04					TRANSECT-245
0203-352-363	0203-352	0203-363	462.16	0.013	282.133	280.46	0.5	1	1.5	21: Irregular	6.945					TRANSECT-263
0203-353-354	0203-353	0203-354	175.572	0.04	276.565	275.717	0.5	1	1.5	21: Irregular	7.03					TRANSECT-267
0203-354-114	0203-354	0203-114	580.278	0.013	275.717	270.407	0.5	1	1.5	21: Irregular	7.03					TRANSECT-267
0203-355-356	0203-355	0203-356	95.362	0.013	268.519	267.754	0.5	1	1.5	2: Rect-Closed	6	10			1	
0203-356-113	0203-356	0203-113	230	0.013	267.754	261.766	0.5	1	1.5	21: Irregular	11.464					TRANSECT-273
0203-357-223	0203-357	0203-223	33.788	0.013	261.414	261.2	0.5	1	1.5	2: Rect-Closed	6	10			1	
0203-358-359	0203-358	0203-359	239.525	0.04	261.032	259.75	0.5	1	1.5	21: Irregular	7.321					TRANSECT-289
0203-359-112	0203-359	0203-112	300.241	0.04	259.75	255.102	0.5	1	1.5	21: Irregular	7.321					TRANSECT-289
0203-360-111	0203-360	0203-111	48.259	0.04	250.807	247.397	0.5	1	1.5	21: Irregular	16.67					TRANSECT-279
0203-361-220	0203-361	0203-220	364.505	0.04	256.859	256.881	0.5	1	1.5	21: Irregular	7.957					TRANSECT-291
0203-362-165	0203-362	0203-165	174.57	0.04	271.395	271	0.5	1	1.5	21: Irregular	7.943				1	TRANSECT-479

Table A-4. Existing System Pipe/Channels

Conduit ID (Char)	From Node ID (Char)	To Node ID (Char)	LENGTH (ft)	Manning's N (Double)	Upstream Invert (ft)	Downstream Invert (ft)	Entry Loss Coeff. (Double)	Exit Loss Coeff. (Double)	Average Loss Coeff. (Double)	SHAPE_TYPE (Int)	Max Depth (ft)	GEOM2 (ft)	GEOM3 (ft)	GEOM4 (ft)	Number of Barrels (Long)	TRANSECT (Char)
0203-363-117	0203-363	0203-117	110.038	0.013	280.46	280.066	0.5	1	1.5	21: Irregular	6.945				1	TRANSECT-263
0203-364-164	0203-364	0203-164	70	0.04	270.79	270.502	0.5	1	1.5	21: Irregular	8.07				1	TRANSECT-477
0203-365-461	0203-365	0203-461	137.01	0.013	286.4	283.176	0.5	1	1.5	0: Circular	5.5				1	
0203-366-367	0203-366	0203-367	59.866	0.013	273.284	272.449	0.5	1	1.5	0: Circular	6				1	
0203-367-368	0203-367	0203-368	262.841	0.04	276.663	271.205	0.5	1	1.5	21: Irregular	3.377					TRANSECT-299
0203-368-370	0203-368	0203-370	29.346	0.04	266.661	266.897	0.5	1	1.5	2: Rect-Closed	6	6			1	TRANSECT-301
0203-369-427	0203-369	0203-427	26.2	0.013	279.009	278.929	0.5	1	1.5	2: Rect-Closed	4	14			1	
0203-370-118	0203-370	0203-118	395.187	0.04	270.605	266.663	0.5	1	1.5	21: Irregular	4.513				1	TRANSECT-303
0203-372-373	0203-372	0203-373	246.702	0.04	264.294	261.956	0.5	1	1.5	21: Irregular	8.563				1	TRANSECT-305
0203-373-377	0203-373	0203-377	14.878	0.04	257.563	257.496	0.5	1	1.5	2: Rect-Closed	7	7			1	
0203-374-375	0203-374	0203-375	497.182	0.04	261.58	259.586	0.5	1	1.5	21: Irregular	3.862					TRANSECT-309
0203-375-376	0203-375	0203-376	29.227	0.04	259.366	259.383	0.5	1	1.5	21: Irregular	7.377					TRANSECT-311
0203-376-341	0203-376	0203-341	148.518	0.04	259.246	257.022	0.5	1	1.5	21: Irregular	11.182					TRANSECT-313
0203-377-374	0203-377	0203-374	14.878	0.04	257.496	257.429	0.5	1	1.5	2: Rect-Closed	7	7			1	
0203-378-379	0203-378	0203-379	174.7	0.013	260.9	258.472	0.5	1	1.5	0: Circular	3				1	
0203-379-242	0203-379	0203-242	286.6	0.013	258.472	257.35	0.5	1	1.5	0: Circular	4				1	
0203-380-187	0203-380	0203-187	509.802	0.04	287.166	285.843	0.5	1	1.5	21: Irregular	9.535					TRANSECT-537
0203-381-134	0203-381	0203-134	392.655	0.04	269.488	264.7	0.5	1	1.5	21: Irregular	4.101					TRANSECT-467
0203-382-339	0203-382	0203-339	751	0.013	298	295.05	0.5	1	1.5	2: Rect-Closed	9	4			1	
0203-383-384	0203-383	0203-384	2,282.96	0.013	311.07	309	0.5	1	1.5	21: Irregular	4.91				1	TRANSECT-143
0203-384-576	0203-384	0203-576	1,332.60	0.013	309	308.49	0.5	1	1.5	21: Irregular	4.91				1	TRANSECT-143
0203-385-057	0203-385	0203-057	67	0.013	305.598	304.598	0.5	1	1.5	0: Circular	1.5				1	
0203-386-385	0203-386	0203-385	62	0.013	306.598	305.598	0.5	1	1.5	0: Circular	1.25				2	
0203-387-059	0203-387	0203-059	81	0.013	305.771	304.771	0.5	1	1.5	0: Circular	1.5				1	
0203-388-387	0203-388	0203-387	70	0.013	306.771	305.771	0.5	1	1.5	0: Circular	1.25				2	
0203-389-113	0203-389	0203-113	175	0.013	262.766	261.766	0.5	1	1.5	0: Circular	1.75				1	
0203-390-389	0203-390	0203-389	52	0.013	263.2	262.766	0.5	1	1.5	0: Circular	1.25				2	
0203-391-123	0203-391	0203-123	23.14	0.04	252.485	252.4	0.5	1	1.5	21: Irregular	6.887				1	TRANSECT-437
0203-392-121	0203-392	0203-121	24.5	0.04	252.283	252.085	0.5	1	1.5	21: Irregular	17.772					TRANSECT-441
0203-393-201	0203-393	0203-201	85.535	0.013	310.878	307.898	0.5	1	1.5	21: Irregular	14.057					TRANSECT-317
0203-394-395	0203-394	0203-395	37.086	0.013	304.2	304.13	0.5	1	1.5	0: Circular	4				1	
0203-395-206	0203-395	0203-206	43.169	0.04	303.905	303.67	0.5	1	1.5	21: Irregular	5.829					TRANSECT-329
0203-396-211	0203-396	0203-211	68.853	0.04	304.197	299.952	0.5	1	1.5	21: Irregular	1.807					TRANSECT-333
0203-397-398	0203-397	0203-398	87.732	0.04	294.633	294.633	0.5	1	1.5	2: Rect-Closed	4	9				TRANSECT-351
0203-398-239	0203-398	0203-239	46.243	0.04	294.633	294.58	0.5	1	1.5	2: Rect-Closed	4	9				TRANSECT-351
0203-399-400	0203-399	0203-400	401.37	0.013	308.643	305.408	0.5	1	1.5	0: Circular	3				1	
0203-400-330	0203-400	0203-330	261.364	0.04	305.41	304.862	0.5	1	1.5	21: Irregular	3.82				1	TRANSECT-593
0203-401-195	0203-401	0203-195	473.162	0.013	292.214	284.597	0.5	1	1.5	0: Circular	4				1	
0203-402-173	0203-402	0203-173	31.22	0.04	282.497	282.374	0.5	1	1.5	21: Irregular	4.497				1	TRANSECT-363
0203-403-404	0203-403	0203-404	14.505	0.04	282.101	282.101	0.5	1	1.5	2: Rect-Closed	4	21			1	TRANSECT-365
0203-404-405	0203-404	0203-405	112.654	0.04	282.101	281.632	0.5	1	1.5	21: Irregular	6.83					TRANSECT-367
0203-405-406	0203-405	0203-406	35.735	0.013	281.632	281.407	0.5	1	1.5	2: Rect-Closed	4	21			1	
0203-406-407	0203-406	0203-407	171.479	0.04	281.407	280.157	0.5	1	1.5	21: Irregular	6.363					TRANSECT-369
0203-407-408	0203-407	0203-408	35.949	0.013	280.157	280.065	0.5	1	1.5	2: Rect-Closed	4	21			1	
0203-408-409	0203-408	0203-409	48.789	0.04	280.065	280	0.5	1	1.5	21: Irregular	6.078					TRANSECT-541
0203-409-172	0203-409	0203-172	326.311	0.04	280	279.772	0.5	1	1.5	21: Irregular	6.078				1	TRANSECT-541
0203-410-170	0203-410	0203-170	82.541	0.013	278.85	278.649	0.5	1	1.5	3: Rect-Open	8	4			2	
0203-411-412	0203-411	0203-412	63.012	0.013	307.608	305.811	0.5	1	1.5	0: Circular	3				1	
0203-412-413	0203-412	0203-413	47.501	0.013	305.811	304.783	0.5	1	1.5	0: Circular	3				1	
0203-413-414	0203-413	0203-414	201.094	0.013	304.783	302.204	0.5	1	1.5	0: Circular	3				1	
0203-414-339	0203-414	0203-339	355.318	0.013	302.204	295.051	0.5	1	1.5	0: Circular	3				1	
0203-415-416	0203-415	0203-416	141.195	0.013	303.605	302.755	0.5	1	1.5	0: Circular	2				1	
0203-416-191	0203-416	0203-191	167.015	0.04	302.755	298.436	0.5	1	1.5	21: Irregular	4.928					TRANSECT-529
0203-417-418	0203-417	0203-418	24.679	0.04	284.57	283.364	0.5	1	1.5	0: Circular	6				1	
0203-418-184	0203-418	0203-184	118.346	0.04	283.364	283.543	0.5	1	1.5	21: Irregular	6.773					TRANSECT-527
0203-419-420	0203-419	0203-420	26.8	0.04	289.924	287.721	0.5	1	1.5	0: Circular	2				1	
0203-420-186	0203-420	0203-186	46.7	0.04	287.721	285.848	0.5	1	1.5	21: Irregular	6.59					TRANSECT-515
0203-421-192	0203-421	0203-192	272.7	0.04	300.142	292.08	0.5	1	1.5	21: Irregular	5.831					TRANSECT-521
0203-422-423	0203-422	0203-423	63.617	0.013	305.75	305.406	0.5	1	1.5	0: Circular	3				1	
0203-423-501	0203-423	0203-501	77.627	0.013	305.406	303.351	0.5	1	1.5	0: Circular	3				1	
0203-424-425	0203-424	0203-425	132.3	0.013	282.629	282.339	0.5	1	1.5	2: Rect-Closed	5	20			1	
0203-425-180	0203-425	0203-180	137.2	0.04	282.339	281.676	0.5	1	1.5	21: Irregular	11.155					TRANSECT-503
0203-426-369	0203-426	0203-369	24.9	0.013	279.084	279.009	0.5	1	1.5	2: Rect-Closed	4	14			1	
0203-427-174	0203-427	0203-174	133.43	0.04	278.929	278.493	0.5	1	1.5	21: Irregular	4.533					TRANSECT-489
0203-428-507	0203-428	0203-507	63.905	0.013	264.646	264.5	0.5	1	1.5	2: Rect-Closed	8	18			1	
0203-429-162	0203-429	0203-162	465.5	0.04	264.467	263.611	0.5	1	1.5	21: Irregular	12.147					TRANSECT-471
0203-430-240	0203-430	0203-240	599.4	0.013	269.896	267.45	0.5	1	1.5	0: Circular	3				1	
0203-431-513	0203-431	0203-513	101.764	0.013	330.78	329.08	0.5	1	1.5	0: Circular	2				1	
0203-432-433	0203-432	0203-433	127.2	0.013	271.24	270.93	0.5	1	1.5	0: Circular	5				1	
0203-433-253	0203-433	0203-253	135.7	0.04	270.93	270.77	0.5	1	1.5	21: Irregular	4.946					TRANSECT-555
0203-434-435	0203-434	0203-435	152.3	0.013	270.77	271.03	0.5	1	1.5	0: Circular	5				1	
0203-435-138	0203-435	0203-138	26	0.04	271.03	270.68	0.5	1	1.5	21: Irregular	6.268					TRANSECT-551
0203-437-438	0203-437	0203-438	289.2	0.013	270.14	264.95	0.5	1	1.5	0: Circular	5.5				1	
0203-438-135	0203-438	0203-135	24.3	0.04	264.95	263.24	0.5	1	1.5	21: Irregular	19.841					TRANSECT-545
0203-439-440	0203-439	0203-440	299.09	0.013	325.583	320.433	0.5	1	1.5	0: Circular	3				1	
0203-440-441	0203-440	0203-441	91.78	0.013	320.136	318.8	0.5	1	1.5	0: Circular	3				1	
0203-441-442	0203-441	0203-442	327.921	0.013	318.8	318.645	0.5	1	1.5	0: Circular	3				1	
0203-442-443	0203-442	0203-443	101.719	0.013	318.645	318.222	0.5	1	1.5	0: Circular	3				1	
0203-443-444	0203-443	0203-444	38.038	0.013	317.953	317.391	0.5	1	1.5	0: Circular	3				1	
0203-444-445	0203-444	0203-445	305.653	0.013	317.391	311.424	0.5	1	1.5	0: Circular	3				1	
0203-445-446	0203-445	0203-446	253.212	0.013	311.33	307.577	0.5	1	1.5	0: Circular	3				1	
0203-446-447	0203-446	0203-447	36.799	0.013	307.54	307.322	0.5	1	1.5	0: Circular	3				1	
0203-447-448	0203-447	0203-448	91.629	0.013	307.322	304.079	0.5	1	1.5	0: Circular	3				1	
0203-448-452	0203-448	0203-452	49.939	0.013	303.811	302.413	0.5	1	1.5	0: Circular	4				1	
0203-449-450	0203-449	0203-450	31.827	0.013	312.718	310.88	0.5	1	1.5	0: Circular	3				1	
0203-450-451	0203-450	0203-451	592.869	0.013	310.868	304.113	0.5	1	1.5	0: Circular	3				1	
0203-451-448	0203-451	0203-448	122.568	0.013	303.931	303.811	0.5	1	1.5	0: Circular	3.5				1	
0203-452-453	0203-452	0203-453	189.959	0.013	302.27	299.78	0.5	1	1.5	0: Circular	4				1	
0203-453-454	0203-453	0203-454	272.355	0.013	299.71	295.195	0.5	1	1.5	0: Circular	4				1	
0203-454-455	0203-454	0203-455	131.951	0.013	295.195	293.669	0.5	1	1.5	0: Circular	4.5				1	
0203-455-457	0203-455	0203-457	262.945	0.013	293.57	291.726	0.5	1	1.5	0: Circular	4.5				1	

Table A-4. Existing System Pipe/Channels

Conduit ID (Char)	From Node ID (Char)	To Node ID (Char)	LENGTH (ft)	Manning's N (Double)	Upstream Invert (ft)	Downstream Invert (ft)	Entry Loss Coeff. (Double)	Exit Loss Coeff. (Double)	Average Loss Coeff. (Double)	SHAPE_TYPE (Int)	Max Depth (ft)	GEOM2 (ft)	GEOM3 (ft)	GEOM4 (ft)	Number of Barrels (Long)	TRANSECT (Char)
0203-456-455	0203-456	0203-455	176.804	0.013	299.133	293.669	0.5	1	1.5	0: Circular	2				1	
0203-457-458	0203-457	0203-458	804.44	0.013	291.645	286.509	0.5	1	1.5	0: Circular	5.5				1	
0203-458-365	0203-458	0203-365	96.448	0.013	286.509	286.4	0.5	1	1.5	0: Circular	5.5				1	
0203-459-460	0203-459	0203-460	46.785	0.013	291.73	291.061	0.5	1	1.5	0: Circular	3.5				1	
0203-460-365	0203-460	0203-365	256.108	0.013	290.134	287.989	0.5	1	1.5	0: Circular	3.5				1	
0203-461-244	0203-461	0203-244	101.828	0.04	283.176	283.121	0.5	1	1.5	21: Irregular	5.737					TRANSECT-295
0203-462-119	0203-462	0203-119	444.388	0.04	282.572	280.255	0.5	1	1.5	21: Irregular	5.737					TRANSECT-295
0203-463-465	0203-463	0203-465	73.225	0.013	292.227	291.673	0.5	1	1.5	0: Circular	3.5				1	
0203-464-463	0203-464	0203-463	310.003	0.013	295.528	292.487	0.5	1	1.5	0: Circular	3				1	
0203-465-466	0203-465	0203-466	863.122	0.013	291.625	286.666	0.5	1	1.5	0: Circular	4				1	
0203-466-367	0203-466	0203-367	776.525	0.013	286.608	277.664	0.5	1	1.5	0: Circular	4				1	
0203-467-485	0203-467	0203-485	108.312	0.013	275.41	275.18	0.5	1	1.5	21: Irregular	3.94					TRANSECT-29
0203-468-469	0203-468	0203-469	15.945	0.013	270.908	270.351	0.5	1	1.5	0: Circular	3				1	
0203-469-470	0203-469	0203-470	346.754	0.013	270.351	268.769	0.5	1	1.5	0: Circular	3				1	
0203-470-471	0203-470	0203-471	215.551	0.013	268.769	268.146	0.5	1	1.5	0: Circular	3				1	
0203-471-473	0203-471	0203-473	29.106	0.013	268.146	267.507	0.5	1	1.5	0: Circular	3				1	
0203-472-013	0203-472	0203-013	126.694	0.013	290.961	290.76	0.5	1	1.5	21: Irregular	4.033					TRANSECT-9
0203-473-372	0203-473	0203-372	141.654	0.013	267.507	266.719	0.5	1	1.5	0: Circular	3				1	
0203-474-242	0203-474	0203-242	170.58	0.013	258.976	257.35	0.5	1	1.5	0: Circular	3				1	
0203-475-476	0203-475	0203-476	27.961	0.013	260.304	260.092	0.5	1	1.5	0: Circular	3				1	
0203-476-359	0203-476	0203-359	161.301	0.013	259.962	259.75	0.5	1	1.5	0: Circular	3				1	
0203-477-478	0203-477	0203-478	365.789	0.013	272.041	269.475	0.5	1	1.5	0: Circular	3				1	
0203-478-479	0203-478	0203-479	564.716	0.013	269.384	265.902	0.5	1	1.5	0: Circular	3				1	
0203-479-480	0203-479	0203-480	200.903	0.013	265.743	265.735	0.5	1	1.5	0: Circular	3				1	
0203-480-342	0203-480	0203-342	245.505	0.013	265.735	265.728	0.5	1	1.5	0: Circular	3				1	
0203-481-482	0203-481	0203-482	434.549	0.013	321.033	315.665	0.5	1	1.5	0: Circular	3				1	
0203-482-483	0203-482	0203-483	397.79	0.013	315.665	311.865	0.5	1	1.5	0: Circular	3				1	
0203-483-484	0203-483	0203-484	379.732	0.013	311.773	305.695	0.5	1	1.5	0: Circular	3.5				1	
0203-484-337	0203-484	0203-337	414.97	0.013	305.119	301.39	0.5	1	1.5	0: Circular	4.5				1	
0203-485-006	0203-485	0203-006	37.494	0.04	275.18	274.95	0.5	1	1.5	21: Irregular	3.9					TRANSECT-31
0203-486-487	0203-486	0203-487	258.375	0.013	296.279	293.735	0.5	1	1.5	0: Circular	5				1	
0203-487-488	0203-487	0203-488	561.136	0.013	293.503	288.04	0.5	1	1.5	0: Circular	5				1	
0203-488-491	0203-488	0203-491	443.637	0.013	288.021	287.077	0.5	1	1.5	0: Circular	6				1	
0203-489-488	0203-489	0203-488	19.385	0.013	290.579	290.042	0.5	1	1.5	0: Circular	3.5				1	
0203-490-489	0203-490	0203-489	80.199	0.013	291.663	290.579	0.5	1	1.5	0: Circular	3.5				1	
0203-491-221	0203-491	0203-221	355.63	0.013	287.077	283.2	0.5	1	1.5	0: Circular	6				1	
0203-492-221	0203-492	0203-221	64.813	0.013	285.998	285.7	0.5	1	1.5	0: Circular	3.5				1	
0203-493-421	0203-493	0203-421	37.866	0.013	300.918	300.142	0.5	1	1.5	0: Circular	3				1	
0203-494-254	0203-494	0203-254	629.097	0.013	266.073	264.393	0.5	1	1.5	0: Circular	4				1	
0203-495-241	0203-495	0203-241	165.397	0.013	266.938	266.53	0.5	1	1.5	0: Circular	2.5				1	
0203-496-497	0203-496	0203-497	142.767	0.013	305.247	304.414	0.5	1	1.5	0: Circular	3				1	
0203-497-498	0203-497	0203-498	76.656	0.013	304.414	304.372	0.5	1	1.5	0: Circular	3				1	
0203-498-499	0203-498	0203-499	62.764	0.013	304.372	304.284	0.5	1	1.5	0: Circular	3				1	
0203-499-500	0203-499	0203-500	163.012	0.013	304.169	303.19	0.5	1	1.5	0: Circular	3				1	
0203-500-200	0203-500	0203-200	80.191	0.04	303.19	300.68	0.5	1	1.5	21: Irregular	6.864					TRANSECT-353
0203-501-194	0203-501	0203-194	33.431	0.013	303.351	301.362	0.5	1	1.5	21: Irregular	3.615					TRANSECT-525
0203-502-503	0203-502	0203-503	193.652	0.013	312.359	311.285	0.5	1	1.5	0: Circular	3.5				1	
0203-503-504	0203-503	0203-504	308.778	0.013	311.285	307.796	0.5	1	1.5	0: Circular	3.5				1	
0203-504-198	0203-504	0203-198	119.738	0.04	307.796	306.605	0.5	1	1.5	21: Irregular	3.075					TRANSECT-355
0203-505-504	0203-505	0203-504	104.058	0.013	308.602	307.796	0.5	1	1.5	0: Circular	3				1	
0203-506-430	0203-506	0203-430	251.688	0.013	271.264	269.896	0.5	1	1.5	0: Circular	2.5				1	
0203-507-429	0203-507	0203-429	59.34	0.013	264.5	264.467	0.5	1	1.5	2: Rect-Closed	8	18			1	
0203-508-509	0203-508	0203-509	58.161	0.04	272.24	271.3	0.5	1	1.5	21: Irregular	7.34					TRANSECT-63
0203-509-517	0203-509	0203-517	35.182	0.04	271.3	270.61	0.5	1	1.5	21: Irregular	7.66					TRANSECT-1
0203-510-095	0203-510	0203-095	20.638	0.013	270.793	267.8	0.5	1	1.5	0: Circular	3				1	
0203-511-230	0203-511	0203-230	15.493	0.013	325.354	324.5	0.5	1	1.5	0: Circular	2.5				1	
0203-512-231	0203-512	0203-231	179.547	0.013	324.159	321.38	0.5	1	1.5	0: Circular	2.5				1	
0203-513-229	0203-513	0203-229	95.129	0.013	329.08	326.84	0.5	1	1.5	0: Circular	2				1	
0203-514-515	0203-514	0203-515	244.9	0.013	319.617	318.758	0.5	1	1.5	0: Circular	3				1	
0203-515-232	0203-515	0203-232	112.81	0.013	318.651	316.86	0.5	1	1.5	0: Circular	3				1	
0203-516-393	0203-516	0203-393	64.195	0.013	312.068	310.878	0.5	1	1.5	0: Circular	3.5				1	
0203-517-048	0203-517	0203-048	60.549	0.04	270.61	270.93	0.5	1	1.5	21: Irregular	8.92					TRANSECT-65
0203-518-519	0203-518	0203-519	121.073	0.013	316.311	315.411	0.5	1	1.5	6: Ellipse-Horiz	2.4	3.8			1	TRANSECT-315
0203-519-203	0203-519	0203-203	604.293	0.04	315.411	306.226	0.5	1	1.5	21: Irregular	5.134					TRANSECT-315
0203-520-006	0203-520	0203_OF06	26.045	0.013	259.95	260.32	0.5	1	1.5	21: Irregular	7.17					TRANSECT-51
0203-521-526	0203-521	0203-526	33.734	0.013	317.8	317.546	0.5	1	1.5	0: Circular	3.5				1	
0203-522-521	0203-522	0203-521	162.855	0.013	318	317.8	0.5	1	1.5	0: Circular	3.5				1	
0203-523-524	0203-523	0203-524	53.629	0.013	318.5	318.25	0.5	1	1.5	0: Circular	3.5				1	
0203-524-522	0203-524	0203-522	94.88	0.013	318.25	318	0.5	1	1.5	0: Circular	3.5				1	
0203-525-033	0203-525	0203-033	121.998	0.04	264.31	262.01	0.5	1	1.5	21: Irregular	16.9					TRANSECT-47
0203-526-527	0203-526	0203-527	61.629	0.013	317.546	317.491	0.5	1	1.5	0: Circular	3.5				1	
0203-527-528	0203-527	0203-528	88.71	0.013	317.491	316.586	0.5	1	1.5	0: Circular	3.5				1	
0203-528-234	0203-528	0203-234	99.703	0.013	316.586	315.75	0.5	1	1.5	0: Circular	4				1	
0203-529-235	0203-529	0203-235	85.266	0.013	315.5	315.25	0.5	1	1.5	0: Circular	4				1	
0203-530-001	0203-530	0203-001	761.254	0.04	266.86	266.39	0.5	1	1.5	21: Irregular	9.53					TRANSECT-61
0203-531-055	0203-531	0203-055	278.1	0.013	312.734	307.562	0.5	1	1.5	0: Circular	2.5				1	
0203-532-580	0203-532	0203-580	150.785	0.04	292.83	290.81	0.5	1	1.5	21: Irregular	9.45					TRANSECT-151
0203-533-538	0203-533	0203-538	196.193	0.013	300.59	299.84	0.5	1	1.5	2: Rect-Closed	3	12			1	
0203-534-535	0203-534	0203-535	19.325	0.013	303.471	303.298	0.5	1	1.5	0: Circular	3				1	
0203-535-542	0203-535	0203-542	134.821	0.013	303.298	300.882	0.5	1	1.5	0: Circular	3				1	
0203-536-537	0203-536	0203-537	69.886	0.013	297.171	297.171	0.5	1	1.5	0: Circular	3.5					
0203-537-539	0203-537	0203-539	321.343	0.013	297.171	294.66	0.5	1	1.5	0: Circular	4				1	
0203-538-608	0203-538	0203-608	23.522	0.04	299.84	298.14	0.5	1	1.5	21: Irregular	4.87					TRANSECT-107
0203-539-540	0203-539	0203-540	354.759	0.013	294.66	291.03	0.5	1	1.5	0: Circular	4				1	
0203-540-541	0203-540	0203-541	75.71	0.013	290.99	290.14	0.5	1	1.5	0: Circular	4				1	
0203-541-543	0203-541	0203-543	325.314	0.013	290.14	284.46	0.5	1	1.5	0: Circular	4				1	
0203-542-536	0203-542	0203-536	225.087	0.013	300.882	297.171	0.5	1	1.5	0: Circular	3.5				1	
0203-543-544	0203-543	0203-544	110.504	0.013	284.46	283.1	0.5	1	1.5	0: Circular	4				1	
0203-544-650	0203-544	0203-650	79.428	0.04	283.1	282.42	0.5	1	1.5	21: Irregular	4.04					TRANSECT-219
0203-545-251	0203-545	0203-251	141.621	0.013	279.978	279.978	0.5	1	1.5	21: Irregular	3.91				1	TRANSECT-221
0203-546-548	0203-546	0203-548	53.449	0.04	279.95	279.92	0.5	1	1.5	2: Rect-Closed	3.5	8			1	TRANSECT-225

Table A-4. Existing System Pipe/Channels

Conduit ID (Char)	From Node ID (Char)	To Node ID (Char)	LENGTH (ft)	Manning's N (Double)	Upstream Invert (ft)	Downstream Invert (ft)	Entry Loss Coeff. (Double)	Exit Loss Coeff. (Double)	Average Loss Coeff. (Double)	SHAPE_TYPE (Int)	Max Depth (ft)	GEOM2 (ft)	GEOM3 (ft)	GEOM4 (ft)	Number of Barrels (Long)	TRANSECT (Char)
0203-547-600	0203-547	0203-600	279.692	0.04	294.71	292	0.5	1	1.5	21: Irregular	6.67					TRANSECT-117
0203-548-651	0203-548	0203-651	17.192	0.04	279.92	279.8	0.5	1	1.5	21: Irregular	3.89					TRANSECT-227
0203-549-633	0203-549	0203-633	13.397	0.04	278.84	278.91	0.5	1	1.5	21: Irregular	4.49					TRANSECT-229
0203-550-638	0203-550	0203-638	40.982	0.04	266.915	265.72	0.5	1	1.5	21: Irregular	10.26					TRANSECT-239
0203-551-550	0203-551	0203-550	60.268	0.013	275.45	266.915	0.5	1	1.5	0: Circular	3.5				1	
0203-552-553	0203-552	0203-553	216.753	0.04	273.06	271.74	0.5	1	1.5	0: Circular	3				1	
0203-553-322	0203-553	0203-322	153.183	0.013	271.02	270.135	0.5	1	1.5	0: Circular	4				1	
0203-554-555	0203-554	0203-555	110.43	0.013	271.82	269.72	0.5	1	1.5	0: Circular	3				1	
0203-555-319	0203-555	0203-319	217.817	0.013	268.07	267.7	0.5	1	1.5	0: Circular	4				1	
0203-556-558	0203-556	0203-558	335.861	0.013	266.85	261.402	0.5	1	1.5	0: Circular	4.5				1	
0203-557-584	0203-557	0203-584	177.178	0.013	289.02	286.18	0.5	1	1.5	2: Rect-Closed	14	6			1	
0203-558-644	0203-558	0203-644	106.501	0.04	261.402	259.72	0.5	1	1.5	21: Irregular	17.29					TRANSECT-257
0203-559-547	0203-559	0203-547	66.714	0.04	294.71	294.71	0.5	1	1.5	21: Irregular	8.04					TRANSECT-113
0203-560-564	0203-560	0203-564	227.654	0.04	345.22	341.1	0.5	1	1.5	21: Irregular	4.58					TRANSECT-119
0203-561-565	0203-561	0203-565	124.766	0.04	335.66	333.73	0.5	1	1.5	2: Rect-Closed	5	8			1	TRANSECT-123
0203-562-590	0203-562	0203-590	68.075	0.04	326	325.93	0.5	1	1.5	21: Irregular	4.43					TRANSECT-73
0203-563-562	0203-563	0203-562	111.158	0.04	328.07	326	0.5	1	1.5	7: Ellipse-Vert	5.67	3.58			1	TRANSECT-71
0203-564-561	0203-564	0203-561	574.377	0.04	341.1	335.66	0.5	1	1.5	21: Irregular	4.58					TRANSECT-119
0203-565-566	0203-565	0203-566	285.46	0.013	333.38	329.36	0.5	1	1.5	21: Irregular	6.13					TRANSECT-127
0203-566-567	0203-566	0203-567	452.743	0.04	329.36	324.41	0.5	1	1.5	21: Irregular	4.89					TRANSECT-129
0203-567-568	0203-567	0203-568	479.2	0.04	324.41	321.67	0.5	1	1.5	21: Irregular	7.77					TRANSECT-131
0203-568-569	0203-568	0203-569	521.575	0.04	321.67	320.28	0.5	1	1.5	21: Irregular	6.66					TRANSECT-133
0203-569-570	0203-569	0203-570	454.595	0.04	320.28	317.96	0.5	1	1.5	21: Irregular	5.1					TRANSECT-135
0203-570-571	0203-570	0203-571	522.291	0.04	317.96	312.66	0.5	1	1.5	21: Irregular	4.54					TRANSECT-137
0203-571-572	0203-571	0203-572	405.428	0.04	312.66	310.61	0.5	1	1.5	21: Irregular	7.53					TRANSECT-139
0203-572-573	0203-572	0203-573	52.378	0.013	310.61	310.61	0.5	1	1.5	2: Rect-Closed	10	15			1	
0203-573-574	0203-573	0203-574	200.358	0.04	310.61	310.61	0.5	1	1.5	21: Irregular	8.35					TRANSECT-141
0203-574-575	0203-574	0203-575	174.484	0.04	310.61	310.61	0.5	1	1.5	21: Irregular	6.44					TRANSECT-577
0203-575-383	0203-575	0203-383	735.82	0.013	310.61	311.07	0.5	1	1.5	21: Irregular	4.91				1	TRANSECT-143
0203-576-577	0203-576	0203-577	391.595	0.04	308.49	295.06	0.5	1	1.5	21: Irregular	13.143					TRANSECT-147
0203-577-578	0203-577	0203-578	43.274	0.04	295.06	295.13	0.5	1	1.5	21: Irregular	13.143					TRANSECT-147
0203-578-579	0203-578	0203-579	534.695	0.04	295.13	292.85	0.5	1	1.5	21: Irregular	12.6					TRANSECT-149
0203-579-247	0203-579	0203-247	86.548	0.013	292.848	293.756	0.5	1	1.5	2: Rect-Closed	16	25			1	
0203-580-582	0203-580	0203-582	265.306	0.04	290.81	291.26	0.5	1	1.5	21: Irregular	9.94					TRANSECT-153
0203-581-592	0203-581	0203-592	198.241	0.013	292.65	290.59	0.5	1	1.5	0: Circular	3				1	
0203-582-583	0203-582	0203-583	150.111	0.04	291.26	288.12	0.5	1	1.5	21: Irregular	8.81					TRANSECT-155
0203-583-584	0203-583	0203-584	70.126	0.04	288.12	286.18	0.5	1	1.5	21: Irregular	11.75					TRANSECT-157
0203-584-585	0203-584	0203-585	57.853	0.04	286.18	286.14	0.5	1	1.5	21: Irregular	13.35					TRANSECT-159
0203-585-586	0203-585	0203-586	66.928	0.04	286.14	285.95	0.5	1	1.5	21: Irregular	13.32					TRANSECT-161
0203-586-587	0203-586	0203-587	288.203	0.04	285.95	284.62	0.5	1	1.5	21: Irregular	14.17					TRANSECT-163
0203-587-588	0203-587	0203-588	151.885	0.04	284.62	282.83	0.5	1	1.5	21: Irregular	13.84					TRANSECT-165
0203-588-589	0203-588	0203-589	253.904	0.04	282.83	285.06	0.5	1	1.5	21: Irregular	15.24					TRANSECT-167
0203-589-612	0203-589	0203-612	443.23	0.04	285.06	284.67	0.5	1	1.5	21: Irregular	16.27				1	TRANSECT-447
0203-590-591	0203-590	0203-591	380.314	0.04	325.93	321.05	0.5	1	1.5	21: Irregular	2.03					TRANSECT-75
0203-591-593	0203-591	0203-593	362.663	0.04	321.05	316.18	0.5	1	1.5	21: Irregular	2.62					TRANSECT-77
0203-592-611	0203-592	0203-611	841.982	0.013	290.53	286.84	0.5	1	1.5	0: Circular	4				1	
0203-593-594	0203-593	0203-594	544.651	0.04	316.18	308.93	0.5	1	1.5	21: Irregular	3.6					TRANSECT-79
0203-594-595	0203-594	0203-595	179.252	0.04	308.93	307.99	0.5	1	1.5	21: Irregular	2.19					TRANSECT-81
0203-595-596	0203-595	0203-596	436.852	0.04	307.99	306.36	0.5	1	1.5	21: Irregular	3.06					TRANSECT-83
0203-596-597	0203-596	0203-597	524.248	0.04	306.36	297.53	0.5	1	1.5	21: Irregular	2.33					TRANSECT-85
0203-597-598	0203-597	0203-598	130.734	0.04	297.53	296.91	0.5	1	1.5	21: Irregular	7.08					TRANSECT-87
0203-598-599	0203-598	0203-599	368.141	0.04	296.91	294.03	0.5	1	1.5	21: Irregular	6.15					TRANSECT-89
0203-599-679	0203-599	0203-679	259.587	0.04	294.03	294	0.5	1	1.5	2: Rect-Closed	4.583	6.25			1	
0203-600-601	0203-600	0203-601	89.683	0.04	291.7	291.02	0.5	1	1.5	21: Irregular	6.67					TRANSECT-117
0203-601-557	0203-601	0203-557	44.073	0.04	291.02	289.02	0.5	1	1.5	21: Irregular	9.29					TRANSECT-579
0203-602-532	0203-602	0203-532	80.419	0.013	293.09	292.83	0.5	1	1.5	2: Rect-Closed	9	24			1	
0203-603-604	0203-603	0203-604	179.469	0.04	304.74	304.05	0.5	1	1.5	21: Irregular	4.549					TRANSECT-97
0203-604-605	0203-604	0203-605	40.537	0.04	304.05	304.03	0.5	1	1.5	21: Irregular	4.539					TRANSECT-99
0203-605-606	0203-605	0203-606	294.71	0.04	304.03	302	0.5	1	1.5	21: Irregular	4.52					TRANSECT-101
0203-606-607	0203-606	0203-607	16.676	0.04	302	301.75	0.5	1	1.5	21: Irregular	3.356					TRANSECT-103
0203-607-533	0203-607	0203-533	109.229	0.04	301.75	300.59	0.5	1	1.5	21: Irregular	3.063					TRANSECT-105
0203-608-609	0203-608	0203-609	473.72	0.013	298.14	295.03	0.5	1	1.5	21: Irregular	6.23					TRANSECT-109
0203-609-610	0203-609	0203-610	185.052	0.04	295.03	294.71	0.5	1	1.5	21: Irregular	8.2					TRANSECT-111
0203-610-559	0203-610	0203-559	36.029	0.013	294.71	294.71	0.5	1	1.5	21: Irregular	8.04					TRANSECT-113
0203-611-621	0203-611	0203-621	53.301	0.04	282.35	282.5	0.5	1	1.5	21: Irregular	15.12					TRANSECT-171
0203-612-611	0203-612	0203-611	192.98	0.04	284.67	282.35	0.5	1	1.5	21: Irregular	11.76					TRANSECT-169
0203-613-614	0203-613	0203-614	356.585	0.04	281.74	280.14	0.5	1	1.5	21: Irregular	13.8					TRANSECT-175
0203-614-615	0203-614	0203-615	205.257	0.04	280.14	280.14	0.5	1	1.5	21: Irregular	14.09					TRANSECT-177
0203-615-616	0203-615	0203-616	383.127	0.04	280.14	279.96	0.5	1	1.5	21: Irregular	16.66					TRANSECT-179
0203-616-617	0203-616	0203-617	437.773	0.04	279.96	280.13	0.5	1	1.5	21: Irregular	12.01					TRANSECT-181
0203-617-618	0203-617	0203-618	127.936	0.04	280.13	279.55	0.5	1	1.5	21: Irregular	10.93					TRANSECT-183
0203-618-619	0203-618	0203-619	241.362	0.04	279.55	279	0.5	1	1.5	21: Irregular	10.66					TRANSECT-185
0203-619-620	0203-619	0203-620	421.257	0.04	279	279.43	0.5	1	1.5	21: Irregular	11.76					TRANSECT-187
0203-620-622	0203-620	0203-622	196.827	0.04	279.43	279.72	0.5	1	1.5	21: Irregular	13.9					TRANSECT-189
0203-621-613	0203-621	0203-613	136.081	0.04	282.5	281.74	0.5	1	1.5	21: Irregular	13.58					TRANSECT-173
0203-622-623	0203-622	0203-623	33.185	0.04	279.72	279.55	0.5	1	1.5	21: Irregular	1.76					TRANSECT-191
0203-623-676	0203-623	0203-676	248.926	0.04	279.55	279.18	0.5	1	1.5	21: Irregular	7.33				1	TRANSECT-205
0203-624-623	0203-624	0203-623	46.221	0.04	280.69	279.55	0.5	1	1.5	21: Irregular	4.01					TRANSECT-203
0203-625-270	0203-625	0203-270	63.559	0.04	283.66	282.52	0.5	1	1.5	21: Irregular	11.2					TRANSECT-573
0203-626-657	0203-626	0203-657	106.898	0.04	287.67	285.6	0.5	1	1.5	21: Irregular	3.86				1	TRANSECT-197
0203-627-252	0203-627	0203-252	439.33	0.04	293.33	292.49	0.5	1	1.5	21: Irregular	6.45				1	TRANSECT-195
0203-628-629	0203-628	0203-629	146.689	0.04	278.72	277.015	0.5	1	1.5	21: Irregular	6.99					TRANSECT-207
0203-629-630	0203-629	0203-630	520.793	0.04	277.015	273.076	0.5	1	1.5	21: Irregular	8.41					TRANSECT-565
0203-630-268	0203-630	0203-268	449.131	0.04	273.076	273.014	0.5	1	1.5	21: Irregular	12.401					TRANSECT-213
0203-631-632	0203-631	0203-632	528.63	0.04	272.075	271.89	0.5	1	1.5	21: Irregular	12.016					TRANSECT-215
0203-632-637	0203-632	0203-637	77.116	0.04	271.89	272.77	0.5	1	1.5	21: Irregular	9.93					TRANSECT-217
0203-633-634	0203-633	0203-634	179.566	0.04	278.91	278.36	0.5	1	1.5	21: Irregular	4.51					TRANSECT-231
0203-634-255	0203-634	0203-255	261.449	0.04	278.36	275.948	0.5	1	1.5	21: Irregular	4.56					TRANSECT-233
0203-635-636	0203-635	0203-636	312.501	0.04	275.52	271.83	0.5	1	1.5	21: Irregular	6.75					TRANSECT-235
0203-636-637	0203-636	0203-637	97.836	0.04	271.83	272.77	0.5	1	1.5	21: Irregular	11.29					TRANSECT-237
0203-637-550	0203-637	0203-550	201.185	0.04	272.77	266.915	0.5	1	1.5	21: Irregular	10.26					TRANSECT-239

Table A-4. Existing System Pipe/Channels

Conduit ID (Char)	From Node ID (Char)	To Node ID (Char)	LENGTH (ft)	Manning's N (Double)	Upstream Invert (ft)	Downstream Invert (ft)	Entry Loss Coeff. (Double)	Exit Loss Coeff. (Double)	Average Loss Coeff. (Double)	SHAPE_TYPE (Int)	Max Depth (ft)	GEOM2 (ft)	GEOM3 (ft)	GEOM4 (ft)	Number of Barrels (Long)	TRANSECT (Char)
0203-638-639	0203-638	0203-639	220.845	0.04	265.72	267.96	0.5	1	1.5	21: Irregular	17.23					TRANSECT-247
0203-639-640	0203-639	0203-640	293.451	0.04	267.96	268.08	0.5	1	1.5	21: Irregular	11.92					TRANSECT-249
0203-640-641	0203-640	0203-641	451.88	0.04	268.08	265.9	0.5	1	1.5	21: Irregular	13.4					TRANSECT-251
0203-641-642	0203-641	0203-642	299.247	0.04	265.9	264.66	0.5	1	1.5	21: Irregular	7.11					TRANSECT-253
0203-642-643	0203-642	0203-643	569.797	0.04	264.66	264.71	0.5	1	1.5	21: Irregular	17.21					TRANSECT-255
0203-643-558	0203-643	0203-558	316.015	0.04	264.71	261.402	0.5	1	1.5	21: Irregular	17.29					TRANSECT-257
0203-644-645	0203-644	0203-645	610.977	0.04	259.72	255.64	0.5	1	1.5	21: Irregular	22.03					TRANSECT-259
0203-645-646	0203-645	0203-646	196.701	0.04	255.64	256.21	0.5	1	1.5	21: Irregular	23.07					TRANSECT-261
0203-646-007	0203-646	0203_OF07	256.15	0.04	256.21	255.3	0.5	1	1.5	21: Irregular	23.07					TRANSECT-261
0203-647-351	0203-647	0203-351	342.074	0.04	277.014	275.48	0.5	1	1.5	21: Irregular	3.6					TRANSECT-243
0203-648-647	0203-648	0203-647	124.015	0.04	277.57	277.014	0.5	1	1.5	21: Irregular	3.6					TRANSECT-243
0203-649-647	0203-649	0203-647	289.922	0.04	278.15	277.014	0.5	1	1.5	21: Irregular	4.97					TRANSECT-241
0203-650-250	0203-650	0203-250	346.654	0.04	282.42	280.75	0.5	1	1.5	21: Irregular	4.04					TRANSECT-219
0203-651-248	0203-651	0203-248	259.569	0.04	279.8	279.462	0.5	1	1.5	21: Irregular	4.17				1	TRANSECT-449
0203-652-653	0203-652	0203-653	306.926	0.013	308.228	302.65	0.5	1	1.5	0: Circular	3				1	
0203-653-654	0203-653	0203-654	500.578	0.013	302.65	298.72	0.5	1	1.5	0: Circular	3.5				1	
0203-654-656	0203-654	0203-656	270.418	0.013	298.72	293.85	0.5	1	1.5	0: Circular	4				1	
0203-655-661	0203-655	0203-661	28.787	0.013	294.49	294.44	0.5	1	1.5	2: Rect-Closed	6	12			1	
0203-656-272	0203-656	0203-272	500	0.01	293.82	291.13	0.5	1	1.5	0: Circular	4				1	
0203-657-625	0203-657	0203-625	368.868	0.04	285.6	283.66	0.5	1	1.5	21: Irregular	3.86				1	TRANSECT-197
0203-658-671	0203-658	0203-671	30.263	0.04	283.06	282.6	0.5	1	1.5	2: Rect-Closed	4.5	5			1	
0203-659-624	0203-659	0203-624	85.492	0.013	282.23	280.69	0.5	1	1.5	21: Irregular	3.98					TRANSECT-201
0203-660-552	0203-660	0203-552	21.468	0.013	273.28	273.07	0.5	1	1.5	0: Circular	3				1	
0203-661-331	0203-661	0203-331	150.64	0.04	294.44	294	0.5	1	1.5	2: Rect-Closed	6	12			1	
0203-662-663	0203-662	0203-663	350.167	0.013	297.19	295.77	0.5	1	1.5	0: Circular	3.5				1	
0203-663-664	0203-663	0203-664	61.568	0.013	295.77	294.3	0.5	1	1.5	0: Circular	3.5				1	
0203-664-627	0203-664	0203-627	31.322	0.013	294.3	293.77	0.5	1	1.5	0: Circular	3.5				1	
0203-665-673	0203-665	0203-673	39.984	0.013	292.46	292.4	0.5	1	1.5	2: Rect-Closed	6	12			1	
0203-666-667	0203-666	0203-667	164.04	0.013	296.63	295.51	0.5	1	1.5	0: Circular	3				1	
0203-667-668	0203-667	0203-668	142.994	0.013	295.24	293.62	0.5	1	1.5	0: Circular	3				1	
0203-668-669	0203-668	0203-669	43.49	0.013	293.44	292.68	0.5	1	1.5	0: Circular	3				1	
0203-669-670	0203-669	0203-670	148.568	0.013	292.68	292.49	0.5	1	1.5	0: Circular	3				1	
0203-670-252	0203-670	0203-252	149.96	0.013	292.49	292.49	0.5	1	1.5	0: Circular	3.5				1	
0203-671-672	0203-671	0203-672	41.063	0.013	282.6	282.35	0.5	1	1.5	2: Rect-Closed	4.5	5			1	
0203-672-659	0203-672	0203-659	26.593	0.013	282.35	282.23	0.5	1	1.5	2: Rect-Closed	4.5	5			1	
0203-673-677	0203-673	0203-677	205.802	0.013	292.4	291.93	0.5	1	1.5	2: Rect-Closed	6	12			1	
0203-674-675	0203-674	0203-675	23.026	0.013	282.6	282.48	0.5	1	1.5	0: Circular	4				1	
0203-675-676	0203-675	0203-676	214.968	0.013	282.48	281.88	0.5	1	1.5	0: Circular	4				1	
0203-676-628	0203-676	0203-628	342.913	0.013	279.18	278.72	0.5	1	1.5	21: Irregular	7.33					TRANSECT-205
0203-677-679	0203-677	0203-679	270.199	0.013	291.93	291.8	0.5	1	1.5	2: Rect-Closed	6	12			1	
0203-678-283	0203-678	0203-283	1,259.19	0.013	294.32	287.58	0.5	1	1.5	0: Circular	3.5				1	
0203-679-600	0203-679	0203-600	13.45	0.04	291.8	291.7	0.5	1	1.5	21: Irregular	7.55					TRANSECT-91
0203-680-681	0203-680	0203-681	245.111	0.013	285.883	285.14	0.5	1	1.5	0: Circular	3				1	
0203-681-682	0203-681	0203-682	217.094	0.013	284.81	283	0.5	1	1.5	0: Circular	3				1	
0203-682-683	0203-682	0203-683	35.322	0.013	283	282.89	0.5	1	1.5	0: Circular	4				1	
0203-683-684	0203-683	0203-684	150.345	0.013	282.89	281.84	0.5	1	1.5	0: Circular	4				1	
0203-684-685	0203-684	0203-685	367.622	0.013	281.84	280.44	0.5	1	1.5	0: Circular	4				1	
0203-685-686	0203-685	0203-686	26.301	0.013	280.44	280.164	0.5	1	1.5	0: Circular	4.5				1	
0203-686-687	0203-686	0203-687	48.952	0.013	280.164	280.164	0.5	1	1.5	0: Circular	4.5				1	
0203-687-269	0203-687	0203-269	9.081	0.04	280.164	280.164	0.5	1	1.5	21: Irregular	7.321					TRANSECT-209
0203-688-689	0203-688	0203-689	40.277	0.013	281.07	281.033	0.5	1	1.5	0: Circular	3				1	
0203-689-631	0203-689	0203-631	680.051	0.013	281.033	276.77	0.5	1	1.5	0: Circular	3.333				1	
CDT-395	0203-394	0203-395	36.122	0.013	304.237	304.111	0.5	1	1.5	0: Circular	3.75				1	

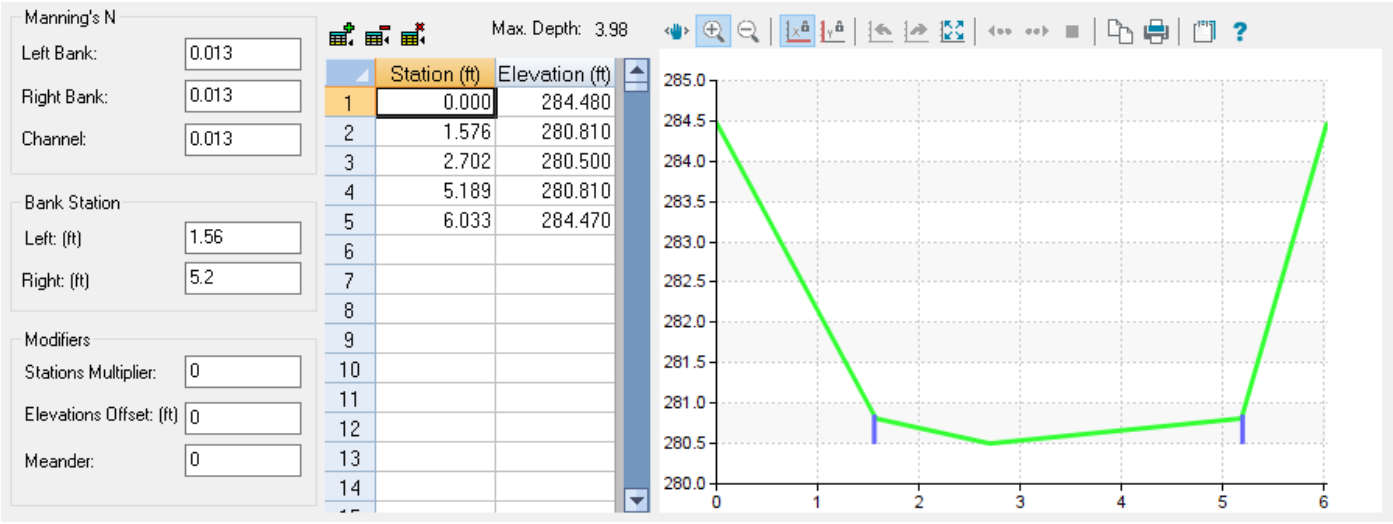


Figure A-1. Irregular Cross-Section Transect-25

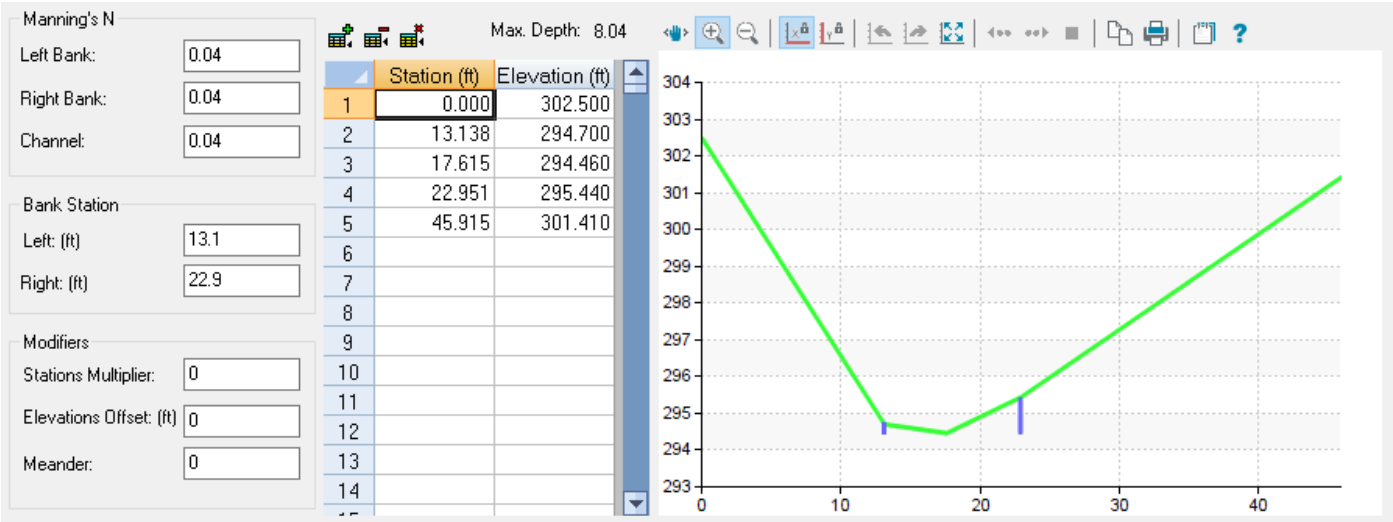


Figure A-2. Irregular Cross-Section Transect-113

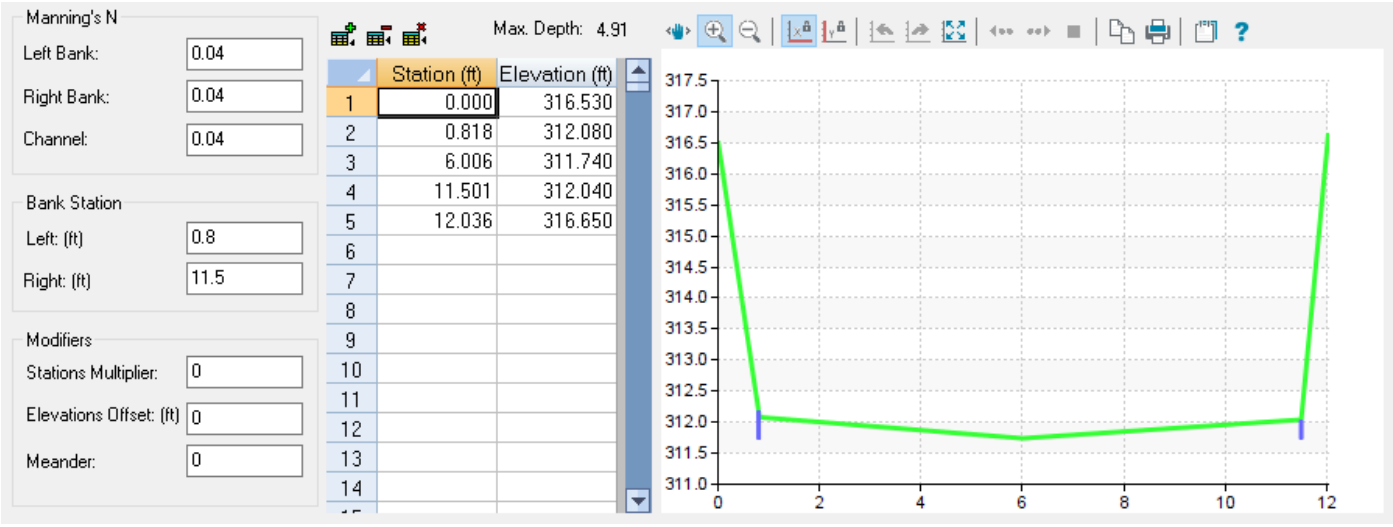


Figure A-3. Irregular Cross-Section Transect-143

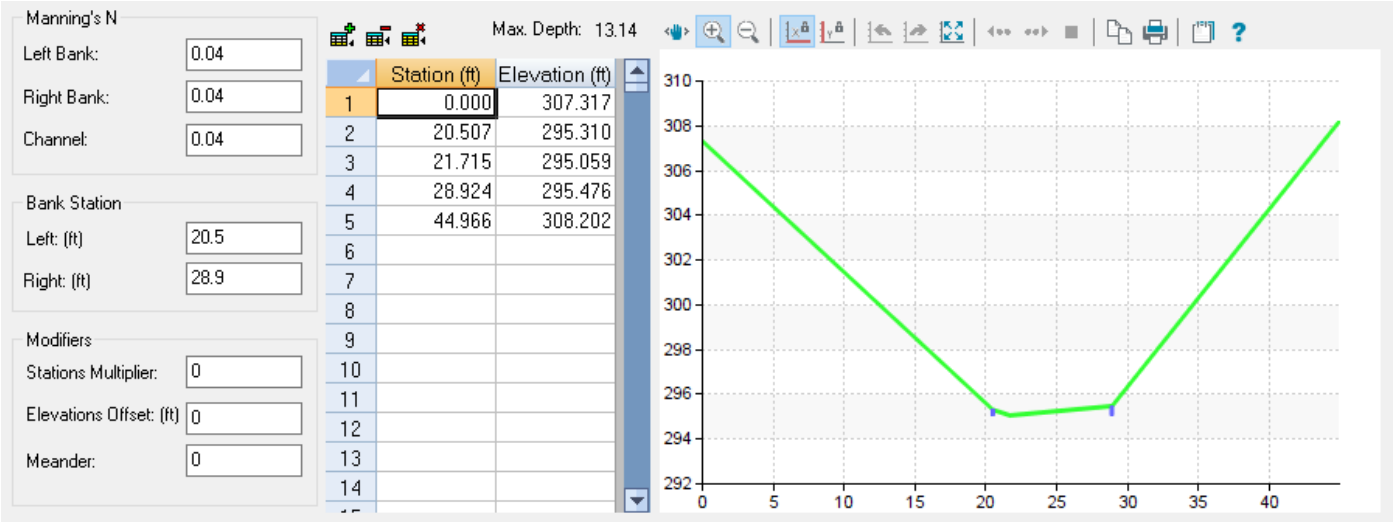


Figure A-4. Irregular Cross-Section Transect-147

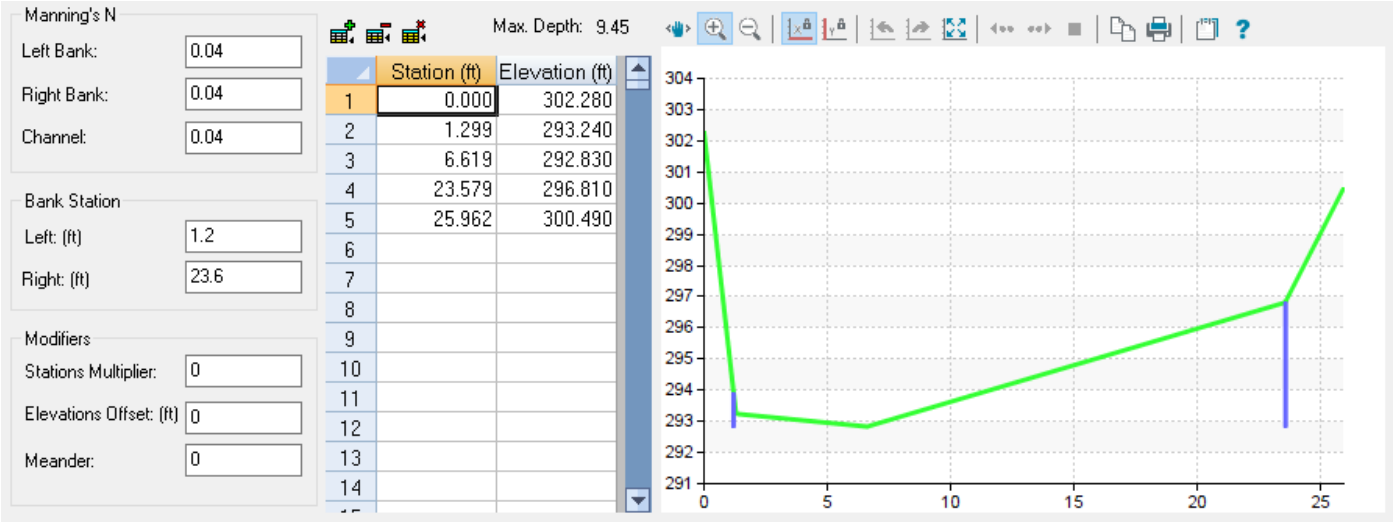


Figure A-5. Irregular Cross-Section Transect-151

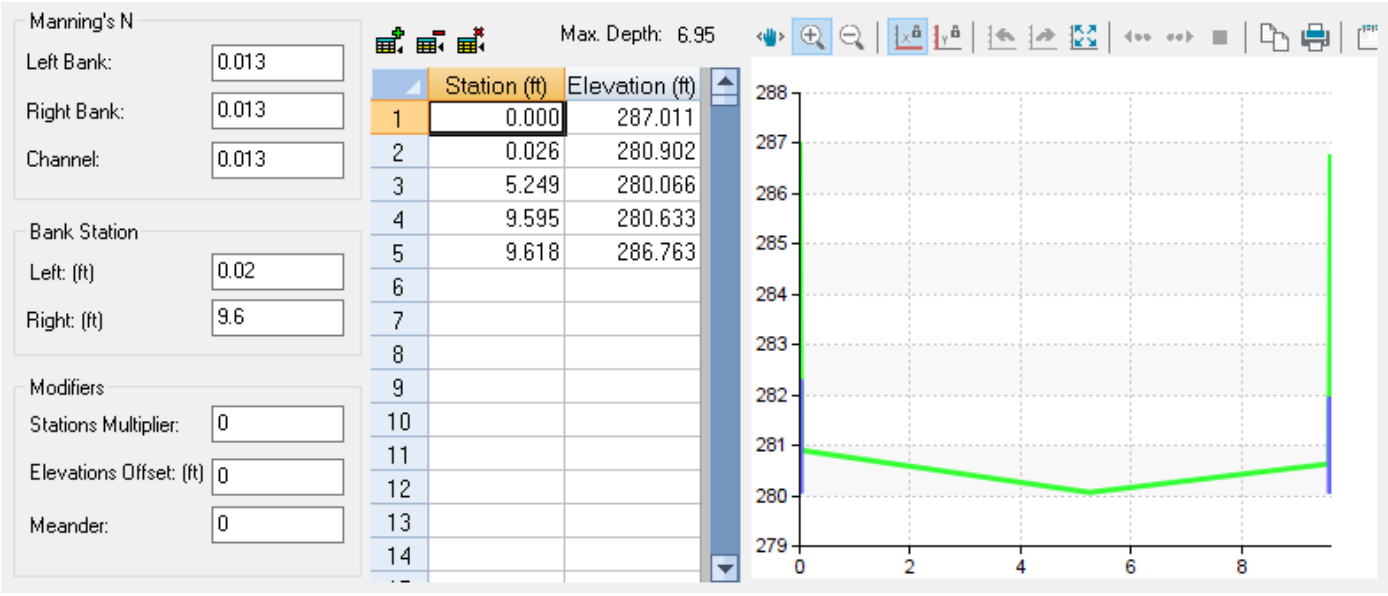


Figure A-6. Irregular Cross-Section Transect-263

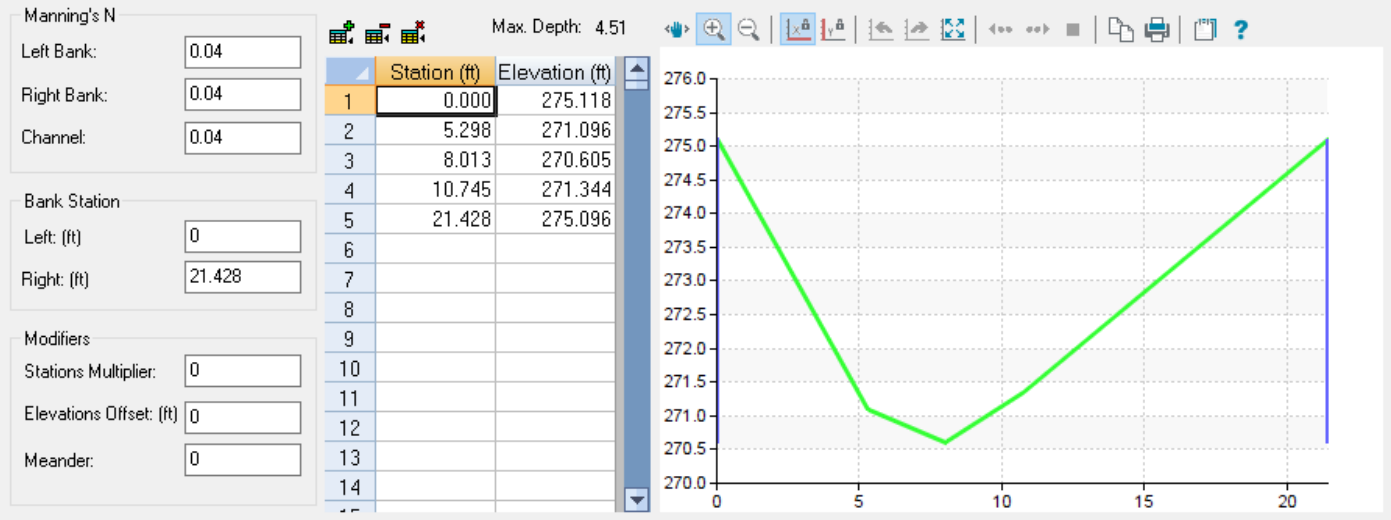


Figure A-7. Irregular Cross-Section Transect-303

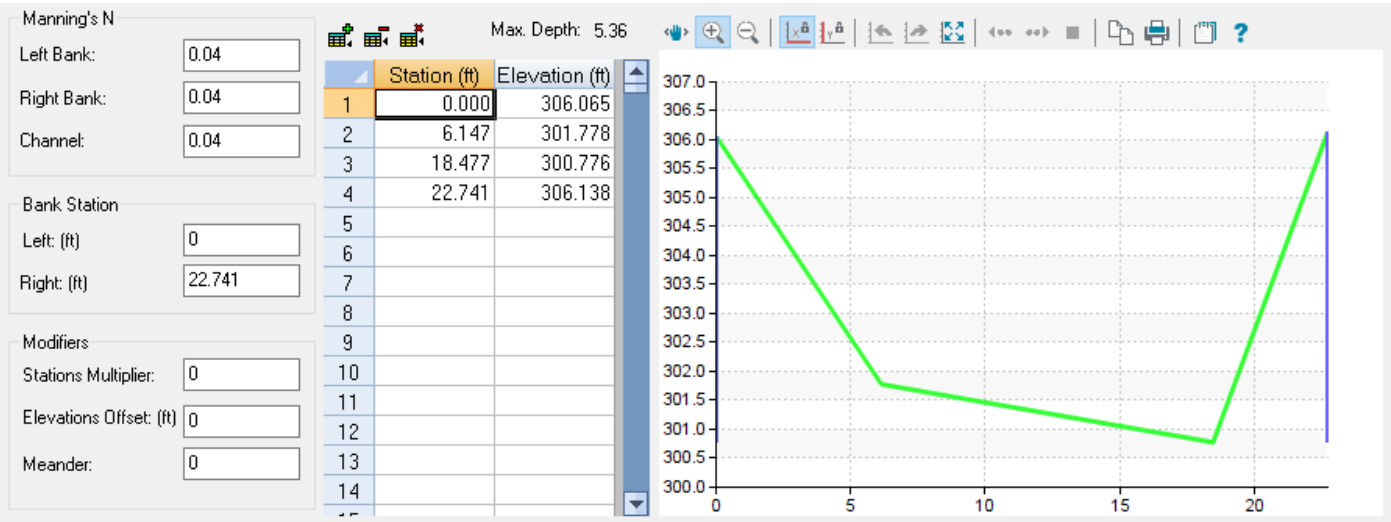


Figure A-8. Irregular Cross-Section Transect-359

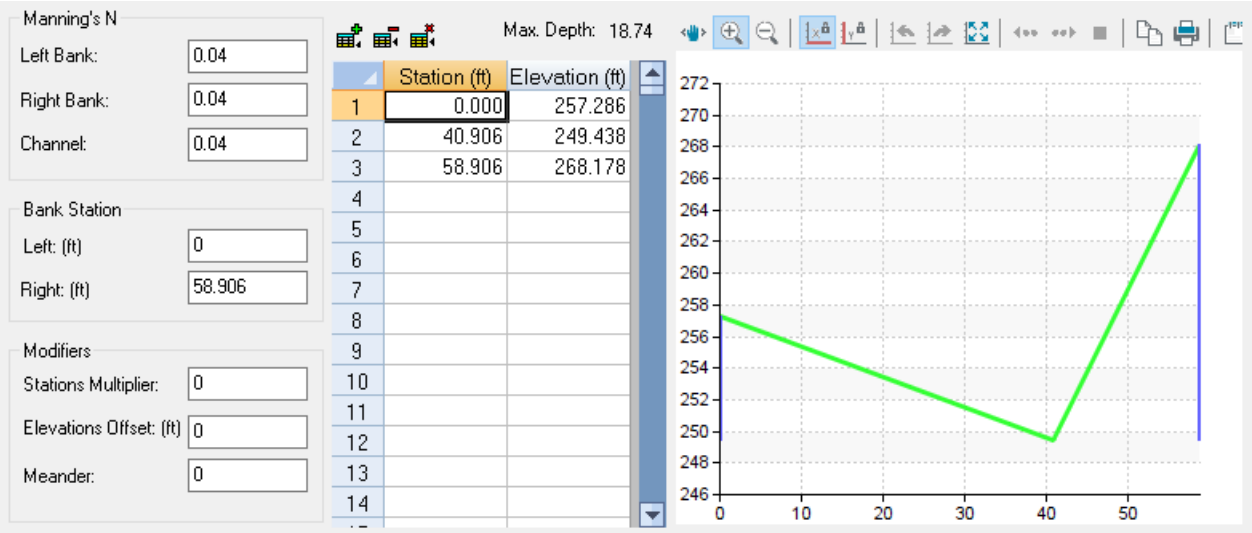


Figure A-9. Irregular Cross-Section Transect-417

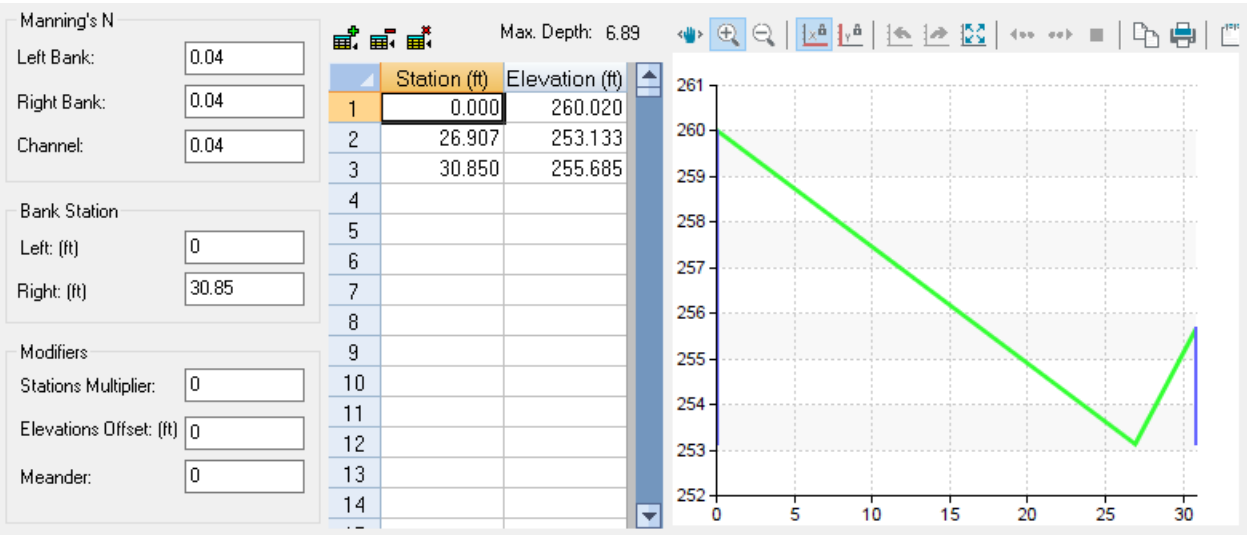


Figure A-10. Irregular Cross-Section Transect-437

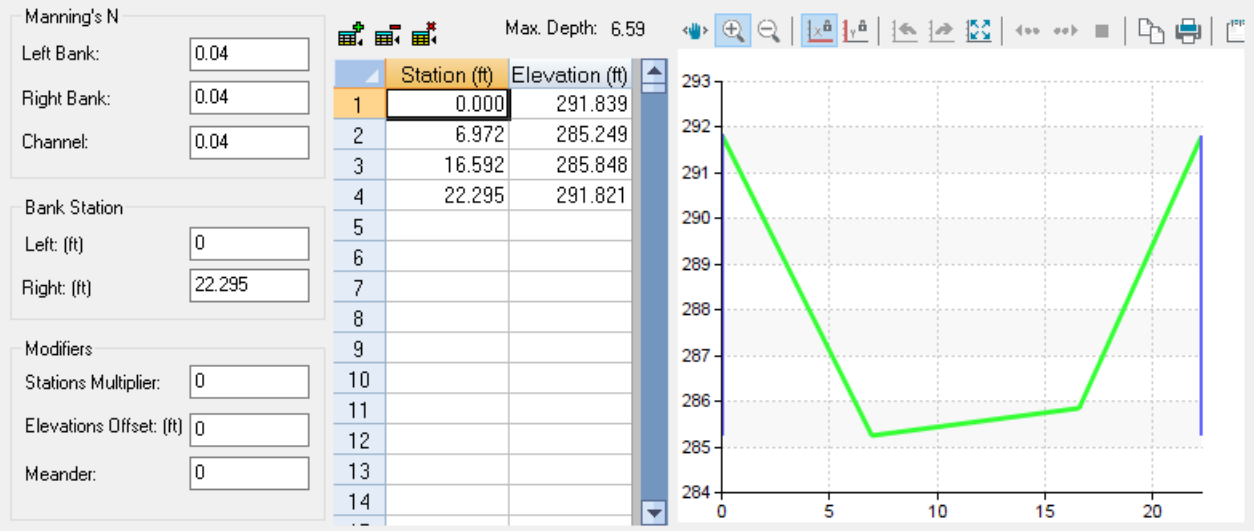


Figure A-11. Irregular Cross-Section Transect-515

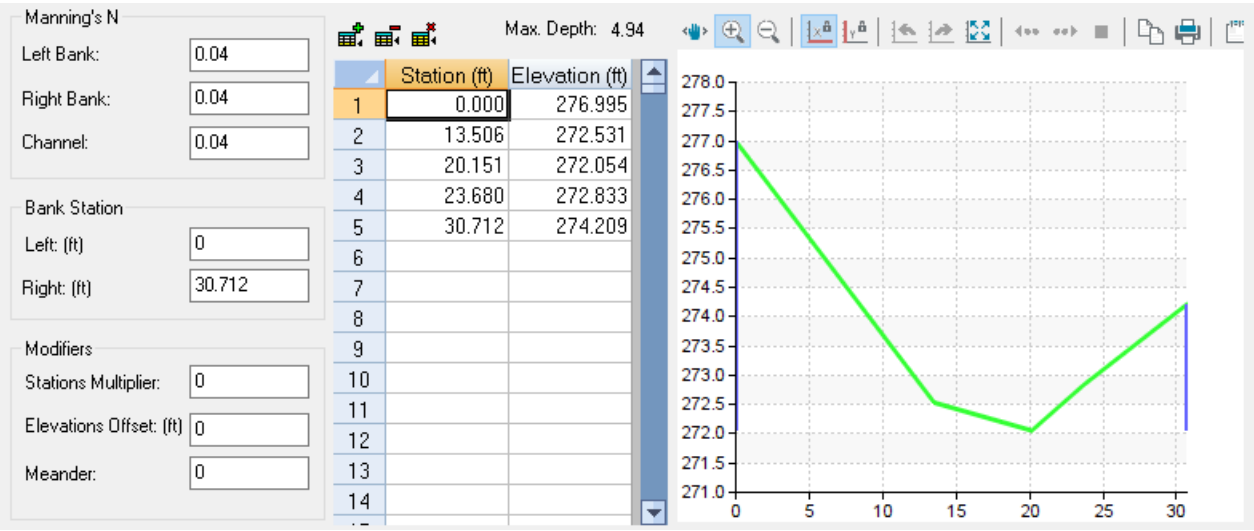


Figure A-12. Irregular Cross-Section Transect-557

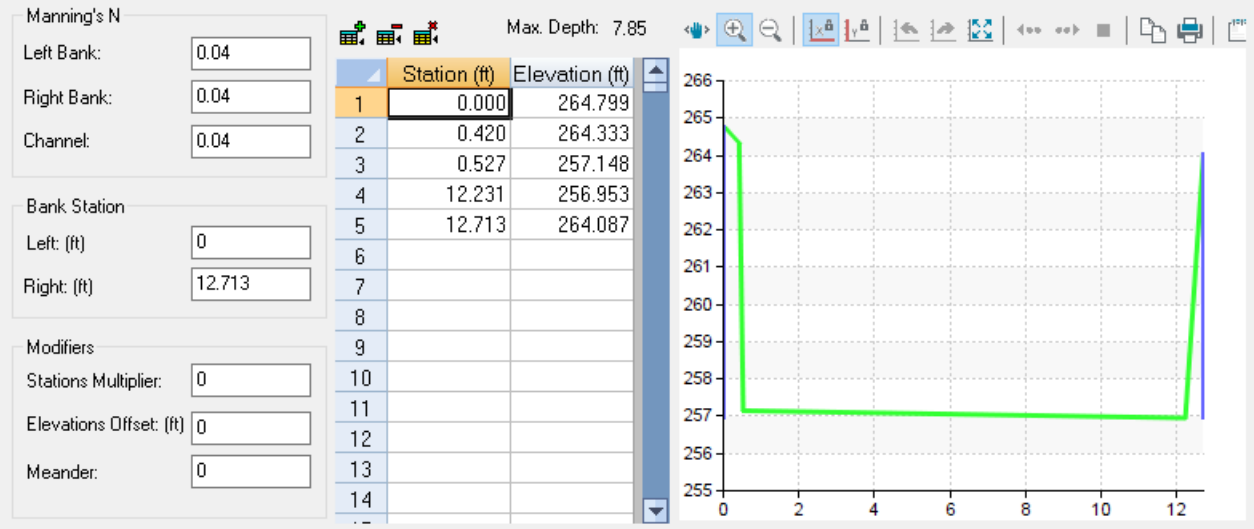


Figure A-13. Irregular Cross-Section Transect-619

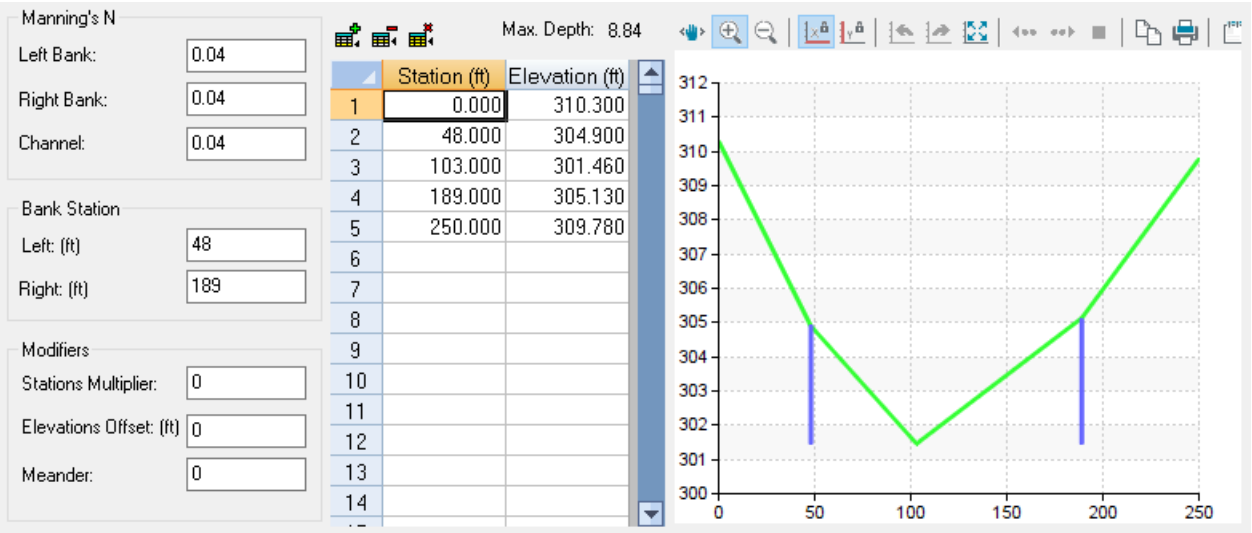


Figure A-14. Irregular Cross-Section Transect-627

APPENDIX B: Model Results

Table B-1a. Existing System Analysis – Nodes; 2-year, 24-hour Event

Table B-1b. Existing System Analysis – Pipes/Channels; 2-year, 24-hour Event

Table B-2a. Existing System Analysis – Nodes; 5-year, 24-hour Event

Table B-2b. Existing System Analysis – Pipes/Channels; 5-year, 24-hour Event

Table B-3a. Existing System Analysis - Nodes; 10-year, 24-hour Event

Table B-3b. Existing System Analysis – Pipes/Channels; 10-year, 24-hour Event

Table B-4a. Existing System Analysis - Nodes; 25-year, 24-hour Event

Table B-4b. Existing System Analysis – Pipes/Channels; 25-year, 24-hour Event

Table B-5a. Existing System Analysis - Nodes; 50-year, 24-hour Event

Table B-5b. Existing System Analysis – Pipes/Channels; 50-year, 24-hour Event

Table B-6a. Existing System Analysis - Nodes; 100-year, 24-hour Event

Table B-6b. Existing System Analysis – Pipes/Channels; 100-year, 24-hour Event

Table B-1a. Existing System Analysis - Nodes
2-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-001	9.113	275.503	Below Link Crown	2.677	0 - 13:03 hrs	0	126.229	0	19.617	0.137	0	0	0	0	0	0	0 - 00:00 hrs
0203-002	7.157	275.517	Below Maximum Depth	1.943	0 - 13:00 hrs	25.716	25.716	0.602	0.602	0	9.878	4.157	1.943	0	0	0	0 - 00:00 hrs
0203-003	6.666	275.626	Below Link Crown	3.204	0 - 13:02 hrs	0	151.376	0	19.155	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-004	7.394	277.734	Below Link Crown	1.236	0 - 12:30 hrs	94.687	154.292	3.322	19.172	0.016	0	0	0	0	0	0	0 - 00:00 hrs
0203-005	5.682	280.032	Surcharged	-1.432	0 - 12:17 hrs	239.119	239.119	6.489	14.331	0.002	7.364	1.512	0	0.576	3.676	100.038	0 - 12:07 hrs
0203-006	5.02	279.97	Surcharged	-0.85	0 - 12:18 hrs	0	69.199	0	7.961	0.001	5.728	0.85	0	0.021	2.864	4.848	0 - 12:04 hrs
0203-007	3.144	284.724	Below Link Crown	0.606	0 - 13:30 hrs	0	84.817	0	7.68	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-008	3.72	285.8	Below Link Crown	2.25	0 - 13:30 hrs	0	84.817	0	7.681	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-009	4.702	280.302	Surcharged	-0.362	0 - 12:53 hrs	0	60.125	0	7.658	0.001	7.267	0.622	0	0.011	3.607	2.283	0 - 12:02 hrs
0203-010	4.283	286.483	Below Link Crown	1.117	0 - 13:30 hrs	0	84.819	0	7.683	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-011	2.781	292.491	Below Link Crown	1.139	0 - 13:29 hrs	0	84.823	0	7.7	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-012	3.386	293.526	Below Link Crown	2.164	0 - 13:29 hrs	0	84.823	0	7.706	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-013	3.743	294.503	Below Link Crown	0.297	0 - 13:27 hrs	0	84.826	0	7.713	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-014	6.146	297.756	Below Maximum Depth	1.054	0 - 12:59 hrs	0	101.626	0	7.691	0.001	2.66	0.646	1.054	0	0	0	0 - 00:00 hrs
0203-015	5.136	298.636	Below Link Crown	3.104	0 - 12:56 hrs	0	102.188	0	7.695	-0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-016	6.663	314.143	Below Maximum Depth	5.657	0 - 12:02 hrs	0	61.804	0	3.818	-0.001	2.071	2.733	5.657	0	0	0	0 - 00:00 hrs
0203-017	5.477	296.887	Below Link Crown	0.023	0 - 13:07 hrs	0	101.623	0	7.686	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-018	4.863	295.983	Surcharged	-0.483	0 - 13:22 hrs	0	101.571	0	7.681	0.001	3.489	0.828	0	0.379	1.679	21.833	0 - 12:03 hrs
0203-019	5.627	321.547	Surcharged	-0.227	0 - 12:26 hrs	59.644	59.644	1.711	1.712	0	2.028	2.627	0	0.201	1.013	35.63	0 - 12:15 hrs
0203-020	6.403	320.913	Surcharged	-0.053	0 - 12:37 hrs	0	37.053	0	1.682	0.001	2.052	3.403	0	0.009	0.631	3.851	0 - 12:02 hrs
0203-021	6.22	320.66	Below Maximum Depth	0	0 - 12:02 hrs	0	37.038	0	1.68	0	2.029	3.15	0	0	0	0	0 - 00:00 hrs
0203-022	2.096	271.086	Below Link Crown	8.914	0 - 12:42 hrs	0	128.621	0	20.372	0.013	0	0	0	0	0	0	0 - 00:00 hrs
0203-023	7.129	319.539	Surcharged	-0.339	0 - 12:32 hrs	0	37.023	0	1.684	0	2.056	3.979	0	0.152	0.874	16.292	0 - 12:04 hrs
0203-024	7.417	319.307	Surcharged	-0.137	0 - 12:18 hrs	77.472	87.109	2.112	3.824	0.002	1.957	4.207	0	0.087	0.46	25.352	0 - 12:15 hrs
0203-025	5.215	311.145	Surcharged	-0.275	0 - 12:32 hrs	0	61.831	0	3.835	0.001	2.137	1.715	0	0.035	0.877	6.352	0 - 12:55 hrs
0203-026	3.792	309.272	Below Maximum Depth	1.428	0 - 12:33 hrs	0	62.927	0	3.836	0.001	1.592	0.282	1.428	0	0	0	0 - 00:00 hrs
0203-027	5.702	305.882	Below Maximum Depth	1.828	0 - 12:06 hrs	0	60.261	0	3.83	0.001	1.767	1.702	1.828	0	0	0	0 - 00:00 hrs
0203-028	5.088	304.918	Below Maximum Depth	2.602	0 - 12:06 hrs	0	60.36	0	3.828	0.001	1.624	0.588	2.602	0	0	0	0 - 00:00 hrs
0203-029	6.7	303.59	Surcharged	-0.25	0 - 12:21 hrs	0	66.767	0	3.799	0.002	2.072	2.2	0	0.249	0.826	57.419	0 - 12:15 hrs
0203-030	6.717	303.527	Below Link Crown	0.973	0 - 12:15 hrs	0	79.244	0	3.83	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-031	2.837	271.837	Below Link Crown	5.493	0 - 12:15 hrs	30.81	30.81	0.89	0.891	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-032	6.252	274.382	Surcharged	-0.122	0 - 12:17 hrs	52.457	52.457	1.305	1.305	0	0.824	3.752	0	0.053	0.355	14.498	0 - 12:15 hrs
0203-033	2.756	264.766	Below Link Crown	14.234	0 - 12:25 hrs	0	163.784	0	21.656	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-034	4.322	280.692	Surcharged	-0.242	0 - 13:55 hrs	0	84.788	0	7.683	-0.01	7.199	0.242	0	1.752	3.589	41.506	0 - 12:36 hrs
0203-035	1.843	287.033	Below Link Crown	3.548	0 - 13:30 hrs	0	84.822	0	7.687	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-036	3.434	289.854	Below Link Crown	1.906	0 - 13:29 hrs	0	84.822	0	7.689	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-037	7.592	303.532	Below Link Crown	0.068	0 - 12:15 hrs	150.586	152.154	3.886	7.712	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-038	5.285	299.955	Surcharged	-0.255	0 - 12:55 hrs	0	151.123	0	7.7	0.002	2.615	0.285	0	0.506	1.307	49.62	0 - 12:15 hrs
0203-039	2.547	290.797	Below Link Crown	1.336	0 - 13:29 hrs	0	84.822	0	7.694	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-040	2.395	282.755	Below Link Crown	1.725	0 - 13:34 hrs	0	84.819	0	7.68	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-041	4.605	278.805	Surcharged	-0.545	0 - 13:04 hrs	0	149.023	0	14.185	0.001	6.698	0.545	0	0.478	3.349	43.439	0 - 12:15 hrs
0203-042	4.74	278.42	Surcharged	-0.58	0 - 13:15 hrs	0	116.177	0	14.175	0.001	6.875	0.58	0	0.647	3.437	54.426	0 - 12:19 hrs
0203-043	6.004	277.874	Below Link Crown	2.626	0 - 12:47 hrs	0	114.309	0	14.165	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-044	6.372	277.852	Below Link Crown	2.298	0 - 12:44 hrs	0	111.028	0	14.161	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-045	6.318	277.828	Below Link Crown	4.602	0 - 12:38 hrs	0	105.298	0	14.157	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-046	7.049	277.819	Below Link Crown	9.881	0 - 12:34 hrs	0	99.21	0	14.144	0.033	0	0	0	0	0	0	0 - 00:00 hrs
0203-047	6.292	277.782	Below Link Crown	10.618	0 - 12:33 hrs	0	99.974	0	14.104	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-048	6.842	277.772	Below Link Crown	2.178	0 - 12:32 hrs	0	103.787	0	15.876	0.011	0	0	0	0	0	0	0 - 00:00 hrs
0203-049	7.373	277.763	Below Link Crown	0.688	0 - 12:32 hrs	0	104.495	0	15.871	0.014	0	0	0	0	0	0	0 - 00:00 hrs
0203-050	7.379	277.749	Below Link Crown	0.681	0 - 12:32 hrs	0	104.842	0	15.862	0.017	0	0	0	0	0	0	0 - 00:00 hrs
0203-051	7.418	275.598	Below Link Crown	2.112	0 - 13:02 hrs	0	149.179	0	19.157	0.018	0	0	0	0	0	0	0 - 00:00 hrs
0203-052	4.208	314.001	Below Maximum Depth	3.799	0 - 12:08 hrs	16.184	16.184	0.455	0.455	0	0.422	1.208	3.799	0	0	0	0 - 00:00 hrs
0203-053	4.718	313.731	Below Maximum Depth	2.969	0 - 12:08 hrs	0	16.185	0	0.456	0	0.427	1.588	2.969	0	0	0	0 - 00:00 hrs
0203-054	4.676	313.576	Below Maximum Depth	2.113	0 - 12:21 hrs	0	16.859	0	0.458	0	0.43	1.676	2.113	0	0	0	0 - 00:00 hrs
0203-055	5.563	313.03	Surcharged	-0.03	0 - 12:15 hrs	0	52.855	0	1.555	0	0.523	2.063	0	0.019	0.205	9.119	0 - 12:15 hrs
0203-056	6.35	312.3	Below Maximum Depth	0	0 - 12:21 hrs	0	43.809	0	1.563	0	0.6	2.679	0	0	0	0	0 - 00:00 hrs
0203-057	6.12	310.718	Surcharged	-0.068	0 - 12:19 hrs	0	43.809	0	1.707	0	0.678	2.47	0	0.016	0.244	7.698	0 - 12:22 hrs
0203-058	5.666	309.287	Below Maximum Depth	0.982	0 - 12:15 hrs	0	49.885	0	1.897	0	0.686	2.166	0.982	0	0	0	0 - 00:00 hrs
0203-059	4.561	309.331	Below Maximum Depth	1.269	0 - 12:15 hrs	0	8.18	0	0.223	0	0.563	1.504	1.269	0	0	0	0 - 00:00 hrs
0203-060	2.592	310.502	Below Link Crown	6.979	0 - 12:29 hrs	0	35.161	0	2.283	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-061	2.488	308.856	Below Link Crown	5.945	0 - 12:15 hrs	0	35.145	0	2.282	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-062	6.023	306.913	Below Maximum Depth	8.402	0 - 12:15 hrs	0	99.755	0	4.83	0.002	0.398	0.813	8.402	0	0	0	0 - 00:00 hrs
0203-063	6.082	305.347	Below Maximum Depth	17.667	0 - 12:15 hrs	0	98.783	0	4.829	0.007	0.415	0.764	17.667	0	0	0	0 - 00:00 hrs
0203-064	5.385	303.759	Below Maximum Depth	16.821	0 - 12:15 hrs	0	97.058	0	4.821	-0.003	0.232	0.272	16.821	0	0	0	0 - 00:00 hrs
0203-065	5.978	302.009	Below Maximum Depth	8.291	0 - 12:15 hrs	0	95.932	0	4.825	0.001	0.702	0.978	8.291	0	0	0	0 - 00:00 hrs
0203-066	5.045	300.801	Below Maximum Depth	7.74	0 - 12:15 hrs	0	95.916	0	4.822	0.001	0.138	0.045	7.74	0	0	0	0 - 00:00 hrs
0203-067	4.267	299.311	Below Link Crown	4.589	0 - 12:17 hrs	0	95.931	0	4.822	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-068	0.574	304.317	Below Link Crown	2.583	0 - 12:15 hrs	0	11.949	0	0.338	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-069	1.172	305.66	Below Link Crown	1.94	0 - 12:15 hrs	0	12.133	0	0.339	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-070	2.099	295.076	Below Link Crown	10.824	0 - 12:22 hrs	0	183.864	0	13.181	0.016	0	0	0	0	0	0	0 - 00:00 hrs
0203-071	2.211	311.722	Below Link Crown	2.264	0 - 12:18 hrs	0	35.074	0	2.282	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-072	2.589	311.118	Below Link Crown	4.582	0 - 12:12 hrs	7.406	7.406	0.249	0.249	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-073	4.026	310.921	Below Link Crown	4.545	0 - 12:12 hrs	0	14.099	0	0.275	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-074	3.89	310.785	Below Link Crown	3.227	0 - 12:14 hrs	0	17.715	0	0.312	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-075	5.021	310.713	Below Link Crown	2.951	0 - 12:12 hrs	0	23.784	0	0.325	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-076	7.349	310.66	Surcharged	-0.05	0 - 12:18 hrs	0	79.592	0	2.688	0	0.723	1.259	0	0.05	0.279	34.241	0 - 12:14 hrs
0203-077	3.347	310.998	Below Link Crown	3.602	0 - 12:12 hrs	0	10.149	0	0.254	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-078	6.447	309.519	Below Maximum Depth	0.553	0 - 12:18 hrs	0	45.484	0	2.629	0	1.027	2.947	0.553	0	0	0	0 - 00:00 hrs
0203-079	6.695	308.084	Below Maximum Depth	1.777	0 - 12:18 hrs	0	45.482	0	2.626	0	1.136	3.195	1.777	0	0	0	0 - 00:00 hrs
0203-080	5.686	306.979	Below Maximum Depth	2.344	0 - 12:18 hrs	0	45.479	0	2.626	0	1.044	2.186	2.344	0	0	0	0 - 00:00 hrs
0203-081	5.818	305.518	Below Maximum Depth	1.736	0 - 12:18 hrs	0	45.475	0	2.622	0	1.197	2.312	1.736	0	0	0	0 - 00:00 hrs
0203-082	4.879	304.426	Below Maximum Depth	1.997	0 - 12:18 hrs	0	45.478	0	2.619	0	1.075	1.349	1.997	0	0	0	0 - 00:00 hrs
0203-083	3.795	303.342	Below Link Crown	1.158	0 - 12:18 hrs	0	45.467	0	2.618	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-084	4.357	302.61	Below Maximum Depth	4.134	0 - 12:17 hrs	0	45.423	0	2.617	0	0.667	0.231	4.134	0	0	0	0 - 00:00 hrs
0203-085	3.516	301.153	Below Link Crown	5.697	0 - 12:17 hrs	0	45.425	0	2.616	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-086	2.828	299.906	Below Link Crown	5.329	0 - 12:15 hrs	0	45.444	0	2.615	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-087	3.474	298.957	Below Link Crown	3.643	0 - 12:15 hrs	0	45.602	0	2.902	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-088	1.521	304.633	Below Link Crown	4.675	0 - 12:15 hrs	21.803	21.803	0.717	0.717	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-089	1.998	302.286	Below Link Crown	5.349	0 - 12:15 hrs	0	21.735	0	0.717	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-090	1.596	300.689	Below Link Crown	5.656	0 - 12:15 hrs	0	21.592	0	0.717	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-091	1.872	298.952	Below Link Crown	5.385	0 - 12:15 hrs	0	22.906	0	0.785	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-092	2.746	298.135	Below Link Crown	5.065	0 - 12:15 hrs	0	43.841	0	2.833	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-093	2.7	297.119	Below Link Crown	3.281	0 - 12:17 hrs	0	22.848	0	0.5	-0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-094	2.147	296.2	Below Link Crown	4.5	0 - 12:18 hrs	0	66.491	0	3.328	-0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-095	5.124	272.924	Below Maximum Depth	2.376	0 - 12:02 hrs	0	55.494	0	6.02	0.001	4.734	1.624	2.376	0	0	0	0 - 00:00 hrs
0203-096	4.944	271.344	Below Maximum Depth	1.756	0 - 12:02 hrs	0	55.581	0	6.045	0	4.727	1.414	1.756	0	0	0	0 - 00:00 hrs
0203-097	4.451	269.101	Below Maximum Depth	2.199	0 - 12:59 hrs	0	54.694	0	6.057	0.001	4.703	0.451	2.199	0	0	0	0 - 00:00 hrs
0203-098	4.234	268.114	Below Maximum Depth	2.386	0 - 12:59 hrs	0	53.304	0	6.056	0.001	4.642	0.164	2.386	0	0	0	0 - 00:00 hrs
0203-099	3.823	267.143	Below Link Crown	2.457	0 - 12:59 hrs	0	52.314	0	6.055	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-100	3.934	266.034	Below Link Crown	2.866	0 - 12:59 hrs	0	52.314	0	6.056	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-101	3.455	264.885	Below Link Crown	3.615	0 - 13:00 hrs	0	52.314	0	6.054	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-102	2.845	263.505	Below Link Crown	3.795	0 - 13:00 hrs	0	52.314	0	6.051	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-103	3.059	262.449	Below Link Crown	4.321	0 - 13:03 hrs	0	52.314	0	6.046	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-104	2.768	261.215	Below Link Crown	4.625	0 - 13:29 hrs	0	52.314	0	6.04	0.004	0	0	0	0	0	0	0 - 00:00 hrs

Table B-1a. Existing System Analysis - Nodes
2-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-105	3.115	292.135	Surcharged	-0.235	0 - 12:30 hrs	51.377	51.377	1.319	1.32	0	3.159	1.115	0	0.222	1.478	35.111	0 - 12:15 hrs
0203-106	2.318	290.736	Below Maximum Depth	2.544	0 - 12:23 hrs	0	17.443	0	1.31	0	1.788	0.318	2.544	0	0	0	0 - 00:00 hrs
0203-107	3.304	284.694	Below Maximum Depth	0.896	0 - 12:21 hrs	0	17.477	0	1.325	0	2.795	1.304	0.896	0	0	0	0 - 00:00 hrs
0203-108	3.448	282.818	Below Maximum Depth	1.882	0 - 12:21 hrs	0	17.483	0	1.327	0	1.252	0.948	1.882	0	0	0	0 - 00:00 hrs
0203-109	2.169	245.402	Below Link Crown	18.698	0 - 12:33 hrs	0	330.881	0	27.582	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-110	2.879	247.698	Below Link Crown	18.002	0 - 12:32 hrs	0	330.913	0	27.583	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-111	2.537	249.934	Below Link Crown	14.166	0 - 12:32 hrs	0	330.934	0	27.587	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-112	7.481	262.583	Surcharged	-0.083	0 - 12:53 hrs	0	270.438	0	22.174	0.018	2.252	0.16	0	0.583	1.123	37.3	0 - 12:32 hrs
0203-113	9.427	271.193	Surcharged	-0.593	0 - 12:26 hrs	0	275.943	0	20.278	0.011	1.246	0.963	0	0.091	0.608	29.461	0 - 12:18 hrs
0203-114	4.542	274.949	Below Link Crown	2.488	0 - 12:22 hrs	0	235.901	0	17.838	0.009	0	0	0	0	0	0	0 - 00:00 hrs
0203-115	7.175	282.982	Below Link Crown	1.975	0 - 12:21 hrs	0	221.233	0	16.552	0.022	0	0	0	0	0	0	0 - 00:00 hrs
0203-116	4.145	283.275	Below Link Crown	5.815	0 - 12:19 hrs	0	225.885	0	16.559	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-117	5.042	285.108	Below Link Crown	1.903	0 - 12:18 hrs	0	226.308	0	16.567	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-118	6.452	273.115	Below Link Crown	2.151	0 - 13:40 hrs	0	198.458	0	31.239	0.016	0	0	0	0	0	0	0 - 00:00 hrs
0203-119	5.326	285.581	Below Link Crown	2.01	0 - 12:33 hrs	0	95.484	0	16.184	0.017	0	0	0	0	0	0	0 - 00:00 hrs
0203-120	5.873	254.655	Below Link Crown	16.645	0 - 12:30 hrs	0	199.377	0	7.769	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-121	2.836	254.921	Below Link Crown	14.979	0 - 12:30 hrs	0	199.788	0	7.767	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-122	4.346	256.646	Below Link Crown	20.994	0 - 12:29 hrs	0	200.016	0	7.781	0.012	0	0	0	0	0	0	0 - 00:00 hrs
0203-123	4.568	256.968	Below Link Crown	20.672	0 - 12:27 hrs	0	200.26	0	7.79	0.011	0	0	0	0	0	0	0 - 00:00 hrs
0203-124	4.986	258.119	Below Link Crown	2.981	0 - 12:27 hrs	0	200.858	0	7.793	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-125	1.426	265.456	Below Link Crown	5.298	0 - 12:33 hrs	0	44.316	0	1.074	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-126	2.328	267.226	Below Link Crown	3.846	0 - 12:33 hrs	0	44.339	0	1.073	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-127	1.585	269.362	Below Link Crown	2.947	0 - 12:32 hrs	0	44.475	0	1.077	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-128	3.954	271.494	Below Link Crown	1.006	0 - 12:30 hrs	86.211	86.211	2.77	2.814	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-129	3.982	271.52	Below Link Crown	1.48	0 - 12:27 hrs	30.111	74.575	1.013	2.724	0.02	0	0	0	0	0	0	0 - 00:00 hrs
0203-130	5.04	259.526	Below Link Crown	2.896	0 - 12:25 hrs	0	161.773	0	6.724	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-131	5.574	260.51	Below Link Crown	2.59	0 - 12:23 hrs	0	162.695	0	6.733	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-132	5.091	262.993	Below Link Crown	3.007	0 - 12:22 hrs	0	163.212	0	6.737	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-133	5.115	265.205	Below Link Crown	1.7	0 - 12:19 hrs	0	163.409	0	6.737	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-134	4.507	269.207	Below Link Crown	0.026	0 - 12:18 hrs	0	109.282	0	4.143	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-135	1.66	264.9	Below Link Crown	7.5	0 - 12:40 hrs	0	40.035	0	2.469	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-136	2.766	272.906	Below Link Crown	4.094	0 - 12:37 hrs	0	40.535	0	2.485	0.014	0	0	0	0	0	0	0 - 00:00 hrs
0203-137	3.005	273.145	Below Link Crown	3.855	0 - 12:36 hrs	0	47.347	0	2.514	0.029	0	0	0	0	0	0	0 - 00:00 hrs
0203-138	2.619	273.299	Below Link Crown	3.701	0 - 12:33 hrs	0	53.169	0	2.517	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-139	2.693	274.743	Below Link Crown	6.357	0 - 12:19 hrs	0	11.829	0	0.438	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-140	2.594	274.754	Below Link Crown	6.446	0 - 12:19 hrs	0	11.588	0	0.439	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-141	1.844	274.784	Below Link Crown	6.816	0 - 12:19 hrs	0	15.496	0	0.442	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-142	1.252	275.46	Below Link Crown	7.35	0 - 12:15 hrs	16.073	16.073	0.441	0.441	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-143	1.503	252.773	Below Link Crown	24.839	0 - 13:34 hrs	0	248.944	0	29.06	0.028	0	0	0	0	0	0	0 - 00:00 hrs
0203-144	1.848	253.118	Below Link Crown	24.494	0 - 13:33 hrs	0	248.947	0	29.082	0.026	0	0	0	0	0	0	0 - 00:00 hrs
0203-145	6.483	258.093	Below Link Crown	12.257	0 - 13:32 hrs	0	248.946	0	29.11	0.026	0	0	0	0	0	0	0 - 00:00 hrs
0203-146	6.736	258.346	Below Link Crown	3.474	0 - 13:32 hrs	0	248.947	0	29.123	0.013	0	0	0	0	0	0	0 - 00:00 hrs
0203-147	6.662	258.522	Below Link Crown	8.878	0 - 13:32 hrs	0	248.947	0	29.129	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-148	7.093	258.953	Below Link Crown	8.447	0 - 13:32 hrs	0	248.948	0	29.135	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-149	7.152	259.162	Below Link Crown	7.942	0 - 13:30 hrs	0	248.95	0	29.141	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-150	7.282	259.292	Below Link Crown	1.108	0 - 13:30 hrs	0	248.952	0	29.147	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-151	6.63	259.42	Below Link Crown	10.48	0 - 13:30 hrs	0	248.962	0	29.156	0.009	0	0	0	0	0	0	0 - 00:00 hrs
0203-152	6.9	260.15	Below Link Crown	9.937	0 - 13:30 hrs	0	248.972	0	29.166	0.01	0	0	0	0	0	0	0 - 00:00 hrs
0203-153	7.182	260.512	Below Link Crown	0.826	0 - 13:30 hrs	0	248.979	0	29.173	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-154	7.415	260.745	Below Link Crown	2.755	0 - 13:29 hrs	0	248.993	0	29.184	0.01	0	0	0	0	0	0	0 - 00:00 hrs
0203-155	7.629	260.959	Below Link Crown	2.641	0 - 13:29 hrs	0	249.009	0	29.194	0.01	0	0	0	0	0	0	0 - 00:00 hrs
0203-156	7.06	261.19	Below Link Crown	4.31	0 - 13:27 hrs	0	249.017	0	29.197	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-157	7.409	261.539	Below Link Crown	12.061	0 - 13:27 hrs	0	249.023	0	29.2	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-158	7.648	261.778	Below Link Crown	11.822	0 - 13:26 hrs	0	249.047	0	29.21	0.009	0	0	0	0	0	0	0 - 00:00 hrs
0203-159	7.739	261.869	Below Link Crown	2.231	0 - 13:26 hrs	0	249.089	0	29.223	0.011	0	0	0	0	0	0	0 - 00:00 hrs
0203-160	6.726	261.964	Below Link Crown	1.136	0 - 13:26 hrs	0	249.118	0	29.228	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-161	2.706	262.304	Below Link Crown	5.196	0 - 13:26 hrs	0	249.178	0	29.231	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-162	3.65	267.261	Below Link Crown	8.539	0 - 12:37 hrs	0	249.134	0	29.257	0.025	0	0	0	0	0	0	0 - 00:00 hrs
0203-163	4.408	272.41	Below Link Crown	4.15	0 - 13:30 hrs	0	237.752	0	27.329	0.018	0	0	0	0	0	0	0 - 00:00 hrs
0203-164	4.572	275.074	Below Link Crown	3.498	0 - 13:30 hrs	0	237.754	0	27.34	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-165	7.01	278.01	Below Link Crown	4.74	0 - 13:29 hrs	0	237.754	0	27.382	0.042	0	0	0	0	0	0	0 - 00:00 hrs
0203-166	7.16	280.071	Below Link Crown	1.029	0 - 13:27 hrs	0	237.757	0	27.421	0.03	0	0	0	0	0	0	0 - 00:00 hrs
0203-167	8.45	281.45	Surcharged	-0.25	0 - 13:27 hrs	0	237.785	0	27.434	0.02	3.155	0.306	0	0.016	1.55	1.863	0 - 12:33 hrs
0203-168	8.012	282.67	Below Link Crown	0.23	0 - 13:26 hrs	0	237.794	0	27.445	0.011	0	0	0	0	0	0	0 - 00:00 hrs
0203-169	4.769	283.259	Below Maximum Depth	0.463	0 - 13:26 hrs	0	237.798	0	27.45	0.003	2.741	0.233	0.463	0	0	0	0 - 00:00 hrs
0203-170	4.992	283.641	Below Link Crown	5.359	0 - 13:23 hrs	0	181.936	0	20.201	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-171	5.607	284.757	Below Link Crown	1.343	0 - 13:18 hrs	0	182.081	0	20.211	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-172	5.171	284.943	Below Link Crown	1.757	0 - 13:17 hrs	0	182.329	0	20.225	0.011	0	0	0	0	0	0	0 - 00:00 hrs
0203-173	4.707	287.081	Surcharged	-0.181	0 - 13:06 hrs	0	216.121	0	20.285	0.005	2.908	0.21	0	0.383	1.431	34.152	0 - 12:36 hrs
0203-174	4.824	283.317	Surcharged	-0.217	0 - 13:27 hrs	0	86.056	0	7.259	0.002	2.901	0.291	0	0.03	1.361	2.754	0 - 12:45 hrs
0203-175	3.904	283.582	Below Link Crown	0.622	0 - 13:30 hrs	0	84.346	0	7.254	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-176	3.893	283.658	Below Link Crown	0.612	0 - 13:32 hrs	0	83.964	0	7.255	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-177	4.878	283.767	Surcharged	-0.367	0 - 13:33 hrs	0	94.172	0	7.297	0.014	4.183	0.394	0	0.474	2.091	38.059	0 - 12:34 hrs
0203-178	3.329	283.855	Below Link Crown	1.155	0 - 13:26 hrs	0	94.876	0	7.295	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-179	2.9	284.576	Below Link Crown	8.624	0 - 12:34 hrs	0	95.237	0	7.297	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-180	3.136	284.812	Below Link Crown	8.388	0 - 12:34 hrs	0	95.874	0	7.299	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-181	2.91	285.539	Below Link Crown	5.661	0 - 12:32 hrs	0	100.04	0	7.311	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-182	3.201	285.974	Below Link Crown	5.369	0 - 12:30 hrs	0	100.838	0	7.316	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-183	3.604	286.167	Below Link Crown	4.967	0 - 12:30 hrs	0	101.305	0	7.322	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-184	3.616	287.159	Below Link Crown	3.952	0 - 12:26 hrs	0	101.562	0	7.324	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-185	3.399	287.172	Below Link Crown	4.009	0 - 12:26 hrs	0	13.182	0	0.659	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-186	1.336	287.184	Below Link Crown	5.316	0 - 12:26 hrs	0	13.847	0	0.659	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-187	3.831	289.674	Below Link Crown	5.726	0 - 12:22 hrs	0	91.304	0	6.677	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-188	5.648	292.814	Below Link Crown	4.486	0 - 12:19 hrs	0	97.204	0	6.694	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-189	5.539	293.105	Below Link Crown	4.595	0 - 12:18 hrs	0	112.791	0	6.735	0.041	0	0	0	0	0	0	0 - 00:00 hrs
0203-190	3.818	293.124	Below Link Crown	7.276	0 - 12:18 hrs	0	20.656	0	0.718	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-191	1.883	300.319	Below Link Crown	9.181	0 - 12:15 hrs	0	20.925	0	0.718	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-192	1.162	293.242	Below Link Crown	4.958	0 - 12:17 hrs	0	17.261	0	0.66	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-193	0.567	298.458	Below Link Crown	3.87	0 - 12:17 hrs	0	8.769	0	0.363	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-194	0.612	301.974	Below Link Crown	3.003	0 - 12:15 hrs	0	8.984	0	0.363	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-195	4.182	288.779	Below Link Crown	5.521	0 - 12:25 hrs	121.062	288.221	4.147	20.301	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-196	2.275	297.395	Below Link Crown	2.585	0 - 12:17 hrs	0	82.426	0	3.119	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-197	1.147	298.529	Below Link Crown	4.271	0 - 12:18 hrs	0	62.401	0	2.412	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-198	2.174	308.779	Below Link Crown	0.921	0 - 12:15 hrs	0	39.246	0	1.481	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-199	2.187	302.963	Below Link Crown	4.737	0 - 12:17 hrs	0	62.931	0	2.415	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-200	2.299	302.979	Below Link Crown	4.621	0 - 12:17 hrs	0	9.648	0	0.295	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-201	4.395	312.293	Below Link Crown	9.707	0 - 12:38 hrs	0	19.654	0	1.2	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-202	3.546	309.046	Below Link Crown	10.554	0 - 12:15 hrs	0	19.608	0	1.197	-0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-203	3.144	309.37	Below Link Crown	2.03	0 - 12:15 hrs	0	35.44	0	1.525	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-204	3.514	309.005	Below Link Crown	1.895	0 - 12:15 hrs	46.05	99.23	1.668	4.384	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-205	3.635	308.735	Below Link Crown	1.945	0 - 12:15 hrs	0	98.686	0	4.383	-0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-206	2.565	306.235	Below Link Crown	3.264	0 - 12:15 hrs	0	98.071	0	4.382	-0.012	0	0	0	0	0	0	0 - 00:00 hrs
0203-207	6.86	306.052	Below Link Crown	1.79	0 - 14:08 hrs	0	97.614	0	4.394	0.017	0	0	0	0	0	0	0 - 00:00 hrs
0203-208	1.715	299.319	Below Link Crown	0.181	0 - 12:22 hrs	0	22.613	0	4.719	0.001	0	0	0	0	0	0	0 - 00:00 hrs

Table B-1a. Existing System Analysis - Nodes
2-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-209	7.772	306.05	Below Link Crown	0.95	0 - 14:10 hrs	0	106.222	0	5.505	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-210	6.25	306.05	Surcharged	-0.55	0 - 14:10 hrs	0	92.723	0	1.126	0	11.168	1.063	0	0.941	5.411	92.714	0 - 12:15 hrs
0203-211	6.098	306.05	Surcharged	-0.15	0 - 14:10 hrs	0	13.276	0	0.35	0	11.844	2.162	0	0.075	3.194	6.594	0 - 12:49 hrs
0203-212	2.146	298.596	Below Maximum Depth	5.484	0 - 12:21 hrs	0	22.613	0	4.719	0.002	1.355	0.369	5.484	0	0	0	0 - 00:00 hrs
0203-213	2.253	298.074	Below Link Crown	3.751	0 - 12:19 hrs	0	31.359	0	5.053	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-214	2.182	298.082	Below Link Crown	3.865	0 - 12:19 hrs	0	11.915	0	0.339	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-215	0.697	299.294	Below Link Crown	5.406	0 - 12:15 hrs	0	11.947	0	0.338	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-216	0.661	306.361	Below Link Crown	2.406	0 - 12:15 hrs	12.167	12.167	0.338	0.338	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-217	2.493	297.833	Below Link Crown	3.456	0 - 12:19 hrs	0	29.385	0	5.05	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-218	5.796	259.726	Below Link Crown	10.069	0 - 12:30 hrs	0	331.07	0	27.608	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-219	5.928	259.858	Below Link Crown	9.814	0 - 12:30 hrs	0	98.77	0	5.475	0.03	0	0	0	0	0	0	0 - 00:00 hrs
0203-220	3.2	260.081	Below Link Crown	4.757	0 - 12:30 hrs	0	99.821	0	5.493	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-221	5.868	288.868	Below Link Crown	3.752	0 - 12:15 hrs	0	230.796	0	16.583	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-222	2.867	286.787	Below Maximum Depth	4.193	0 - 12:21 hrs	0	17.454	0	1.315	0	1.655	0.867	4.193	0	0	0	0 - 00:00 hrs
0203-223	8.2	269.4	Surcharged	-0.27	0 - 12:37 hrs	0	250.384	0	20.304	0.006	1.8	2.2	0	0.003	0.575	3.223	0 - 12:49 hrs
0203-224	6.61	267.69	Surcharged	-0.23	0 - 12:34 hrs	67.153	67.153	1.933	1.934	0	2.723	3.61	0	0.262	1.315	42.804	0 - 12:15 hrs
0203-225	1.279	307.939	Below Link Crown	6.791	0 - 12:15 hrs	9.177	9.177	0.363	0.363	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-226	12.289	316.309	Below Maximum Depth	1.721	0 - 12:15 hrs	64.183	64.183	2.374	2.375	0	1.153	8.789	1.721	0	0	0	0 - 00:00 hrs
0203-227	9.897	313.517	Below Maximum Depth	0.733	0 - 12:15 hrs	0	64.177	0	2.376	0	1.144	6.397	0.733	0	0	0	0 - 00:00 hrs
0203-228	3.077	311.077	Below Link Crown	6.193	0 - 12:12 hrs	0	8.23	0	0.251	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-229	3.422	330.012	Below Maximum Depth	6.798	0 - 12:03 hrs	0	20.097	0	1.202	0	1.103	1.172	6.798	0	0	0	0 - 00:00 hrs
0203-230	3.049	327.549	Below Maximum Depth	2.601	0 - 12:03 hrs	0	19.715	0	1.203	0	1.096	0.549	2.601	0	0	0	0 - 00:00 hrs
0203-231	1.564	322.944	Below Link Crown	4.896	0 - 12:06 hrs	0	19.752	0	1.202	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-232	1.382	318.242	Below Link Crown	6.888	0 - 12:22 hrs	0	19.654	0	1.198	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-233	1.2	315.7	Below Link Crown	7.59	0 - 12:08 hrs	0	19.654	0	1.199	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-234	3.803	319.553	Below Link Crown	1.787	0 - 12:25 hrs	0	35.076	0	2.279	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-235	3.316	318.566	Below Link Crown	2.494	0 - 12:25 hrs	0	35.073	0	2.282	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-236	1.419	316.419	Below Link Crown	2.941	0 - 12:19 hrs	0	35.073	0	2.282	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-237	2.334	313.334	Below Link Crown	4.676	0 - 12:26 hrs	0	35.08	0	2.282	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-238	6.082	308.082	Below Maximum Depth	8.338	0 - 12:15 hrs	20.127	99.914	0.65	4.827	0.001	0.476	1.082	8.338	0	0	0	0 - 00:00 hrs
0203-239	4.111	297.611	Below Link Crown	7.079	0 - 12:19 hrs	0	122.794	0	9.866	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-240	9.426	276.876	Surcharged	-0.016	0 - 12:19 hrs	0	34.33	0	2.292	0.002	1.523	5.426	0	0	0.002	15.948	0 - 12:19 hrs
0203-241	3.749	269.749	Below Maximum Depth	7.541	0 - 12:15 hrs	0	20.427	0	0.726	0	0.604	0.719	7.541	0	0	0	0 - 00:00 hrs
0203-242	8.289	265.639	Surcharged	-0.029	0 - 12:25 hrs	0	104.704	0	5.514	0.002	1.823	3.956	0	0.039	0.41	4.969	0 - 12:18 hrs
0203-243	6.255	263.225	Below Maximum Depth	3.095	0 - 12:25 hrs	0	99.873	0	5.511	0.001	1.804	1.922	3.095	0	0	0	0 - 00:00 hrs
0203-244	6.096	289.217	Surcharged	-0.359	0 - 13:41 hrs	0	172.048	0	16.218	-0.023	8.9	0.359	0	3.256	4.436	84.446	0 - 12:06 hrs
0203-245	3.807	296.807	Below Link Crown	6.663	0 - 12:19 hrs	0	122.686	0	9.865	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-246	3.052	288.705	Below Link Crown	4.395	0 - 12:25 hrs	0	90.512	0	6.671	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-247	3.374	297.13	Below Link Crown	12.626	0 - 15:23 hrs	0	108.251	0	38.779	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-248	4.239	283.701	Below Maximum Depth	1.889	0 - 12:17 hrs	0	32.084	0	7.399	0.004	6.488	0.069	1.889	0	0	0	0 - 00:00 hrs
0203-249	0.992	303.592	Below Link Crown	2.608	0 - 12:15 hrs	24.917	24.917	0.706	0.707	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-250	4.388	285.138	Surcharged	-0.338	0 - 12:59 hrs	0	79.471	0	7.425	0.005	2.074	0.348	0	0.085	1.037	5.478	0 - 12:11 hrs
0203-251	4.115	284.093	Below Link Crown	2.537	0 - 13:56 hrs	0	37.835	0	7.409	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-252	1.779	294.269	Below Link Crown	4.731	0 - 12:23 hrs	0	87.052	0	4.784	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-253	3.933	274.703	Below Link Crown	4.427	0 - 12:18 hrs	18.402	23.454	0.512	0.964	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-254	4.659	269.046	Below Link Crown	6.774	0 - 12:15 hrs	0	128.241	0	7.082	0.013	0	0	0	0	0	0	0 - 00:00 hrs
0203-255	2.559	278.507	Below Link Crown	7.391	0 - 12:18 hrs	0	38.852	0	7.901	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-256	4.262	301.872	Below Maximum Depth	4.888	0 - 12:17 hrs	0	45.424	0	2.616	0	0.752	0.262	4.888	0	0	0	0 - 00:00 hrs
0203-257	2.404	280.634	Below Link Crown	2.041	0 - 12:18 hrs	0	29.166	0	2.717	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-258	3.582	281.812	Below Maximum Depth	4.208	0 - 12:10 hrs	0	29.155	0	2.718	0.002	2.987	0.582	4.208	0	0	0	0 - 00:00 hrs
0203-259	5.156	284.636	Below Maximum Depth	0.874	0 - 12:10 hrs	0	29.698	0	2.72	0.001	2.846	2.156	0.874	0	0	0	0 - 00:00 hrs
0203-260	4.51	285.06	Below Maximum Depth	1.77	0 - 12:10 hrs	0	31.983	0	2.719	0.002	2.835	1.51	1.77	0	0	0	0 - 00:00 hrs
0203-261	4.524	286.024	Below Maximum Depth	1.756	0 - 12:10 hrs	0	32.739	0	2.718	0.001	2.907	1.524	1.756	0	0	0	0 - 00:00 hrs
0203-262	6.016	289.236	Surcharged	-0.226	0 - 13:03 hrs	0	34.183	0	2.736	0.002	2.952	3.016	0	0.019	1.435	4.449	0 - 12:06 hrs
0203-263	6.342	290.732	Surcharged	-0.112	0 - 12:45 hrs	49.717	49.717	2.723	2.725	0	2.923	3.342	0	0.158	1.447	19.66	0 - 12:15 hrs
0203-264	2.604	289.604	Surcharged	-0.004	0 - 12:15 hrs	18.607	18.607	0.516	0.516	0	0.1	0.604	0	0.001	0.045	1.773	0 - 12:14 hrs
0203-265	3.182	284.402	Below Maximum Depth	1.998	0 - 12:15 hrs	0	17.273	0	0.51	-0.004	0.186	0.182	1.998	0	0	0	0 - 00:00 hrs
0203-266	3.079	283.979	Below Maximum Depth	1.941	0 - 12:17 hrs	0	17.339	0	0.518	0	0.066	0.019	1.941	0	0	0	0 - 00:00 hrs
0203-267	2.907	283.687	Below Link Crown	2.263	0 - 12:17 hrs	0	17.243	0	0.518	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-268	7.169	280.183	Below Link Crown	5.307	0 - 12:56 hrs	0	816.55	0	120.611	0.26	0	0	0	0	0	0	0 - 00:00 hrs
0203-269	5.762	285.926	Below Link Crown	1.574	0 - 12:48 hrs	0	35.076	0	2.856	0.009	0	0	0	0	0	0	0 - 00:00 hrs
0203-270	7.576	290.096	Below Link Crown	4.604	0 - 12:34 hrs	0	118.115	0	6.622	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-271	4.27	306.86	Below Maximum Depth	1.29	0 - 12:15 hrs	78.871	78.871	2.987	2.989	0	0.244	1.38	1.29	0	0	0	0 - 00:00 hrs
0203-272	3.596	294.726	Below Link Crown	5.294	0 - 12:23 hrs	0	68.486	0	5.325	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-273	2.708	289.578	Below Link Crown	8.222	0 - 13:00 hrs	0	70.565	0	5.302	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-274	5.748	291.608	Below Maximum Depth	0.802	0 - 12:07 hrs	0	72.148	0	5.416	0.004	2.728	1.728	0.802	0	0	0	0 - 00:00 hrs
0203-275	2.951	287.131	Below Link Crown	6.249	0 - 12:32 hrs	0	72.148	0	5.411	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-276	3.257	286.527	Below Link Crown	6.853	0 - 12:32 hrs	0	72.114	0	5.413	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-277	1.723	284.643	Below Link Crown	2.557	0 - 12:32 hrs	0	72.085	0	5.411	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-278	6.009	292.009	Below Maximum Depth	0.471	0 - 12:06 hrs	0	28.342	0	1.231	0.002	2.349	2.009	0.471	0	0	0	0 - 00:00 hrs
0203-279	5.307	292.867	Below Maximum Depth	0.013	0 - 12:07 hrs	0	28.322	0	1.227	0	0.839	1.807	0.013	0	0	0	0 - 00:00 hrs
0203-280	4.71	292.85	Surcharged	0	0 - 12:07 hrs	0	28.802	0	1.222	0	0.819	1.21	0	0	0.002	5.087	0 - 12:07 hrs
0203-281	5.65	294.69	Surcharged	0	0 - 12:07 hrs	0	29.76	0	1.221	-0.001	0.821	2.4	0	0	0	2.831	0 - 12:07 hrs
0203-282	4.613	294.263	Surcharged	-0.093	0 - 12:18 hrs	40.867	40.867	1.224	1.224	0	0.872	1.613	0	0.039	0.409	12.616	0 - 12:15 hrs
0203-283	5.238	292.818	Surcharged	-0.368	0 - 12:56 hrs	0	65.797	0	4.207	0.001	2.752	1.738	0	0.385	1.372	23.676	0 - 12:07 hrs
0203-284	8.569	334.279	Below Maximum Depth	1.141	0 - 12:15 hrs	85.182	85.182	3.674	3.676	0	3.015	5.069	1.141	0	0	0	0 - 00:00 hrs
0203-285	2.489	306.989	Below Link Crown	3.011	0 - 12:30 hrs	0	20.399	0	3.672	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-286	1.589	307.589	Below Link Crown	3.251	0 - 12:32 hrs	0	20.249	0	3.672	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-287	1.655	309.355	Below Link Crown	1.735	0 - 13:37 hrs	0	20.249	0	3.672	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-288	2.225	310.565	Below Link Crown	1.885	0 - 13:37 hrs	0	20.249	0	3.673	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-289	2.395	311.395	Below Link Crown	3.145	0 - 13:37 hrs	0	20.249	0	3.675	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-290	2.656	314.656	Below Maximum Depth	5.874	0 - 13:36 hrs	0	20.249	0	3.676	0.001	9.014	0.156	5.874	0	0	0	0 - 00:00 hrs
0203-291	3.376	316.676	Below Maximum Depth	2.744	0 - 13:36 hrs	0	20.249	0	3.678	0	9.123	0.876	2.744	0	0	0	0 - 00:00 hrs
0203-292	3.451	321.261	Below Maximum Depth	4.619	0 - 11:59 hrs	0	20.805	0	3.681	0.001	9.043	1.451	4.619	0	0	0	0 - 00:00 hrs
0203-293	4.131	323.871	Below Maximum Depth	0.659	0 - 13:34 hrs	0	20.844	0	3.683	0	9.094	1.401	0.659	0	0	0	0 - 00:00 hrs
0203-294	2.688	325.918	Below Link Crown	1.372	0 - 13:32 hrs	0	42.083	0	3.677	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-295	3.325	327.325	Below Link Crown	6.715	0 - 12:45 hrs	0	42.085	0	3.674	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-296	4.303	328.353	Below Maximum Depth	4.987	0 - 12:41 hrs	0	42.085	0	3.673	0.001	3.005	0.803	4.987	0	0	0	0 - 00:00 hrs
0203-297	3.665	329.375	Surcharged	-0.165	0 - 12:41 hrs	0	85.18	0	3.675	-0.005	2.945	0.165	0	0.327	1.464	43.769	0 - 12:15 hrs
0203-298	6.69	316.22	Surcharged	0	0 - 12:02 hrs	0	112.098	0	9.943	-0.006	3.206	2.19	0	0	0.001	23.479	0 - 12:02 hrs
0203-299	5.937	319.777	Surcharged	-0.207	0 - 12:26 hrs	106.525	106.525	2.926	2.928	0	2.081	2.937	0	0.335	1.038	60.931	0 - 12:15 hrs
0203-300	5.473	320.453	Surcharged	-0.243	0 - 12:38 hrs	173.896	173.896	5.277	5.28	0	4.349	2.473	0	0.912	2.004	122.014	0 - 12:15 hrs
0203-301	8.932	308.932	Surcharged	-0.472	0 - 14:00 hrs	0	130.926	0	15.19	0.008	7.079	3.932	0	0.44	2.723	29.048	0 - 14:45 hrs
0203-302	10.401	305.591	Surcharged	-0.471	0 - 13:55 hrs	160.136	307.942	4.887	22.914	0.033	8.102	5.321	0	2.053	3.518	153.371	0 - 12:15 hrs
0203-303	6.067	306.817	Surcharged	-0.247	0 - 12:33 hrs	94.341	94.341	2.623	2.624	0	7.111	3.067	0	0.452	1.971	65.716	0 - 12:15 hrs
0203-304	1.418	312.768	Below Link Crown	1.772	0 - 13:37 hrs	0	20.249	0	3.676	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-305	3.284	315.614	Surcharged	-0.054	0 - 13:36 hrs	0	20.249	0	3.677	0	9.197	0.784	0	0	3.968	0.024	0 - 11:59 hrs
0203-306	4.407	324.737	Surcharged	-0.297	0 - 13:34 hrs	0	42.057	0	3.678	0.001	9.006	0.907	0	0.88	4.492	21.964	0 - 12:37 hrs
0203-307	3.55	317.75	Below Maximum Depth	2.48	0 - 12:45 hrs	0	52.028	0	5.317	0	2.156	0.05	2.48	0	0	0	0 - 00:00 hrs
0203-308	3.512	316.012	Below Maximum Depth	4.838	0 - 12:59 hrs	0	52.026	0	5.312	0.001	1.435	0.012	4.838	0	0	0	0 - 00:00 hrs
0203-309	3.527	314.197	Below Link Crown	3.653	0 - 13:45 hrs	0	52.017	0	5.302	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-310	3.416	312.556	Below Link Crown	5.104	0 - 14:00 hrs	0	52.281	0	5.294	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-311	7.35	312.91	Surcharged	0	0 - 12:02 hrs	0	52.649	0	5.285	-0.001	4.007	3.35	0	0	0	6.455	0 - 12:02 hrs
0203-312	7.96	309.96	Surcharged	-0.36	0 - 14:03 hrs	0	99.543	0	9.945	0.004	5.628	2.96	0	0.771	2.741	35.132	0 - 14:45 hrs

Table B-1a. Existing System Analysis - Nodes
2-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-313	7.56	311.81	Below Maximum Depth	0	0 - 12:00 hrs	0	99.547	0	9.937	0.002	5.492	2.56	0	0	0	0	0 - 00:00 hrs
0203-314	7.61	313.1	Surcharged	0	0 - 12:02 hrs	0	99.544	0	9.985	0.003	4.54	2.61	0	0	0.001	0.552	0 - 12:02 hrs
0203-315	6.42	321.05	Below Maximum Depth	0	0 - 12:00 hrs	0	76.241	0	7.009	-0.004	4.42	2.78	0	0	0	7.697	0 - 12:00 hrs
0203-316	6.667	322.717	Surcharged	-0.247	0 - 12:45 hrs	218.204	218.204	7.042	7.046	0	4.642	3.167	0	1.281	2.209	155.892	0 - 12:15 hrs
0203-317	8.54	306.66	Surcharged	-0.13	0 - 14:15 hrs	0	123.287	0	15.276	0.003	7.176	3.46	0	0.3	2.367	54.044	0 - 14:52 hrs
0203-318	4.088	283.227	Below Maximum Depth	2.363	0 - 12:17 hrs	0	38.912	0	7.912	0.002	12.999	1.088	2.363	0	0	0	0 - 00:00 hrs
0203-319	3.754	271.454	Below Link Crown	12.026	0 - 12:18 hrs	0	44.458	0	3.348	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-320	1.673	279.665	Below Link Crown	4.576	0 - 13:11 hrs	0	28.877	0	2.707	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-321	2.255	280.547	Below Link Crown	6.055	0 - 12:18 hrs	0	28.877	0	2.717	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-322	4.62	274.755	Below Maximum Depth	1.245	0 - 12:47 hrs	0	25.596	0	3.195	0.009	5.805	0.62	1.245	0	0	0	0 - 00:00 hrs
0203-323	5.435	274.544	Below Link Crown	28.076	0 - 12:48 hrs	0	25.596	0	3.186	0.046	0	0	0	0	0	0	0 - 00:00 hrs
0203-324	1.445	274.36	Below Link Crown	28.26	0 - 12:48 hrs	0	25.595	0	3.138	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-325	6.275	292.419	Below Link Crown	8.341	0 - 12:30 hrs	0	182.765	0	13.166	0.073	0	0	0	0	0	0	0 - 00:00 hrs
0203-326	1.831	272.779	Below Link Crown	5.021	0 - 12:15 hrs	88.013	88.013	2.612	2.614	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-327	2.756	269.856	Below Link Crown	7.244	0 - 12:15 hrs	0	87.192	0	2.614	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-328	5.307	268.511	Below Link Crown	4.789	0 - 12:18 hrs	0	175.309	0	6.743	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-329	6.047	291.473	Below Link Crown	4.887	0 - 12:33 hrs	0	173.028	0	13.093	0.049	0	0	0	0	0	0	0 - 00:00 hrs
0203-330	1.897	306.759	Below Link Crown	1.941	0 - 12:17 hrs	0	54.125	0	2.123	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-331	7.222	301.221	Below Maximum Depth	0.129	0 - 15:10 hrs	0	144.346	0	22.667	0.031	7.758	1.222	0.128	0	0	0	0 - 00:00 hrs
0203-332	5.509	299.009	Below Link Crown	0.591	0 - 12:15 hrs	0	144.346	0	22.62	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-333	7.148	302.148	Surcharged	-0.868	0 - 14:57 hrs	0	167.934	0	22.604	0.02	7.719	1.148	0	0.576	3.857	32.961	0 - 12:15 hrs
0203-334	6.744	306.384	Surcharged	-0.004	0 - 13:56 hrs	0	34.097	0	2.654	-0.001	7.141	3.214	0	0	0.022	3.361	0 - 13:56 hrs
0203-335	2.86	267.247	Below Link Crown	11.853	0 - 12:15 hrs	0	127.875	0	7.058	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-336	2.643	288.853	Below Maximum Depth	5.707	0 - 12:22 hrs	0	17.452	0	1.307	0	1.78	0.643	5.707	0	0	0	0 - 00:00 hrs
0203-337	2.141	303.031	Below Link Crown	4.969	0 - 12:15 hrs	0	60.761	0	9.045	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-338	2.115	295.745	Below Link Crown	2.532	0 - 12:21 hrs	0	64.779	0	3.328	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-339	0.972	296.022	Below Link Crown	8.078	0 - 12:15 hrs	42.745	94.832	1.516	6.019	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-340	6.44	316.57	Surcharged	-0.42	0 - 13:03 hrs	0	69.853	0	7.009	0	4.473	2.44	0	0.216	1.601	17.582	0 - 12:02 hrs
0203-341	3.171	260.193	Below Link Crown	8.307	0 - 14:25 hrs	0	247.166	0	39.102	0.01	0	0	0	0	0	0	0 - 00:00 hrs
0203-342	5.789	271.517	Surcharged	-0.917	0 - 12:27 hrs	0	64.518	0	5.742	0.002	3.063	0.928	0	0.028	1.528	12.421	0 - 12:15 hrs
0203-343	13.742	315.028	Surcharged	-0.118	0 - 12:06 hrs	104.733	104.733	3.355	3.356	0	4.471	7.742	0	0.008	0.04	40.848	0 - 12:04 hrs
0203-344	9.219	308.33	Surcharged	-0.13	0 - 12:41 hrs	0	132.688	0	3.307	0.002	4.839	3.074	0	0.469	2.336	104.616	0 - 12:15 hrs
0203-345	2.509	256.546	Below Link Crown	8.283	0 - 13:48 hrs	0	291.353	0	44.828	0.028	0	0	0	0	0	0	0 - 00:00 hrs
0203-346	1.258	258.211	Below Link Crown	6.588	0 - 12:41 hrs	0	46.029	0	5.738	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-347	5.871	264.567	Below Link Crown	1.394	0 - 12:41 hrs	0	46.124	0	5.744	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-348	4.14	264.654	Below Link Crown	3.146	0 - 12:41 hrs	0	46.792	0	5.747	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-349	7.086	268.481	Below Link Crown	0.556	0 - 12:34 hrs	0	48.001	0	5.756	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-350	5.906	268.521	Below Link Crown	1.285	0 - 12:34 hrs	0	49.313	0	5.758	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-351	2.763	278.243	Below Link Crown	4.517	0 - 12:15 hrs	0	43.974	0	1.332	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-352	5.246	287.379	Below Link Crown	1.699	0 - 12:17 hrs	0	229.677	0	16.59	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-353	5.461	282.026	Below Link Crown	1.569	0 - 12:21 hrs	0	235.452	0	17.851	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-354	2.893	278.61	Below Link Crown	4.137	0 - 12:19 hrs	0	235.362	0	17.843	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-355	4.97	273.489	Below Link Crown	1.984	0 - 12:23 hrs	0	234.66	0	17.83	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-356	4.412	272.166	Below Link Crown	4.134	0 - 12:23 hrs	59.818	269.175	1.708	19.533	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-357	8.803	270.217	Surcharged	-0.087	0 - 12:37 hrs	0	269.221	0	20.297	0.007	1.117	0.339	0	0.093	0.491	21.581	0 - 12:25 hrs
0203-358	7.553	268.585	Surcharged	-0.185	0 - 12:37 hrs	0	249.335	0	20.296	0.009	1.151	0.232	0	0.009	0.561	4.536	0 - 12:21 hrs
0203-359	6.05	265.8	Below Link Crown	1.3	0 - 12:41 hrs	0	270.502	0	22.199	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-360	2.255	253.062	Below Link Crown	14.438	0 - 12:32 hrs	0	330.946	0	27.599	0.011	0	0	0	0	0	0	0 - 00:00 hrs
0203-361	3.871	260.73	Below Link Crown	5.9	0 - 12:30 hrs	0	99.876	0	5.51	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-362	3.385	278.705	Below Link Crown	4.558	0 - 13:29 hrs	0	237.756	0	27.391	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-363	5.824	286.284	Below Link Crown	1.121	0 - 12:17 hrs	0	227.602	0	16.582	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-364	2.817	276.783	Below Link Crown	5.253	0 - 13:29 hrs	0	237.754	0	27.343	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-365	9.2	295.6	Surcharged	0	0 - 13:36 hrs	0	174.881	0	16.2	-0.001	3.28	3.7	0	0	0.001	29.697	0 - 13:34 hrs
0203-366	12.034	285.318	Surcharged	-0.118	0 - 12:32 hrs	0	122.303	0	16.279	0.002	1.873	0.133	0	0.475	0.936	122.296	0 - 12:15 hrs
0203-367	12.869	285.318	Surcharged	-2.306	0 - 12:11 hrs	240.355	300.592	7.479	31.269	0.015	2.708	3.654	0	0.1	1.183	37.729	0 - 12:06 hrs
0203-368	10.032	276.693	Surcharged	-0.376	0 - 13:30 hrs	0	269.225	0	31.28	0.004	7.424	2.111	0	2.045	3.55	76.252	0 - 12:15 hrs
0203-369	5.787	283.448	Below Maximum Depth	1.871	0 - 13:29 hrs	0	85.213	0	7.259	0.002	3.262	0.439	1.871	0	0	0	0 - 00:00 hrs
0203-370	8.113	275.01	Below Link Crown	0.111	0 - 13:40 hrs	0	205.268	0	31.265	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-371	0	270.605	Below Link Invert	4.595	0 - 00:00 hrs	0	0	0	0	0	48	0	4.595	0	0	0	0 - 00:00 hrs
0203-372	8.325	272.619	Below Link Crown	0.391	0 - 13:38 hrs	0	214.017	0	33.133	0.012	0	0	0	0	0	0	0 - 00:00 hrs
0203-373	14.643	272.206	Surcharged	-1.687	0 - 13:38 hrs	0	212.939	0	33.112	0.005	8.088	1.687	0	0.04	4.044	15.791	0 - 12:04 hrs
0203-374	12.877	270.369	Surcharged	-0.369	0 - 15:00 hrs	0	210.439	0	33.092	0.019	9.155	4.928	0	0.694	3.69	17.747	0 - 12:56 hrs
0203-375	6.167	265.533	Below Link Crown	5.167	0 - 15:06 hrs	0	195.336	0	33.091	0.015	0	0	0	0	0	0	0 - 00:00 hrs
0203-376	5.471	264.854	Below Link Crown	6.561	0 - 15:11 hrs	0	195.316	0	33.074	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-377	13.745	271.241	Surcharged	-1.241	0 - 13:40 hrs	0	212.703	0	33.167	0.013	10.412	6.745	0	0.299	4.064	26.208	0 - 12:10 hrs
0203-378	10.431	271.331	Surcharged	-0.118	0 - 12:30 hrs	107.455	107.455	3.751	3.753	0	1.815	7.431	0	0.275	0.854	50.802	0 - 12:15 hrs
0203-379	8.57	267.042	Below Maximum Depth	4.171	0 - 12:25 hrs	0	66.104	0	3.772	0.001	1.805	4.57	4.171	0	0	0	0 - 00:00 hrs
0203-380	4.994	291.994	Below Link Crown	5.306	0 - 12:21 hrs	0	94.184	0	6.687	0.01	0	0	0	0	0	0	0 - 00:00 hrs
0203-381	2.342	271.83	Below Link Crown	1.77	0 - 12:15 hrs	111.297	111.297	4.141	4.143	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-382	1.681	299.681	Below Link Crown	8.519	0 - 14:25 hrs	0	28.414	0	3.336	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-383	5.578	316.648	Below Maximum Depth	1.052	0 - 15:14 hrs	0	138.36	0	40.633	0	23.78	0.668	1.052	0	0	0	0 - 00:00 hrs
0203-384	5.672	314.672	Below Maximum Depth	1.698	0 - 15:15 hrs	0	117.857	0	40.017	0.74	23.651	0.762	1.698	0	0	0	0 - 00:00 hrs
0203-385	4.952	310.55	Below Maximum Depth	0	0 - 12:07 hrs	0	4.257	0	0.159	0	0.905	3.452	0	0.002	0.195	0.554	0 - 12:22 hrs
0203-386	3.892	310.49	Below Maximum Depth	0	0 - 12:07 hrs	5.151	7.44	0.171	0.186	0	0.776	2.642	0	0.041	0.258	7.44	0 - 12:15 hrs
0203-387	4.394	310.165	Below Maximum Depth	0.225	0 - 12:15 hrs	0	8.16	0	0.223	0	0.737	2.894	0.225	0	0	0	0 - 00:00 hrs
0203-388	3.839	310.61	Below Maximum Depth	0	0 - 12:07 hrs	9.585	9.585	0.235	0.235	0	0.649	2.589	0	0.009	0.168	3.446	0 - 12:15 hrs
0203-389	9.424	272.19	Below Maximum Depth	0.57	0 - 12:26 hrs	0	14.925	0	0.765	0.001	9.639	7.674	0.57	0	0	0	0 - 00:00 hrs
0203-390	9.71	272.91	Surcharged	0	0 - 12:02 hrs	29.134	29.134	0.887	0.888	0	9.94	8.46	0	0.12	0.564	19.38	0 - 12:15 hrs
0203-391	5.141	257.626	Below Link Crown	5.682	0 - 12:27 hrs	0	200.393	0	7.791	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-392	3.861	256.144	Below Link Crown	13.956	0 - 12:29 hrs	0	199.855	0	7.768	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-393	2.624	313.502	Below Link Crown	11.498	0 - 12:22 hrs	0	19.654	0	1.2	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-394	4.129	308.366	Below Link Crown	1.544	0 - 12:15 hrs	0	98.156	0	4.37	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-395	3.237	307.366	Below Link Crown	3.84	0 - 12:15 hrs	0	98.086	0	4.381	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-396	1.854	306.051	Below Maximum Depth	4.049	0 - 14:08 hrs	13.515	13.515	0.342	0.342	0	3.601	0.047	4.049	0	0	0	0 - 00:00 hrs
0203-397	3.132	297.765	Below Link Crown	3.524	0 - 12:19 hrs	0	29.987	0	5.049	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-398	3.048	297.681	Below Link Crown	3.314	0 - 12:19 hrs	0	30.348	0	5.047	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-399	1.054	309.697	Below Link Crown	3.15	0 - 12:15 hrs	15.983	15.983	0.645	0.645	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-400	2.843	308.251	Below Link Crown	0.979	0 - 12:15 hrs	0	15.855	0	0.645	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-401	1.899	294.113	Below Link Crown	5.287	0 - 12:19 hrs	0	81.911	0	3.114	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-402	4.876	287.373	Surcharged	-0.373	0 - 12:51 hrs	0	283.646	0	20.276	0.018	3.376	0.379	0	0.776	1.688	94.636	0 - 12:23 hrs
0203-403	4.684	286.785	Below Maximum Depth	1.69	0 - 13:07 hrs	0	201.414	0	20.299	0.008	3.105	0.27	1.69	0	0	0	0 - 00:00 hrs
0203-404	4.44	286.541	Below Link Crown	2.459	0 - 13:08 hrs	0	197.548	0	20.291	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-405	4.462	286.094	Below Link Crown	2.406	0 - 13:11 hrs	0	195.105	0	20.284	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-406	4.461	285.868	Below Link Crown	2.032	0 - 13:11 hrs	0	190.696	0	20.277	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-407	5.458	285.615	Below Link Crown	0.905	0 - 13:12 hrs	0	185.971	0	20.266	0.009	0	0	0	0	0	0	0 - 00:00 hrs
0203-408	5.326	285.391	Below Link Crown	0.752	0 - 13:14 hrs	0	184.589	0	20.251	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-409	5.229	285.229	Below Link Crown	0.871	0 - 13:15 hrs	0	183.902	0	20.244	0.014	0	0	0	0	0	0	0 - 00:00 hrs
0203-410	5.777	284.627	Below Link Crown	2.273	0 - 13:18 hrs	0	181.979	0	20.205	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-411	1.641	309.249	Below Link Crown	3.001	0 - 12:15 hrs	25.059	25.059	1.177	1.178	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-412	2.196	308.007	Below Link Crown	4.693	0 - 12:15 hrs	0	25.002	0	1.178	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-413	1.773	306.556	Below Link Crown	6.044	0 - 12:15 hrs	0	24.929	0	1.178	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-414	1.366	303.57	Below Link Crown	2.72	0 - 12:15 hrs	0	24.848	0	1.178	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-415	4.896	308.501	Below Maximum Depth	0.799	0 - 12:15 hrs	21.083	21.083	0.717	0.717	0	0.544	2.896	0.799	0	0	0	0 - 00:00 hrs
0203-416	1.351	304.106	Below Link Crown	3.594	0 - 12:15 hrs	0	21.081	0	0.718	0	0	0	0	0	0	0	0 - 00:00 hrs

Table B-1a. Existing System Analysis - Nodes
2-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-417	3.876	288.446	Below Link Crown	3.563	0 - 12:25 hrs	0	89.4	0	6.67	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-418	3.964	287.328	Below Link Crown	4.503	0 - 12:26 hrs	0	89.079	0	6.67	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-419	2.488	292.412	Below Link Crown	3.688	0 - 12:22 hrs	0	16.743	0	0.659	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-420	0.693	288.414	Below Link Crown	5.897	0 - 12:17 hrs	0	13.848	0	0.66	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-421	0.902	301.044	Below Link Crown	4.956	0 - 12:15 hrs	0	8.959	0	0.298	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-422	1.425	307.175	Below Link Crown	2.025	0 - 12:15 hrs	0	9.092	0	0.363	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-423	1.175	306.581	Below Link Crown	6.019	0 - 12:15 hrs	0	9.012	0	0.364	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-424	2.467	285.096	Below Link Crown	5.304	0 - 12:33 hrs	0	98.807	0	7.305	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-425	2.583	284.922	Below Link Crown	8.578	0 - 12:33 hrs	0	97.225	0	7.303	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-426	4.414	283.498	Below Link Crown	3.502	0 - 13:30 hrs	0	84.733	0	7.257	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-427	4.469	283.398	Below Link Crown	3.502	0 - 13:29 hrs	0	85.521	0	7.259	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-428	5.577	270.223	Below Link Crown	8.266	0 - 13:18 hrs	0	237.757	0	27.314	0.021	0	0	0	0	0	0	0 - 00:00 hrs
0203-429	5.141	269.608	Below Link Crown	7.007	0 - 13:17 hrs	0	249.139	0	29.279	0.021	0	0	0	0	0	0	0 - 00:00 hrs
0203-430	6.557	276.453	Surcharged	-0.003	0 - 12:19 hrs	0	35.094	0	2.3	0.005	2.531	3.557	0	0.005	0.097	12.769	0 - 12:03 hrs
0203-431	4.225	335.005	Surcharged	-0.065	0 - 12:18 hrs	32.149	32.149	1.201	1.201	0	1.128	2.225	0	0.049	0.543	12.509	0 - 12:15 hrs
0203-432	3.5	274.74	Below Link Crown	2.94	0 - 12:19 hrs	0	12.49	0	0.437	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-433	3.778	274.708	Below Link Crown	4.162	0 - 12:18 hrs	0	13.193	0	0.453	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-434	3.929	274.699	Below Link Crown	4.361	0 - 12:18 hrs	36.053	53.936	1.572	2.519	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-435	2.317	273.347	Below Link Crown	6.173	0 - 12:32 hrs	0	53.886	0	2.518	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-436	0	269.45	Below Link Invert	3.53	0 - 00:00 hrs	0	0	0	0	0	48	0	3.53	0	0	0	0 - 00:00 hrs
0203-437	1.343	271.483	Below Link Crown	4.617	0 - 12:38 hrs	0	40.082	0	2.471	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-438	1.558	266.508	Below Link Crown	7.692	0 - 12:38 hrs	0	40.031	0	2.469	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-439	4.65	330.095	Surcharged	-0.177	0 - 12:33 hrs	135.818	135.818	4.587	4.59	0	2.616	1.512	0	0.479	1.306	75.788	0 - 12:15 hrs
0203-440	4.343	324.479	Surcharged	-0.321	0 - 13:21 hrs	0	60.215	0	4.599	-0.002	7.623	1.046	0	1.099	3.807	31.161	0 - 12:19 hrs
0203-441	4.662	323.462	Surcharged	-0.002	0 - 13:25 hrs	0	29.909	0	4.585	0.002	7.738	1.662	0	0	0.214	0.083	0 - 13:21 hrs
0203-442	3.331	321.976	Below Maximum Depth	0.424	0 - 13:32 hrs	0	29.834	0	4.585	0.002	7.614	0.331	0.424	0	0	0	0 - 00:00 hrs
0203-443	2.934	320.887	Below Link Crown	0.913	0 - 13:19 hrs	0	29.836	0	4.586	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-444	1.637	319.028	Below Link Crown	2.672	0 - 12:57 hrs	0	29.835	0	4.587	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-445	1.371	312.701	Below Link Crown	3.165	0 - 13:18 hrs	0	30.05	0	4.58	-0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-446	3.411	310.951	Below Maximum Depth	0.729	0 - 12:00 hrs	0	29.9	0	4.582	0.001	7.611	0.374	0.729	0	0	0	0 - 00:00 hrs
0203-447	1.707	309.029	Below Link Crown	3.212	0 - 12:57 hrs	0	29.907	0	4.58	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-448	4.184	307.995	Below Maximum Depth	3.755	0 - 12:57 hrs	0	72.789	0	7.678	0.001	1.826	0.184	3.755	0	0	0	0 - 00:00 hrs
0203-449	5.246	317.964	Surcharged	-0.164	0 - 12:26 hrs	107.067	107.067	3.1	3.102	0	1.852	2.246	0	0.275	0.886	54.756	0 - 12:15 hrs
0203-450	7.105	317.973	Below Maximum Depth	0.027	0 - 12:03 hrs	0	56.96	0	3.096	0	1.776	4.093	0.027	0	0	0	0 - 00:00 hrs
0203-451	5.223	309.154	Surcharged	-0.254	0 - 12:56 hrs	0	52.385	0	3.094	0.001	2.615	1.723	0	0.21	1.236	8.96	0 - 12:22 hrs
0203-452	4.031	306.301	Below Link Crown	4.951	0 - 12:57 hrs	0	72.791	0	7.675	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-453	4.551	304.261	Below Maximum Depth	1.139	0 - 12:57 hrs	0	76.937	0	7.672	-0.001	2.399	0.481	1.139	0	0	0	0 - 00:00 hrs
0203-454	6.842	302.037	Surcharged	-0.437	0 - 13:15 hrs	0	73.315	0	7.663	0.002	2.912	2.342	0	0.07	1.378	25.448	0 - 12:03 hrs
0203-455	7.352	300.922	Surcharged	-0.212	0 - 13:17 hrs	0	93.269	0	8.879	0.001	2.987	2.753	0	0.166	1.426	8.566	0 - 12:25 hrs
0203-456	3.367	302.5	Surcharged	-0.232	0 - 12:30 hrs	48.412	48.412	1.219	1.219	0	3.172	1.367	0	0.212	1.584	34.025	0 - 12:15 hrs
0203-457	7.68	299.325	Surcharged	-0.194	0 - 12:30 hrs	140.317	217.301	4.536	13.424	0.001	2.941	2.18	0	0.422	1.232	74.463	0 - 12:15 hrs
0203-458	9.845	296.354	Surcharged	-0.376	0 - 12:44 hrs	0	143.058	0	13.444	0.011	3.39	4.345	0	0.389	1.535	24.848	0 - 12:04 hrs
0203-459	6.925	298.655	Surcharged	-0.135	0 - 12:22 hrs	96.155	96.155	2.761	2.762	0	1.433	3.425	0	0.179	0.672	42.145	0 - 12:15 hrs
0203-460	7.565	297.699	Below Maximum Depth	0.398	0 - 12:45 hrs	0	54.078	0	2.73	0.003	2.026	3.138	0.398	0	0	0	0 - 00:00 hrs
0203-461	8.908	292.084	Surcharged	-0.134	0 - 12:44 hrs	0	174.88	0	16.205	0.004	8.771	3.171	0	0.041	0.836	8.845	0 - 13:36 hrs
0203-462	5.668	288.24	Below Link Crown	1.43	0 - 13:37 hrs	0	95.457	0	16.18	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-463	4.846	297.073	Below Maximum Depth	2.427	0 - 12:59 hrs	0	61.248	0	7.599	0	5.548	1.346	2.427	0	0	0	0 - 00:00 hrs
0203-464	7.657	303.185	Surcharged	-0.221	0 - 12:59 hrs	184.672	184.672	7.611	7.616	0	5.554	4.657	0	1.284	2.698	123.964	0 - 12:15 hrs
0203-465	2.79	294.415	Below Link Crown	4.61	0 - 13:00 hrs	0	61.248	0	7.597	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-466	1.918	288.526	Below Link Crown	4.926	0 - 14:41 hrs	0	61.247	0	7.6	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-467	4.666	280.077	Surcharged	-0.577	0 - 12:38 hrs	0	79.136	0	7.741	0.002	7.299	0.586	0	0.481	3.65	79.136	0 - 12:15 hrs
0203-468	4.502	275.41	Surcharged	-0.21	0 - 12:38 hrs	57.201	57.201	1.926	1.927	0	3.181	1.502	0	0.232	1.587	33.674	0 - 12:15 hrs
0203-469	5.749	276.1	Surcharged	0	0 - 12:03 hrs	0	30.053	0	1.911	0.001	3.178	2.749	0	0	0	5.437	0 - 12:03 hrs
0203-470	7.483	276.252	Below Maximum Depth	1.992	0 - 12:03 hrs	0	26.074	0	1.935	0.001	7.243	4.483	1.992	0	0	0	0 - 00:00 hrs
0203-471	5.522	273.668	Below Maximum Depth	1.432	0 - 13:38 hrs	0	26.07	0	1.937	0	7.551	2.522	1.432	0	0	0	0 - 00:00 hrs
0203-472	4.216	295.177	Surcharged	-0.181	0 - 13:27 hrs	0	93.665	0	7.673	0.002	3.259	0.181	0	0.271	1.629	10.007	0 - 12:56 hrs
0203-473	6.057	273.564	Below Maximum Depth	1.336	0 - 13:38 hrs	0	26.061	0	1.936	0.001	8.243	3.057	1.336	0	0	0	0 - 00:00 hrs
0203-474	9.674	268.65	Surcharged	-0.05	0 - 12:18 hrs	62.959	62.959	1.734	1.734	0	1.846	6.674	0	0.038	0.303	15.1	0 - 12:15 hrs
0203-475	6.62	266.924	Below Maximum Depth	0.376	0 - 12:37 hrs	0	33.676	0	1.93	0	2.801	3.476	0.376	0	0	0	0 - 00:00 hrs
0203-476	6.473	266.435	Below Maximum Depth	1.165	0 - 12:40 hrs	0	33.66	0	1.931	0.001	3.024	3.343	1.165	0	0	0	0 - 00:00 hrs
0203-477	6.875	278.917	Surcharged	-0.216	0 - 12:38 hrs	96.246	96.246	3.093	3.095	0	3.406	3.875	0	0.438	1.701	61.702	0 - 12:15 hrs
0203-478	7.588	276.972	Surcharged	-0.224	0 - 12:41 hrs	0	40.481	0	3.103	-0.002	3.438	4.497	0	0.01	1.306	10.517	0 - 12:03 hrs
0203-479	8.839	274.582	Below Maximum Depth	0.245	0 - 12:27 hrs	0	38.745	0	3.105	0.003	4.874	5.68	0.245	0	0	0	0 - 00:00 hrs
0203-480	7.377	273.112	Below Maximum Depth	0.328	0 - 12:27 hrs	0	38.75	0	3.102	0.002	4.839	4.377	0.328	0	0	0	0 - 00:00 hrs
0203-481	7.769	328.802	Surcharged	-0.294	0 - 12:52 hrs	349.615	349.615	9.067	9.072	0	7.362	4.769	0	2.558	3.679	289.125	0 - 12:15 hrs
0203-482	7.033	322.698	Below Maximum Depth	0	0 - 11:48 hrs	0	60.761	0	9.108	0.01	7.374	4.033	0	0	0.003	8.764	0 - 11:48 hrs
0203-483	2.581	314.354	Below Link Crown	3.798	0 - 11:51 hrs	0	60.761	0	9.095	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-484	2.591	307.71	Below Link Crown	3.73	0 - 12:53 hrs	0	61.288	0	9.06	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-485	4.806	279.986	Surcharged	-0.166	0 - 12:29 hrs	0	69.076	0	7.922	0.001	7.339	0.866	0	0.04	0.999	17.102	0 - 12:18 hrs
0203-486	2.683	298.962	Below Link Crown	6.112	0 - 12:55 hrs	0	60.823	0	9.039	-0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-487	2.73	296.233	Below Link Crown	6.955	0 - 12:15 hrs	0	61.936	0	9.048	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-488	7.468	295.489	Below Maximum Depth	1.102	0 - 12:15 hrs	163.232	220.985	6.116	15.549	0.009	1.111	1.468	1.102	0	0	0	0 - 00:00 hrs
0203-489	4.553	295.132	Surcharged	-0.032	0 - 12:22 hrs	0	39.936	0	0.399	0	1.108	1.053	0	0.14	0.505	39.936	0 - 12:15 hrs
0203-490	3.565	295.228	Below Maximum Depth	1.832	0 - 12:15 hrs	13.849	13.849	0.319	0.319	0	0.34	0.065	1.832	0	0	0	0 - 00:00 hrs
0203-491	4.785	291.862	Below Link Crown	1.238	0 - 12:15 hrs	0	194.996	0	15.467	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-492	3.731	289.729	Below Maximum Depth	2.213	0 - 12:15 hrs	38.356	38.356	1.105	1.106	0	0.139	0.231	2.213	0	0	0	0 - 00:00 hrs
0203-493	1.144	302.062	Below Link Crown	14.538	0 - 12:15 hrs	8.999	8.999	0.298	0.298	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-494	9.944	276.017	Surcharged	-0.007	0 - 12:17 hrs	103.566	115.55	4.056	6.352	0.004	2.355	5.944	0	0.008	0.127	19.013	0 - 12:19 hrs
0203-495	4.059	270.997	Below Maximum Depth	5.135	0 - 12:15 hrs	20.429	20.429	0.726	0.726	0	0.662	1.559	5.135	0	0	0	0 - 00:00 hrs
0203-496	1.387	306.634	Below Link Crown	2.816	0 - 12:15 hrs	9.908	9.908	0.295	0.295	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-497	1.937	306.351	Below Link Crown	1.949	0 - 12:15 hrs	0	9.822	0	0.295	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-498	1.7	306.072	Below Link Crown	5.828	0 - 12:15 hrs	0	9.725	0	0.295	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-499	1.381	305.55	Below Link Crown	5.05	0 - 12:15 hrs	0	9.69	0	0.295	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-500	0.532	303.722	Below Link Crown	6.378	0 - 12:15 hrs	0	9.661	0	0.295	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-501	0.36	303.711	Below Link Crown	3.589	0 - 12:15 hrs	0	8.988	0	0.363	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-502	2.805	315.164	Below Link Crown	3.036	0 - 12:15 hrs	36.247	36.247	1.361	1.361	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-503	2.025	313.31	Below Link Crown	6.605	0 - 12:15 hrs	0	36.049	0	1.362	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-504	1.459	309.255	Below Link Crown	2.587	0 - 12:15 hrs	0	39.563	0	1.481	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-505	0.739	309.341	Below Link Crown	6.681	0 - 12:15 hrs	3.87	3.87	0.12	0.12	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-506	5.73	276.994	Surcharged	-0.177	0 - 12:37 hrs	65.553	65.553	2.296	2.297	0	2.957	3.23	0	0.364	1.42	53.565	0 - 12:15 hrs
0203-507	5.446	269.946	Below Link Crown	6.669	0 - 13:17 hrs	57.959	249.141	1.999	29.294	0.012	0	0	0	0	0	0	0 - 00:00 hrs
0203-508	5.558	277.798	Below Link Crown	1.782	0 - 12:22 hrs	69.064	69.064	1.781	1.782	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-509	6.49	277.79	Below Link Crown	1.45	0 - 12:26 hrs	0	67.755	0	1.782	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-510	4.659	275.452	Surcharged	-0.193	0 - 12:57 hrs	130.292	130.292	6.049	6.052	0	4.737	1.659	0	0.821	2.36	78.316	0 - 12:15 hrs
0203-511	2.97	328.324	Below Maximum Depth	0.976	0 - 12:03 hrs	0	20.084	0	1.202	0	1.079	0.47	0.976	0	0	0	0 - 00:00 hrs
0203-512	1.509	325.668	Below Link Crown	4.583	0 - 12:04 hrs	0	19.913	0	1.203	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-513	3.49	332.57	Below Maximum Depth	0.14	0 - 12:03 hrs	0	20.106	0	1.202	0	1.092	1.49	0.14	0	0	0	0 - 00:00 hrs
0203-514	2.191	321.808	Below Link Crown	0.892	0 - 12:21 hrs	0	19.834	0	1.199	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-515	1.558	320.209	Below Link Crown	3.383	0 - 12:21 hrs	0	19.654	0	1.197	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-516	1.789	313.857	Below Link Crown	5.123	0 - 12:22 hrs	0	19.654	0	1.2	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-517	7.165	277.775	Below Link Crown	1.755	0 - 12:32 hrs	0	65.823	0	1.78	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-518	3.559	319.87	Surcharged	-0.07	0 - 12:17 hrs	46.748	46.748	1.523	1.523	0	0.791	1.159	0	0.038	0.352	11.686	0 - 12:15 hrs
0203-519	3.205	318.616	Below Link Crown	1.984	0 - 12:06 hrs	0	35.358	0	1.533	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-520	3.24	263.19	Below Link Crown	10.67	0 - 12:25 hrs	0	163.683	0	21.647	0.01	0	0	0	0	0	0	0 - 00:00 hrs

Table B-1a. Existing System Analysis - Nodes
2-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-521	4.298	322.098	Below Maximum Depth	2.046	0 - 12:23 hrs	0	36.208	0	2.278	0	1.845	0.798	2.046	0	0	0	0 - 00:00 hrs
0203-522	4.931	322.931	Below Maximum Depth	1.742	0 - 12:25 hrs	0	36.237	0	2.278	0.001	1.86	1.431	1.742	0	0	0	0 - 00:00 hrs
0203-523	5.829	324.329	Surcharged	-0.129	0 - 12:22 hrs	74.212	74.212	2.284	2.285	0	1.88	2.329	0	0.196	0.914	39.245	0 - 12:15 hrs
0203-524	5.41	323.66	Below Maximum Depth	0.24	0 - 12:22 hrs	0	36.273	0	2.278	0	1.87	1.91	0.24	0	0	0	0 - 00:00 hrs
0203-525	2.67	266.98	Below Link Crown	14.32	0 - 12:48 hrs	0	128.614	0	20.348	0.014	0	0	0	0	0	0	0 - 00:00 hrs
0203-526	3.889	321.435	Below Maximum Depth	1.565	0 - 12:22 hrs	0	36.175	0	2.278	0	1.83	0.389	1.565	0	0	0	0 - 00:00 hrs
0203-527	3.221	320.712	Below Link Crown	2.059	0 - 12:23 hrs	0	36.219	0	2.278	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-528	3.4	319.986	Below Link Crown	2.311	0 - 12:25 hrs	0	35.231	0	2.278	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-529	3.566	319.066	Below Link Crown	1.622	0 - 12:25 hrs	0	35.074	0	2.28	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-530	8.695	275.555	Below Link Crown	1.305	0 - 13:03 hrs	0	138.995	0	19.137	0.13	0	0	0	0	0	0	0 - 00:00 hrs
0203-531	10.599	323.333	Below Maximum Depth	1.278	0 - 12:08 hrs	36.675	36.675	1.09	1.091	0	0.312	8.099	1.278	0	0	0	0 - 00:00 hrs
0203-532	2.515	295.345	Below Link Crown	7.505	0 - 12:37 hrs	0	108.247	0	38.536	0.035	0	0	0	0	0	0	0 - 00:00 hrs
0203-533	1.926	302.516	Below Link Crown	2.924	0 - 13:11 hrs	0	87.358	0	13.578	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-534	3.082	306.553	Below Maximum Depth	2.654	0 - 12:30 hrs	0	21.885	0	3.672	0	1.256	0.082	2.654	0	0	0	0 - 00:00 hrs
0203-535	2.854	306.152	Below Link Crown	2.816	0 - 12:29 hrs	0	22.888	0	3.673	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-536	8.205	305.376	Surcharged	-0.144	0 - 12:27 hrs	110.955	130.889	3.762	7.427	0.002	3.032	4.705	0	0.259	0.859	51.749	0 - 12:15 hrs
0203-537	4.808	301.979	Below Maximum Depth	3.844	0 - 12:06 hrs	0	83.352	0	7.424	0.002	1.72	0.808	3.844	0	0	0	0 - 00:00 hrs
0203-538	1.378	301.218	Below Link Crown	5.062	0 - 12:49 hrs	0	87.357	0	13.577	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-539	4.929	299.589	Below Maximum Depth	1.011	0 - 12:06 hrs	0	83.128	0	7.423	0.001	1.697	0.929	1.011	0	0	0	0 - 00:00 hrs
0203-540	5.349	296.339	Below Maximum Depth	1.211	0 - 12:06 hrs	0	79.529	0	7.428	0.001	1.873	1.309	1.211	0	0	0	0 - 00:00 hrs
0203-541	2.734	292.874	Below Link Crown	3.566	0 - 12:45 hrs	0	79.53	0	7.426	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-542	4.786	305.668	Below Maximum Depth	1.838	0 - 12:29 hrs	0	30.953	0	3.664	0.001	1.752	1.286	1.838	0	0	0	0 - 00:00 hrs
0203-543	5.457	289.917	Below Maximum Depth	1.223	0 - 12:45 hrs	0	79.488	0	7.435	0.001	1.819	1.457	1.223	0	0	0	0 - 00:00 hrs
0203-544	4.626	287.726	Below Maximum Depth	6.124	0 - 12:56 hrs	0	79.487	0	7.428	0.001	1.749	0.586	6.124	0	0	0	0 - 00:00 hrs
0203-545	4.255	284.233	Surcharged	-0.333	0 - 14:00 hrs	0	76.378	0	7.422	0.006	12.777	0.345	0	1.467	6.387	52.225	0 - 12:18 hrs
0203-546	4.081	284.031	Below Link Crown	3.039	0 - 13:53 hrs	0	35.808	0	7.406	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-547	3.967	298.677	Below Link Crown	4.123	0 - 12:17 hrs	0	89.636	0	13.517	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-548	4.013	283.933	Below Maximum Depth	3.347	0 - 13:48 hrs	0	34.713	0	7.404	0.002	8.897	0.123	3.347	0	0	0	0 - 00:00 hrs
0203-549	2.841	281.681	Below Link Crown	3.909	0 - 12:17 hrs	0	38.912	0	7.909	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-550	9.358	276.273	Below Link Crown	0.927	0 - 12:59 hrs	0	865.065	0	130.408	0.14	0	0	0	0	0	0	0 - 00:00 hrs
0203-551	1.193	276.643	Below Link Crown	5.857	0 - 12:18 hrs	0	44.062	0	1.33	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-552	5.569	278.629	Below Maximum Depth	2.221	0 - 12:45 hrs	0	25.596	0	3.207	0.002	5.695	2.559	2.221	0	0	0	0 - 00:00 hrs
0203-553	3.976	274.996	Below Link Crown	5.704	0 - 12:47 hrs	0	25.596	0	3.202	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-554	1.585	273.405	Below Link Crown	2.635	0 - 12:10 hrs	22.101	22.101	0.645	0.645	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-555	3.505	271.575	Below Link Crown	3.935	0 - 12:17 hrs	0	22.159	0	0.644	-0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-556	1.276	268.126	Below Link Crown	8.074	0 - 12:18 hrs	0	43.977	0	3.345	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-557	9.084	298.104	Below Link Crown	4.996	0 - 12:17 hrs	0	436.938	0	53.664	0.015	0	0	0	0	0	0	0 - 00:00 hrs
0203-558	5.411	266.813	Below Link Crown	14.317	0 - 13:03 hrs	39.628	943.145	0.964	140.107	0.064	0	0	0	0	0	0	0 - 00:00 hrs
0203-559	4.061	298.771	Below Link Crown	4.029	0 - 12:17 hrs	0	88.922	0	13.521	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-560	5.432	350.652	Surcharged	-0.002	0 - 12:15 hrs	376.015	376.015	14.22	14.228	0	0.205	0.852	0	0.005	0.053	13.28	0 - 12:15 hrs
0203-561	6.86	342.52	Below Maximum Depth	0	0 - 12:08 hrs	0	237.983	0	14.249	0.011	1.438	1.86	0	0.001	0.008	8.611	0 - 12:11 hrs
0203-562	6.377	332.377	Surcharged	-0.677	0 - 14:26 hrs	0	73.902	0	8.18	0.003	8.918	0.707	0	1.623	4.458	30.02	0 - 11:56 hrs
0203-563	6.277	334.347	Surcharged	-0.267	0 - 12:41 hrs	271.444	271.444	8.183	8.187	0	5.052	0.607	0	1.565	2.499	198.134	0 - 12:15 hrs
0203-564	4.733	345.833	Surcharged	-0.133	0 - 12:26 hrs	0	362.932	0	14.206	0.011	1.328	0.153	0	0.588	0.663	127.476	0 - 12:14 hrs
0203-565	1.853	335.233	Below Link Crown	4.277	0 - 12:27 hrs	0	237.345	0	14.213	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-566	4.65	334.01	Below Link Crown	3.13	0 - 12:12 hrs	0	236.563	0	14.218	0.043	0	0	0	0	0	0	0 - 00:00 hrs
0203-567	4.74	329.15	Below Link Crown	3.04	0 - 12:36 hrs	0	237.784	0	14.16	0.01	0	0	0	0	0	0	0 - 00:00 hrs
0203-568	5.578	327.248	Below Link Crown	2.692	0 - 12:18 hrs	0	236.748	0	14.144	0.018	0	0	0	0	0	0	0 - 00:00 hrs
0203-569	3.994	324.274	Below Link Crown	2.726	0 - 12:51 hrs	0	246.309	0	14.122	0.012	0	0	0	0	0	0	0 - 00:00 hrs
0203-570	6.093	324.053	Surcharged	-0.053	0 - 12:55 hrs	0	253.702	0	14.286	0.015	1.454	0.993	0	0.208	0.543	30.023	0 - 12:33 hrs
0203-571	7.466	320.126	Below Link Crown	0.074	0 - 12:32 hrs	0	216.627	0	14.079	0.167	0	0	0	0	0	0	0 - 00:00 hrs
0203-572	9.184	319.794	Below Link Crown	0.906	0 - 12:32 hrs	0	217.411	0	13.896	0.148	0	0	0	0	0	0	0 - 00:00 hrs
0203-573	9.071	319.681	Below Link Crown	1.019	0 - 12:30 hrs	386.331	543.151	28.099	41.864	0.103	0	0	0	0	0	0	0 - 00:00 hrs
0203-574	8.455	319.065	Surcharged	-0.065	0 - 12:52 hrs	0	542.957	0	41.744	0.145	2.102	0.105	0	0.578	1.049	57.019	0 - 12:30 hrs
0203-575	6.802	317.412	Surcharged	-0.312	0 - 15:14 hrs	0	487.313	0	41.714	0.258	23.875	0.362	0	15.644	11.937	381.257	0 - 12:17 hrs
0203-576	1.634	310.124	Below Link Crown	11.576	0 - 15:15 hrs	0	108.247	0	39.272	0.107	0	0	0	0	0	0	0 - 00:00 hrs
0203-577	3.378	298.437	Below Link Crown	9.766	0 - 15:18 hrs	0	108.247	0	39.167	0.064	0	0	0	0	0	0	0 - 00:00 hrs
0203-578	2.502	297.632	Below Link Crown	10.641	0 - 15:22 hrs	0	108.247	0	39.103	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-579	4.354	297.202	Below Link Crown	12.518	0 - 15:23 hrs	0	108.247	0	39.001	0.222	0	0	0	0	0	0	0 - 00:00 hrs
0203-580	3.989	294.799	Below Link Crown	7.521	0 - 12:34 hrs	0	108.247	0	38.5	0.081	0	0	0	0	0	0	0 - 00:00 hrs
0203-581	6.671	299.321	Surcharged	-0.001	0 - 12:15 hrs	66.937	66.937	1.831	1.832	0	0.524	3.671	0	0	0.028	1.486	0 - 12:15 hrs
0203-582	3.07	294.33	Below Link Crown	6.87	0 - 12:33 hrs	0	108.249	0	38.419	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-583	6.157	294.277	Below Link Crown	5.623	0 - 12:33 hrs	0	111.125	0	38.386	0.051	0	0	0	0	0	0	0 - 00:00 hrs
0203-584	8.092	294.272	Below Link Crown	5.928	0 - 12:33 hrs	0	514.592	0	91.986	0.106	0	0	0	0	0	0	0 - 00:00 hrs
0203-585	7.981	294.121	Below Link Crown	5.379	0 - 12:33 hrs	0	513.124	0	91.884	0.052	0	0	0	0	0	0	0 - 00:00 hrs
0203-586	7.918	293.868	Below Link Crown	6.332	0 - 12:33 hrs	0	512.471	0	91.834	0.075	0	0	0	0	0	0	0 - 00:00 hrs
0203-587	8.581	293.201	Below Link Crown	5.599	0 - 12:36 hrs	0	511.163	0	91.761	0.118	0	0	0	0	0	0	0 - 00:00 hrs
0203-588	10.206	293.036	Below Link Crown	5.034	0 - 12:36 hrs	0	509.249	0	91.643	0.174	0	0	0	0	0	0	0 - 00:00 hrs
0203-589	7.422	292.482	Below Link Crown	8.918	0 - 12:37 hrs	0	507.767	0	91.467	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-590	1.711	327.641	Below Link Crown	2.759	0 - 14:27 hrs	0	48.007	0	8.179	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-591	2.588	323.638	Below Link Crown	0.032	0 - 14:29 hrs	0	47.988	0	8.173	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-592	3.002	293.532	Below Link Crown	3.298	0 - 12:15 hrs	0	65.661	0	1.831	0.01	0	0	0	0	0	0	0 - 00:00 hrs
0203-593	1.154	317.334	Below Link Crown	2.466	0 - 14:30 hrs	0	47.971	0	8.17	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-594	3.76	312.69	Surcharged	-0.09	0 - 16:10 hrs	0	47.964	0	8.171	0.023	8.831	0.16	0	0.359	4.398	5.146	0 - 14:30 hrs
0203-595	2.844	310.834	Below Link Crown	0.266	0 - 16:12 hrs	0	43.092	0	8.147	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-596	1.869	308.229	Below Link Crown	1.271	0 - 16:14 hrs	0	43.092	0	8.14	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-597	2.86	300.39	Below Link Crown	4.31	0 - 16:15 hrs	0	43.092	0	8.133	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-598	2.29	299.2	Below Link Crown	4.8	0 - 12:19 hrs	0	43.092	0	8.128	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-599	4.931	298.961	Below Link Crown	4.329	0 - 12:18 hrs	0	43.175	0	8.126	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-600	6.928	298.628	Below Link Crown	2.232	0 - 12:17 hrs	289.252	468.361	9.685	53.687	0.015	0	0	0	0	0	0	0 - 00:00 hrs
0203-601	7.144	298.164	Below Link Crown	3.186	0 - 12:17 hrs	0	448.398	0	53.667	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-602	2.408	295.498	Below Link Crown	10.002	0 - 12:37 hrs	0	108.279	0	38.626	0.09	0	0	0	0	0	0	0 - 00:00 hrs
0203-603	4.84	309.58	Surcharged	-0.28	0 - 13:08 hrs	340.4	340.4	13.562	13.57	0	7.599	0.291	0	3.024	3.799	257.5	0 - 12:15 hrs
0203-604	4.367	308.413	Below Link Crown	0.186	0 - 13:08 hrs	0	87.359	0	13.531	-0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-605	3.782	307.812	Below Link Crown	0.788	0 - 13:10 hrs	0	87.359	0	13.543	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-606	2.518	304.518	Below Link Crown	2.082	0 - 13:10 hrs	0	87.359	0	13.559	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-607	1.869	303.619	Below Link Crown	1.581	0 - 13:10 hrs	0	87.358	0	13.57	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-608	1.461	299.601	Below Link Crown	4.769	0 - 13:30 hrs	0	87.372	0	13.564	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-609	3.896	298.926	Below Link Crown	4.304	0 - 12:18 hrs	0	87.326	0	13.554	0.013	0	0	0	0	0	0	0 - 00:00 hrs
0203-610	4.14	298.85	Below Link Crown	4.15	0 - 12:18 hrs	0	87.753	0	13.533	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-611	9.325	291.675	Below Link Crown	5.825	0 - 12:41 hrs	0	601.98	0	98.616	0.097	0	0	0	0	0	0	0 - 00:00 hrs
0203-612	7.161	291.831	Below Link Crown	9.169	0 - 12:41 hrs	107.107	582.808	5.574	96.896	0.101	0	0	0	0	0	0	0 - 00:00 hrs
0203-613	8.775	290.515	Below Link Crown	5.085	0 - 12:55 hrs	0	596.713	0	98.482	0.128	0	0	0	0	0	0	0 - 00:00 hrs
0203-614	10.109	290.249	Below Link Crown	3.981	0 - 12:56 hrs	0	589.542	0	98.355	0.209	0	0	0	0	0	0	0 - 00:00 hrs
0203-615	9.809	289.949	Below Link Crown	6.851	0 - 12:59 hrs	0	579.688	0	98.145	0.269	0	0	0	0	0	0	0 - 00:00 hrs
0203-616	9.847	289.807	Below Link Crown	6.893	0 - 13:00 hrs	0	566.617	0	97.879	0.388	0	0	0	0	0	0	0 - 00:00 hrs
0203-617	9.436	289.566	Below Link Crown	2.634	0 - 13:00 hrs	0	611.564	0	102.774	0.476	0	0	0	0	0	0	0 - 00:00 hrs
0203-618	9.88	289.43	Below Link Crown	1.07	0 - 13:00 hrs	0	599.429	0	102.307	0.192	0	0	0	0	0	0	0 - 00:00 hrs
0203-619	10.244	289.244	Below Link Crown	1.556	0 - 13:00 hrs	0	598.113	0	102.119	0.236	0	0	0	0	0	0	0 - 00:00 hrs
0203-620	9.187	288.617	Below Link Crown	5.213	0 - 13:00 hrs	0	598.2	0	101.893	0.129	0	0	0	0	0	0	0 - 00:00 hrs
0203-621	8.503	291.003	Below Link Crown	6.617	0 - 12:49 hrs	0	598.657	0	98.519	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-622	8.807	288.527	Below Link Crown	5.303	0 - 13:00 hrs	40.532	611.446	1.646	103.412	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-623	4.927	284.477	Below Link Crown	2.423	0 - 12:49 hrs	0	703.477	0	109.953	0.072	0	0	0	0	0	0	0 - 00:00 hrs
0203-624	4.017	284.707	Below Maximum Depth	5.313	0 - 12:48 hrs	0	108.591	0	6.638	0.005	0.068	0.007	5.313	0	0	0	0 - 00:00 hrs

Table B-1a. Existing System Analysis - Nodes
2-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-625	6.485	290.145	Below Link Crown	4.755	0 - 12:34 hrs	0	134.272	0	6.597	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-626	5.571	293.241	Below Link Crown	0.959	0 - 12:15 hrs	62.652	149.115	1.891	6.666	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-627	3.162	296.492	Below Link Crown	3.288	0 - 12:45 hrs	0	52.102	0	2.991	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-628	3.662	282.382	Below Link Crown	3.718	0 - 12:51 hrs	0	716.941	0	111.422	0.051	0	0	0	0	0	0	0 - 00:00 hrs
0203-629	4.239	281.254	Below Link Crown	4.176	0 - 12:53 hrs	52.218	787.938	1.329	118.105	0.059	0	0	0	0	0	0	0 - 00:00 hrs
0203-630	7.778	280.854	Below Link Crown	4.646	0 - 12:55 hrs	0	786.033	0	118.06	0.284	0	0	0	0	0	0	0 - 00:00 hrs
0203-631	7.38	279.455	Below Link Crown	5.045	0 - 12:56 hrs	16.251	824.518	0.489	121.729	0.308	0	0	0	0	0	0	0 - 00:00 hrs
0203-632	6.22	278.11	Below Link Crown	5.89	0 - 12:57 hrs	0	823.391	0	121.423	0.166	0	0	0	0	0	0	0 - 00:00 hrs
0203-633	2.533	281.443	Below Link Crown	2.057	0 - 12:17 hrs	0	38.906	0	7.908	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-634	2.138	280.498	Below Link Crown	2.422	0 - 12:18 hrs	0	38.885	0	7.905	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-635	1.571	277.091	Below Link Crown	5.489	0 - 12:18 hrs	0	38.832	0	7.898	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-636	4.95	276.78	Below Link Crown	6.34	0 - 12:59 hrs	0	38.816	0	7.895	0.032	0	0	0	0	0	0	0 - 00:00 hrs
0203-637	3.995	276.765	Below Link Crown	7.335	0 - 12:59 hrs	0	856.695	0	129.122	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-638	10.356	276.076	Below Link Crown	6.924	0 - 12:59 hrs	0	864.959	0	130.316	0.167	0	0	0	0	0	0	0 - 00:00 hrs
0203-639	7.409	275.369	Below Link Crown	9.831	0 - 12:59 hrs	179.515	901.591	5.627	135.774	0.132	0	0	0	0	0	0	0 - 00:00 hrs
0203-640	5.959	274.039	Below Link Crown	7.441	0 - 13:00 hrs	0	901.314	0	135.593	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-641	6.728	272.628	Below Link Crown	6.672	0 - 13:00 hrs	0	900.941	0	135.46	0.196	0	0	0	0	0	0	0 - 00:00 hrs
0203-642	6.724	271.384	Below Link Crown	10.486	0 - 13:02 hrs	36.955	905.977	0.981	136.244	0.273	0	0	0	0	0	0	0 - 00:00 hrs
0203-643	4.338	269.048	Below Link Crown	12.952	0 - 13:03 hrs	0	905.734	0	135.972	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-644	6.085	265.805	Below Link Crown	15.945	0 - 13:03 hrs	0	942.911	0	140.042	0.128	0	0	0	0	0	0	0 - 00:00 hrs
0203-645	8.317	263.957	Below Link Crown	14.843	0 - 13:06 hrs	0	942.636	0	139.913	0.253	0	0	0	0	0	0	0 - 00:00 hrs
0203-646	6.82	263.03	Below Link Crown	16.27	0 - 13:06 hrs	0	942.306	0	139.663	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-647	2.583	279.597	Below Link Crown	2.387	0 - 12:15 hrs	0	46.01	0	1.335	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-648	2.395	279.965	Below Link Crown	2.635	0 - 12:15 hrs	29.224	29.224	0.845	0.846	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-649	1.764	279.914	Below Link Crown	4.236	0 - 12:15 hrs	17.894	17.894	0.489	0.489	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-650	4.481	286.901	Surcharged	-0.011	0 - 12:57 hrs	0	79.483	0	7.428	0.003	1.727	0.441	0	0.002	0.235	0.682	0 - 12:56 hrs
0203-651	4.041	283.841	Below Link Crown	2.299	0 - 13:47 hrs	0	33.731	0	7.403	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-652	6.705	314.933	Surcharged	-0.179	0 - 12:33 hrs	149.58	149.58	5.308	5.311	0	2.549	3.705	0	0.521	1.269	81.396	0 - 12:15 hrs
0203-653	6.29	308.94	Surcharged	0	0 - 12:03 hrs	0	72.394	0	5.27	0.002	2.531	2.79	0	0	0.001	8.614	0 - 12:03 hrs
0203-654	2.249	300.969	Below Link Crown	1.831	0 - 12:03 hrs	0	68.449	0	5.309	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-655	7.284	301.774	Surcharged	-0.494	0 - 15:07 hrs	0	148.697	0	22.72	0.013	7.74	1.284	0	0.27	3.57	13.054	0 - 12:25 hrs
0203-656	3.183	297.003	Below Link Crown	3.077	0 - 12:56 hrs	0	69.432	0	5.331	-0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-657	6.213	291.813	Surcharged	-0.113	0 - 12:32 hrs	0	146.722	0	6.74	0.019	1.462	2.353	0	0.111	0.591	61.629	0 - 12:48 hrs
0203-658	7.001	290.061	Below Link Crown	5.489	0 - 12:34 hrs	0	108.744	0	6.629	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-659	3.623	285.853	Below Link Crown	8.237	0 - 12:48 hrs	0	108.646	0	6.638	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-660	5.991	279.271	Surcharged	-0.271	0 - 12:45 hrs	106.007	106.007	3.201	3.203	0	5.708	2.991	0	0.682	2.782	80.744	0 - 12:15 hrs
0203-661	7.143	301.583	Surcharged	-0.233	0 - 15:08 hrs	0	145.098	0	22.715	0.013	7.734	1.143	0	0.117	3.01	3.025	0 - 12:57 hrs
0203-662	4.987	302.177	Surcharged	-0.097	0 - 12:26 hrs	0	78.87	0	2.989	0.003	1.252	1.487	0	0.104	0.618	27.045	0 - 12:15 hrs
0203-663	4.342	300.112	Below Maximum Depth	1.548	0 - 12:07 hrs	0	55.741	0	2.992	0	1.24	0.842	1.548	0	0	0	0 - 00:00 hrs
0203-664	4.241	298.541	Below Maximum Depth	2.429	0 - 12:07 hrs	0	52.102	0	2.992	0	1.268	0.741	2.429	0	0	0	0 - 00:00 hrs
0203-665	6.392	298.852	Below Maximum Depth	0.018	0 - 12:29 hrs	0	144.407	0	22.614	0.009	1.046	0.392	0.018	0	0	0	0 - 00:00 hrs
0203-666	6.864	303.494	Below Maximum Depth	0.666	0 - 12:15 hrs	42.781	42.781	1.797	1.798	0	0.726	3.864	0.666	0	0	0	0 - 00:00 hrs
0203-667	5.849	301.089	Below Maximum Depth	1.861	0 - 12:08 hrs	0	42.78	0	1.798	0	0.724	2.579	1.861	0	0	0	0 - 00:00 hrs
0203-668	5.346	298.786	Surcharged	-0.056	0 - 12:21 hrs	0	42.789	0	1.801	0	0.991	2.166	0	0.018	0.337	7.93	0 - 12:15 hrs
0203-669	5.004	297.684	Below Maximum Depth	0.486	0 - 12:08 hrs	0	35.007	0	1.805	0.001	1.207	2.004	0.486	0	0	0	0 - 00:00 hrs
0203-670	3.482	295.972	Below Link Crown	0.028	0 - 12:21 hrs	0	35.007	0	1.805	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-671	5.968	288.568	Below Maximum Depth	6.982	0 - 12:36 hrs	0	108.647	0	6.638	0.001	1.607	1.468	6.982	0	0	0	0 - 00:00 hrs
0203-672	5.075	287.425	Below Maximum Depth	6.665	0 - 12:38 hrs	0	108.646	0	6.638	0.001	1.344	0.575	6.665	0	0	0	0 - 00:00 hrs
0203-673	6.31	298.71	Below Maximum Depth	0	0 - 12:14 hrs	0	144.445	0	22.603	0.009	0.899	0.31	0	0.196	0.248	57.403	0 - 12:18 hrs
0203-674	4.139	286.74	Below Maximum Depth	2.5	0 - 12:15 hrs	47.846	47.846	1.661	1.662	0	0.082	0.139	2.501	0	0	0	0 - 00:00 hrs
0203-675	3.49	285.97	Below Link Crown	2.8	0 - 12:15 hrs	0	47.851	0	1.662	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-676	4.577	283.757	Below Link Crown	3.773	0 - 12:49 hrs	0	717.53	0	111.535	0.111	0	0	0	0	0	0	0 - 00:00 hrs
0203-677	6.745	298.675	Below Maximum Depth	0.305	0 - 12:17 hrs	0	144.488	0	22.417	0.025	1.283	0.745	0.305	0	0	0	0 - 00:00 hrs
0203-678	5.823	300.143	Surcharged	-0.113	0 - 12:29 hrs	110.435	110.435	4.204	4.207	0	1.624	2.323	0	0.218	0.81	44.691	0 - 12:15 hrs
0203-679	6.842	298.642	Below Link Crown	1.378	0 - 12:17 hrs	0	187.573	0	30.512	0.022	0	0	0	0	0	0	0 - 00:00 hrs
0203-680	5.018	290.901	Surcharged	-0.167	0 - 12:37 hrs	83.537	83.537	2.854	2.856	0	2.975	2.018	0	0.325	1.455	48.57	0 - 12:15 hrs
0203-681	4.515	289.325	Below Maximum Depth	3.125	0 - 12:03 hrs	0	39.532	0	2.86	-0.003	2.917	1.185	3.125	0	0	0	0 - 00:00 hrs
0203-682	4.719	287.719	Below Maximum Depth	0.601	0 - 12:44 hrs	0	39.127	0	2.86	0	2.633	0.719	0.601	0	0	0	0 - 00:00 hrs
0203-683	4.487	287.377	Below Maximum Depth	0.873	0 - 12:44 hrs	0	38.629	0	2.86	0	2.527	0.487	0.873	0	0	0	0 - 00:00 hrs
0203-684	5.138	286.978	Below Maximum Depth	0.992	0 - 12:56 hrs	0	37.948	0	2.86	0.001	2.751	1.138	0.992	0	0	0	0 - 00:00 hrs
0203-685	6.035	286.475	Below Maximum Depth	1.036	0 - 12:56 hrs	0	35.483	0	2.86	0.001	2.907	1.535	1.036	0	0	0	0 - 00:00 hrs
0203-686	6.093	286.257	Below Maximum Depth	0.838	0 - 12:56 hrs	0	35.447	0	2.858	0.001	2.952	1.593	0.838	0	0	0	0 - 00:00 hrs
0203-687	5.87	286.034	Below Link Crown	1.451	0 - 12:47 hrs	0	35.426	0	2.857	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-688	3.292	284.363	Below Maximum Depth	1.305	0 - 12:15 hrs	28.749	28.749	0.905	0.906	0	0.16	0.292	1.305	0	0	0	0 - 00:00 hrs
0203-689	1.765	282.798	Below Link Crown	2.865	0 - 12:15 hrs	0	28.754	0	0.906	0.011	0	0	0	0	0	0	0 - 00:00 hrs

Table B-1b. Existing System Analysis - Pipes/Channels
2-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-001-022	3.883	345.652	0.807	122.374	Free Surface	0 - 13:00 hrs	7.128	7.129	0.354	0.77	223.278	19.473	6.648	0	0	6.912	0	0	0
0203-002-001	3	68.703	1.061	25.715	Backwater	0 - 12:15 hrs	3.638	3.638	0.374	1	42.989	0.6	2.999	4.939	4.939	18.837	0	0	1
0203-003-051	7.47	1,836.26	1.173	149.179	Free Surface	0 - 12:17 hrs	1.278	3.798	0.081	0.943	1,687.08	19.157	30.638	0	0	0	0	0	0
0203-004-003	3.5	70.599	0.717	151.376	Exceeds Capacity	0 - 12:17 hrs	7.427	7.443	2.144	1	-80.778	19.155	6	3.668	4.137	3.668	4.08	3.668	0
0203-005-041	4	336.322	0.564	149.023	Backwater	0 - 12:15 hrs	5.82	5.82	0.443	1	187.3	14.185	7.413	3.39	3.73	3.39	0	3.39	0
0203-006-005	4.17	340.431	0.535	69.572	Backwater	0 - 15:38 hrs	2.806	2.816	0.204	1	270.86	7.714	7.017	2.864	2.864	3.682	0	0	0
0203-007-040	3.06	227.444	0.761	84.819	Free Surface	0 - 13:30 hrs	5.653	5.824	0.373	0.891	142.625	7.68	6.319	0	1.129	0	0	0	0
0203-008-007	3.75	289.554	0.703	84.817	Free Surface	0 - 13:30 hrs	4.38	4.38	0.293	0.915	204.737	7.68	6.165	0	0	0	0	0	0
0203-009-467	4.08	204.974	0.478	58.98	Backwater	0 - 12:03 hrs	3.099	3.099	0.288	1	145.993	7.654	5.474	3.607	3.633	3.65	0	3.607	0
0203-010-008	3.5	155.722	0.302	84.817	Backwater	0 - 13:30 hrs	3.728	3.728	0.545	1	70.905	7.681	6.5	1.788	1.862	1.788	0	1.788	0
0203-011-039	3.82	361.971	0.957	84.822	Free Surface	0 - 13:29 hrs	5.47	5.668	0.234	0.698	277.149	7.694	6.19	0	0	0	0	0	0
0203-012-011	3.4	179.651	0.437	84.823	Free Surface	0 - 13:29 hrs	4.232	4.232	0.472	0.907	94.828	7.7	6.5	0	0	0	0	0	0
0203-013-012	3	215.243	0.901	84.823	Backwater	0 - 13:27 hrs	4.35	4.35	0.394	1	130.42	7.706	6.5	1.83	1.842	1.832	0	1.828	0
0203-014-017	5.5	200.833	0.358	101.623	Free Surface	0 - 12:21 hrs	4.298	4.311	0.506	0.998	99.21	7.686	5.484	0	1.329	0	0	0	0
0203-015-014	5.5	584.361	3.028	101.626	Free Surface	0 - 12:21 hrs	4.347	4.468	0.174	0.967	482.734	7.691	5.5	0	0	1.329	0	0	0
0203-016-025	3.5	86.614	0.741	61.831	Backwater	0 - 12:06 hrs	6.427	6.427	0.714	1	24.783	3.835	3.5	1.053	1.054	1.069	0	1.026	0
0203-017-018	4.035	221.445	0.332	101.571	Backwater	0 - 12:21 hrs	4.459	4.459	0.459	1	119.874	7.681	6.73	1.707	1.732	1.745	0	1.404	0
0203-018-472	4.035	202.107	0.276	93.665	Backwater	0 - 13:10 hrs	4.112	4.112	0.463	1	108.442	7.673	6.73	1.534	1.745	1.629	0	1.497	0
0203-019-020	3	95.745	2.061	37.053	Backwater	0 - 12:55 hrs	5.242	5.242	0.387	1	58.692	1.682	2.981	1.014	1.014	1.026	0	0.136	0
0203-020-021	3	3.682	0.003	37.038	Exceeds Capacity	0 - 12:55 hrs	5.24	5.24	10.059	1	-33.355	1.68	2.988	1.015	1.026	1.015	3.317	1.014	0
0203-021-023	3	55.487	0.692	37.023	Backwater	0 - 12:55 hrs	5.238	5.238	0.667	1	18.464	1.684	2.998	1.014	1.015	1.028	0	0.136	0
0203-022-525	10.92	4,890.27	0.824	128.614	Free Surface	0 - 12:42 hrs	3.377	3.524	0.026	0.218	4,761.65	20.348	23.942	0	0	0	0	0	0
0203-023-024	3	58.562	0.771	42.043	Backwater	0 - 12:55 hrs	5.948	5.948	0.718	1	16.519	1.711	2.999	0.977	1.034	0.978	0	0.527	0
0203-024-016	3	80.465	1.455	61.804	Backwater	0 - 12:06 hrs	8.743	8.743	0.768	1	18.661	3.818	3	1.027	1.028	1.036	0	0.941	0
0203-025-026	3.5	111.064	1.219	62.927	Backwater	0 - 12:06 hrs	6.806	7.337	0.567	1	48.137	3.836	3.484	0.796	1.069	0.796	0	0.796	0
0203-026-027	3.5	99.78	0.984	60.261	Backwater	0 - 12:55 hrs	6.293	6.789	0.604	1	39.519	3.83	3.488	0.8	0.8	1.033	0	0	0
0203-027-028	4	133.8	0.868	60.36	Backwater	0 - 12:55 hrs	4.803	5.403	0.451	1	73.44	3.828	3.991	0.841	0.883	0.841	0	0.841	0
0203-028-029	4.5	158.864	0.653	66.767	Backwater	0 - 12:55 hrs	4.249	4.307	0.42	1	92.097	3.799	4.497	0.812	0.812	1.036	0	0	0
0203-029-030	4.5	85.729	0.19	79.244	Backwater	0 - 12:55 hrs	4.983	4.983	0.924	1	6.485	3.83	4.498	0.92	1.036	0.92	0	0.789	0
0203-030-037	7.66	386.522	0.309	79.367	Free Surface	0 - 12:55 hrs	2.888	2.888	0.205	0.934	307.155	3.824	5.312	0	0	0	0	0	0
0203-031-022	4.5	22.455	0.013	30.713	Free Surface	0 - 12:15 hrs	3.502	3.502	1.368	0.54	-8.258	0.89	4.5	0	0	0	0.192	0	0
0203-032-033	2.5	83.636	4.158	38.035	Free Surface	0 - 12:17 hrs	9.814	9.814	0.455	0.737	45.601	1.319	2.5	0	0.412	0	0	0	0
0203-033-520	8.14	2,355.24	0.771	163.683	Free Surface	0 - 12:25 hrs	3.429	3.429	0.069	0.368	2,191.56	21.647	27.501	0	0	0	0	0	0
0203-034-009	4.08	269.154	0.824	60.125	Backwater	0 - 12:02 hrs	3.159	3.159	0.223	1	209.029	7.658	5.474	3.599	3.599	3.633	0	0	0
0203-035-010	5.391	1,184.67	3.322	84.819	Free Surface	0 - 13:30 hrs	4.751	5.296	0.072	0.568	1,099.85	7.683	6.405	0	0	0	0	0	0
0203-036-035	5.33	290.679	2.466	84.822	Free Surface	0 - 13:30 hrs	5.732	5.912	0.292	0.494	205.857	7.687	6.124	0	0	0	0	0	0
0203-037-038	3.923	268.973	0.973	151.123	Backwater	0 - 12:15 hrs	8.444	8.444	0.562	1	117.85	7.7	5.364	1.356	1.356	1.367	0	0.926	0
0203-038-015	5	322.127	1.53	102.188	Free Surface	0 - 12:03 hrs	5.266	5.866	0.317	0.999	219.939	7.695	4.991	0	1.307	0	0	0	0
0203-039-036	3.883	682.362	3.144	84.822	Free Surface	0 - 13:29 hrs	4.94	4.94	0.124	0.769	597.54	7.689	6.422	0	0	0	0	0	0
0203-040-034	3.98	279.318	0.963	84.788	Free Surface	0 - 13:32 hrs	6.197	6.199	0.304	0.801	194.53	7.683	5.615	0	0	3.607	0	0	0
0203-041-042	4.06	499.996	0.664	116.177	Backwater	0 - 12:07 hrs	3.728	4.436	0.232	1	383.819	14.175	10.421	3.303	3.349	3.467	0	0.136	0
0203-042-043	4.16	563.61	1.528	114.309	Backwater	0 - 12:07 hrs	4.543	4.792	0.203	1	449.301	14.165	6.861	3.437	3.437	3.813	0	0	0
0203-043-044	8.63	2,960.15	2.046	111.028	Free Surface	0 - 12:07 hrs	1.461	1.852	0.038	0.717	2,849.12	14.161	32.299	0	0	0	0	0	0
0203-044-045	8.63	367.618	0.032	105.298	Free Surface	0 - 12:07 hrs	1.344	1.794	0.286	0.735	262.32	14.157	32.992	0	0	0	0	0	0
0203-045-046	10.92	3,308.14	0.377	99.21	Free Surface	0 - 15:06 hrs	0.625	0.989	0.03	0.612	3,208.93	14.144	45.196	0	0	0	0	0	0
0203-046-047	16.9	4,107.02	0.223	99.974	Free Surface	0 - 15:02 hrs	1.054	1.536	0.024	0.395	4,007.04	14.104	28.718	0	0	0	0	0	0
0203-047-048	8.14	1,396.26	0.271	100.796	Free Surface	0 - 15:00 hrs	0.681	1.061	0.072	0.807	1,295.47	14.099	46.517	0	0	0	0	0	0
0203-048-049	7.17	1,567.97	0.556	104.495	Free Surface	0 - 14:26 hrs	0.577	0.722	0.067	0.977	1,463.48	15.871	40.806	0	0	1.239	0	0	0
0203-049-050	8.06	304.652	0.023	104.842	Free Surface	0 - 14:26 hrs	0.69	0.805	0.344	0.915	199.81	15.86	36.593	0	0	0	0	0	0
0203-050-004	8.06	279.054	0.019	105.275	Free Surface	0 - 14:23 hrs	0.693	0.758	0.377	0.916	173.779	15.846	36.621	0	0	0	0	0	0
0203-051-530	9.53	1,383.85	0.423	138.995	Free Surface	0 - 12:17 hrs	1.186	1.274	0.1	0.845	1,244.86	19.137	26.188	0	0	0	0	0	0
0203-052-053	3	63.59	0.909	16.185	Backwater	0 - 12:15 hrs	2.29	3.107	0.255	1	47.404	0.456	2.993	0.211	0.211	0.214	0	0	1
0203-053-054	3	48.022	0.518	16.859	Backwater	0 - 12:21 hrs	2.406	3.596	0.351	1	31.163	0.458	2.998	0.214	0.216	0.214	0	0.16	1
0203-054-055	3	84.505	1.605	19.292	Backwater	0 - 12:21 hrs	2.756	3.163	0.228	1	65.213	0.461	2.993	0.214	0.214	0.284	0	0.001	0
0203-055-056	3.5	168.299	2.798	43.809	Backwater	0 - 12:11 hrs	4.553	5.264	0.26	1	124.489	1.563	3.488	0.261	0.261	0.3	0	0	0
0203-056-057	3.5	83.517	0.689	43.809	Backwater	0 - 12:11 hrs	4.553	4.553	0.525	1	39.707	1.564	3.498	0.308	0.31	0.339	0	0.209	0
0203-057-058	3	74.237	1.239	42.415	Backwater	0 - 12:08 hrs	6	6	0.571	1	31.822	1.673	2.999	0.379	0.386	0.393	0	0.353	0
0203-058-238	3.5	90.882	0.816	49.872	Backwater	0 - 12:08 hrs	5.184	5.184	0.549	1	41.01	1.894	3.497	0.343	0.343	0.493	0	0.03	0
0203-059-058	3	54.649	0.671	8.303	Backwater	0 - 12:22 hrs	1.18	3.026	0.152	1	46.345	0.223	2.989	0.281	0.281	0.343	0	0	1
0203-060-061	3.5	142.302	2.001	35.145	Free Surface	0 - 12:11 hrs	5.808	6.879	0.247	0.67	107.157	2.282	3.497	0	0	0	0	0	0
0203-061-238	3.5	172.123	2.927	37.681	Free Surface	0 - 12:22 hrs	4.952	6.026	0.219	0.855	134.442	2.283	3.486	0	0	0.493	0	0	0
0203-062-063	5	162.88	0.391	98.783	Backwater	0 - 12:11 hrs	5.063	5.099	0.606	1	64.097	4.829	5	0.206	0.234	0.208	0	0.203	0
0203-063-064	5	130.257	0.25	97.058	Backwater	0 - 12:11 hrs	4.997	5.426	0.745	1	33.199	4.821	4.998	0.116	0.244	0.116	0	0.116	0
0203-064-065	5	183.236	0.495	95.932	Backwater	0 - 12:15 hrs	4.886	4.886	0.524	1	87.303	4.825	4.99	0.178	0.178	0.351	0	0	0
0203-065-066	5	159.984	0.377	95.916	Backwater	0 - 12:15 hrs	4.885	4.885	0.6	1	64.067	4.822	4.998	0.069	0.351	0.069	0	0.069	0
0203-066-067	5	161.359	0.384	95.931	Free Surface	0 - 12:15 hrs	5.06	5.061	0.595	0.927	65.429	4.822	4.999	0	0.069	0	0	0	0
0203-067-239	5	206.753	0.63	95.606	Free Surface	0 - 12:15 hrs	5.542	5.578	0.462	0.833	111.147	4.821	4.998	0	0	0	0	0	0
0203-068-215	3.066	1,149.61	20.197	11.947	Free Surface	0 - 12:15 hrs	5.491	5.493	0.01	0.207	1,137.67	0.338	6.807	0	0	0	0	0	0
0203-069-068	2	25.455	1.266	11.949	Free Surface	0 - 12:15 hrs	4.534	4.534	0.235	0.437	13.506	0.338	1.982	0	0	0	0	0	0
0203-070-325	12.854	4,967.02	0.992	182.765	Free Surface	0 - 12:22 hrs	2.352	2.409	0.037	0.324	4,784.25	13.166	23.799	0	0	0	0	0	0
0203-071-060	3.5	187.895	3.488	35.161	Free Surface	0 - 12:23 hrs	5.409	5.607	0.187	0.67	152.734	2.283	3.454	0	0	0	0	0	0
0203-072-228	4.5	186.529	0.9	8.23	Free Surface	0 - 12:14 hrs	0.806	2.786	0.044	0.629	178.299	0.251	4.497	0	0	0	0	0	0
0203-073-074	4.5	4.183	0	17.715	Free Surface	0 - 12:30 hrs	1.42	2.062	4.235	0.879	-13.532	0.282	4.495	0	0	0	0.351	0	0
0203-074-075	4.5	221.385	1.267	23.784	Free Surface	0 - 12:29 hrs	1.73	3.831	0.107	0.917	197.601	0.278	4.479	0	0	0	0	0	0
0203-075-076	4.5	325.803	2.745	23.128	Backwater	0 - 12:29 hrs	1.454	3.546	0.071	1	302.675	0.283	4.475	0.296	0.296	0.361	0	0.001	0
0203-076-078	3.5	68.953	0.47	45.484	Backwater	0 - 12:11 hrs	4.728	4.728	0.66	1	23.468	2.629	3.499	0.513	0.55	0.513	0	0.513	0
0203-077-073	4.5	160.442	0.666	14.099	Free Surface	0 - 12:30 hrs	1.28	2.366	0.088	0.818	146.343	0.265	4.463	0	0	0	0	0	0
0203-078-079	3.5	93.392	0.862	45.482	Backwater	0 - 12:11 hrs	4.727	4.727	0.487	1	47.91	2.626	3.5	0.513	0.513	0.568	0	0	0
0203-079-080	3.5	54.172	0.29	45.479	Backwater	0 - 12:11 hrs	4.727	4.727	0.84	1	8.693	2.626	3.5	0.522	0.568	0.522	0	0.522	0
0203-080-081	3.5	87.521	0.757	45.475	Backwater	0 - 12:11 hrs	4.727	4.727	0.52	1	42.046	2.622	3.5	0.522	0.522	0.599	0	0	0
0203-081-082	3.5	69.53	0.478	45.478	Backwater	0 - 12:11 hrs	4.727	4.727	0.654	1	24.052	2.619	3.5	0.538	0.6	0.538	0	0.538	0
0203-082-083	3.5	6.926	0.005	45.467	Exceeds Capacity	0 - 12:11 hrs	4.726	4.726	6.564	1	-38.54	2.618	3.499	0.334	0.542	0.334	3.93	0.334	0
0203-083-084	4	131.346	0.836	45.423	Free Surface	0 - 12:21 hrs	3.642	4.028	0.346	0.974	85.922	2.617	3.997	0	0	0.334	0	0	0
0203-084-256	4	101.062	0.495	45.424	Backwater	0 - 12:21 hrs	3.615	3.615	0.449	1	55.638	2.616	4	0.372	0.373	0.376	0	0.363	0
0203-085-086	4	70.749	0.243	45.444	Free Surface	0 - 12:19 hrs	4.371	4.406	0.642	0.779	25.305	2.615	3.996	0	0	0	0	0	0
0203-086-087	4	154.972	1.164	45.602	Free Surface	0 - 12:18 hrs	4.566	4.73	0.294	0.762	109.37	2.618	3.994	0	0	0	0	0	0
0203-087-092	4.5	84.096	0.183	43.841	Free Surface	0 - 12:15 hrs	3.74	3.822	0.521	0.691	40.255	2.833	4.498	0	0	0	0	0	0

Table B-1b. Existing System Analysis - Pipes/Channels
2-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-088-089	3	82.098	1.515	21.735	Free Surface	0 - 12:15 hrs	6.072	6.241	0.265	0.505	60.363	0.717	2.991	0	0	0	0	0	0
0203-089-090	3	60.036	0.81	21.592	Free Surface	0 - 12:15 hrs	4.893	4.894	0.36	0.598	38.444	0.717	2.986	0	0	0	0	0	0
0203-090-091	3	65.069	0.952	21.474	Free Surface	0 - 12:15 hrs	5.153	5.757	0.33	0.571	43.595	0.715	2.999	0	0	0	0	0	0
0203-091-087	3	88.207	1.749	7.191	Free Surface	0 - 12:29 hrs	1.425	2.955	0.082	0.791	81.016	0.215	2.999	0	0	0	0	0	0
0203-091-093	3	49.976	0.561	22.848	Free Surface	0 - 12:15 hrs	4.872	5.061	0.457	0.63	27.128	0.5	2.998	0	0	0	0	0	0
0203-092-094	5	130.84	0.252	43.849	Free Surface	0 - 12:15 hrs	4.811	4.867	0.335	0.473	86.991	2.826	4.995	0	0	0	0	0	0
0203-093-094	3	32.421	0.236	22.644	Free Surface	0 - 12:15 hrs	3.72	3.727	0.698	0.805	9.777	0.502	2.995	0	0	0	0	0	0
0203-094-338	2.97	136.306	0.132	64.779	Free Surface	0 - 12:17 hrs	1.653	1.734	0.475	0.716	71.527	3.328	26.736	0	0	0	0	0	0
0203-095-096	3.5	90.975	0.818	55.581	Backwater	0 - 12:02 hrs	5.844	5.844	0.611	1	35.394	6.045	3.485	2.361	2.367	2.364	0	2.36	2
0203-096-097	3.5	101.427	1.016	54.694	Backwater	0 - 12:03 hrs	5.685	5.685	0.539	1	46.733	6.057	3.493	2.365	2.365	2.378	0	2.36	2
0203-097-098	4	103.324	0.517	53.304	Backwater	0 - 12:03 hrs	4.281	4.295	0.516	1	50.021	6.056	3.993	2.321	2.351	2.321	0	2.321	0
0203-098-099	4	97.211	0.458	52.314	Free Surface	0 - 12:57 hrs	4.189	4.445	0.538	0.977	44.896	6.055	3.991	0	2.333	0	0	0	0
0203-099-100	4	100.312	0.488	52.314	Free Surface	0 - 12:59 hrs	4.202	4.327	0.522	0.97	47.998	6.056	3.998	0	0	0	0	0	0
0203-100-101	4	83.923	0.341	52.314	Free Surface	0 - 12:59 hrs	4.318	4.318	0.623	0.922	31.608	6.054	3.985	0	0	0	0	0	0
0203-101-102	5	90.752	1.15	52.314	Free Surface	0 - 13:00 hrs	4.038	4.092	0.576	0.627	38.438	6.051	4.968	0	0	0	0	0	0
0203-102-103	5	185.211	0.506	52.314	Free Surface	0 - 13:00 hrs	4.337	4.518	0.282	0.59	132.896	6.046	4.997	0	0	0	0	0	0
0203-103-104	5	159.475	0.375	52.314	Free Surface	0 - 13:00 hrs	4.408	4.545	0.328	0.583	107.161	6.04	4.994	0	0	0	0	0	0
0203-104-341	5.5	207.433	0.382	52.31	Free Surface	0 - 13:02 hrs	4.218	4.326	0.252	0.521	155.123	6.035	5.496	0	0	0	0	0	0
0203-105-106	2	30.06	1.766	17.443	Backwater	0 - 13:10 hrs	5.571	5.66	0.58	1	12.617	1.31	1.962	0.894	1.579	0.894	0	0.894	0
0203-106-336	2	28.691	1.609	17.452	Backwater	0 - 13:08 hrs	5.582	5.717	0.608	1	11.239	1.307	1.999	0.883	0.894	0.89	0	0.012	1
0203-107-108	2	28.341	1.57	17.483	Backwater	0 - 13:08 hrs	5.641	6.322	0.617	1	10.858	1.327	1.976	0.873	1.398	0.873	0	0.272	1
0203-108-353	2.5	51.358	1.568	17.548	Backwater	0 - 13:10 hrs	3.88	4.043	0.342	1	33.809	1.325	2.498	0.626	0.626	3.718	0	0	1
0203-109-001	13.779	15,450.54	0.802	330.846	Free Surface	0 - 12:33 hrs	3.5	3.5	0.021	0.141	15,119.69	27.582	59.664	0	0	0	0	0	0
0203-110-109	16.67	43,091.18	5.225	330.881	Free Surface	0 - 12:32 hrs	5.968	5.968	0.008	0.151	42,760.30	27.582	37.837	0	0	0	0	0	0
0203-111-110	16.67	32,295.05	2.935	330.913	Free Surface	0 - 12:32 hrs	5.295	5.295	0.01	0.162	31,964.14	27.583	38.822	0	0	0	0	0	0
0203-112-218	7.321	243.809	0.423	237.699	Free Surface	0 - 13:03 hrs	5.276	5.374	0.975	0.896	6.11	22.172	8.097	0	1.126	0	0	0	0
0203-113-357	8.464	406.283	0.082	269.221	Backwater	0 - 12:25 hrs	4.335	4.335	0.663	1	137.062	20.297	8.717	0.558	0.623	0.558	0	0.558	0
0203-114-355	6.954	1,349.50	0.794	234.66	Free Surface	0 - 12:22 hrs	5.483	5.689	0.174	0.684	1,114.84	17.83	10.029	0	0	0	0	0	0
0203-115-353	7.03	1,566.16	1.225	219.422	Free Surface	0 - 12:19 hrs	4.062	4.062	0.14	0.888	1,346.73	16.524	9.567	0	0	0.167	0	0	0
0203-116-115	9.15	3,747.00	0.711	221.233	Free Surface	0 - 12:18 hrs	3.203	3.577	0.059	0.619	3,525.77	16.55	18.01	0	0	0	0	0	0
0203-117-116	6.945	921.659	0.399	225.885	Free Surface	0 - 12:17 hrs	5.639	5.937	0.245	0.659	695.774	16.559	9.6	0	0	0	0	0	0
0203-118-372	8.563	803.823	0.95	195.939	Free Surface	0 - 13:41 hrs	2.722	4.544	0.244	0.863	607.885	31.199	17.121	0	0	0	0	0	0
0203-119-366	7.336	447.07	0.386	112.086	Free Surface	0 - 13:08 hrs	1.83	3.642	0.251	0.863	334.984	16.213	21.976	0	0	0.936	0	0	0
0203-120-003	22.5	12,809.94	0.912	199.206	Free Surface	0 - 12:30 hrs	5.312	5.312	0.016	0.219	12,610.73	7.763	15.24	0	0	0	0	0	0
0203-121-120	17.772	22,770.23	2.632	199.377	Free Surface	0 - 12:29 hrs	2.578	2.624	0.009	0.245	22,570.85	7.769	30.118	0	0	0	0	0	0
0203-122-392	17.772	3,239.21	0.053	199.855	Free Surface	0 - 12:27 hrs	2.858	2.86	0.062	0.231	3,039.36	7.768	29.057	0	0	0	0	0	0
0203-123-122	20	2,602.91	0.05	200.016	Free Surface	0 - 12:27 hrs	2.494	2.495	0.077	0.223	2,402.89	7.781	18	0	0	0	0	0	0
0203-124-391	6.887	1,318.52	1.785	200.393	Free Surface	0 - 12:26 hrs	3.084	3.096	0.152	0.735	1,118.13	7.791	23.667	0	0	0	0	0	0
0203-125-124	6.724	2,774.56	11.136	44.313	Free Surface	0 - 12:33 hrs	1.93	2.199	0.016	0.475	2,730.25	1.072	14.905	0	0	0	0	0	0
0203-126-125	6.174	1,373.44	3.659	44.316	Free Surface	0 - 12:33 hrs	5.021	5.021	0.032	0.304	1,329.12	1.074	9.367	0	0	0	0	0	0
0203-127-126	4.532	720.569	2.378	44.339	Free Surface	0 - 12:32 hrs	3.135	3.136	0.062	0.432	676.23	1.073	14.396	0	0	0	0	0	0
0203-128-127	2.699	140.425	0.406	44.475	Free Surface	0 - 12:30 hrs	2.194	2.195	0.317	0.637	95.95	1.077	27.314	0	0	0	0	0	0
0203-128-129	4.861	7.073	0	45.069	Free Surface	0 - 12:12 hrs	1.094	1.247	6.372	0.816	-37.996	1.668	21.947	0	0	0	1.553	0	0
0203-129-342	4.861	498.481	0.673	29.842	Free Surface	0 - 14:07 hrs	0.799	1.829	0.06	0.91	468.639	2.643	24.715	0	0	1.532	0	0	0
0203-130-124	7.936	627.086	0.675	161.334	Free Surface	0 - 12:23 hrs	3.859	4.03	0.257	0.63	465.752	6.721	14.519	0	0	0	0	0	0
0203-131-130	7.259	399.334	0.298	161.773	Free Surface	0 - 12:22 hrs	3.316	3.341	0.405	0.731	237.561	6.724	18.416	0	0	0	0	0	0
0203-132-131	8.018	540.547	0.563	162.695	Free Surface	0 - 12:22 hrs	3.83	3.843	0.301	0.664	377.852	6.733	14.569	0	0	0	0	0	0
0203-133-132	6.815	448.438	0.712	163.212	Free Surface	0 - 12:19 hrs	4.151	4.163	0.364	0.748	285.226	6.737	15.399	0	0	0	0	0	0
0203-134-328	4.533	193.541	0.93	92.77	Free Surface	0 - 12:21 hrs	2.762	3.184	0.479	0.997	100.772	4.132	13.642	0	0	0.241	0	0	0
0203-135-005	9.15	3,341.27	2.172	40.008	Free Surface	0 - 12:40 hrs	4.579	4.579	0.012	0.179	3,301.26	2.467	10.259	0	0	0	0	0	0
0203-136-437	5.947	17.321	0	40.082	Free Surface	0 - 12:37 hrs	2.147	2.148	2.314	0.345	-22.761	2.471	15.781	0	0	0	1.317	0	0
0203-137-136	6.797	23.695	0	40.535	Free Surface	0 - 12:33 hrs	0.991	1.009	1.711	0.424	-16.841	2.485	25.447	0	0	0	0.918	0	0
0203-138-137	6.268	600.479	0.087	47.347	Free Surface	0 - 12:22 hrs	0.943	1.033	0.079	0.448	553.132	2.514	36.446	0	0	0	0	0	0
0203-139-432	4.941	1,402.11	2.904	12.49	Free Surface	0 - 12:25 hrs	0.261	1.187	0.009	0.627	1,389.62	0.437	25.129	0	0	0	0	0	0
0203-140-139	9.026	1,769.19	0.482	11.829	Free Surface	0 - 12:21 hrs	0.446	1.764	0.007	0.293	1,757.36	0.438	21.408	0	0	0	0	0	0
0203-141-140	8.612	1,878.86	0.563	11.588	Free Surface	0 - 12:18 hrs	0.531	1.166	0.006	0.258	1,867.27	0.439	19.712	0	0	0	0	0	0
0203-142-141	6.92	832.122	0.288	15.496	Free Surface	0 - 12:15 hrs	1.293	1.517	0.019	0.217	816.626	0.442	13.768	0	0	0	0	0	0
0203-143-004	17.323	21,642.13	0.992	248.942	Free Surface	0 - 13:34 hrs	3.295	3.295	0.012	0.079	21,393.18	29.033	63.794	0	0	0	0	0	0
0203-144-143	19	992.533	0	248.944	Free Surface	0 - 13:33 hrs	2.286	2.286	0.251	0.088	743.59	29.06	65	0	0	0	0	0	0
0203-145-144	18.74	4,051.12	0.094	248.947	Free Surface	0 - 13:33 hrs	4.647	4.647	0.061	0.222	3,802.17	29.082	25.711	0	0	0	0	0	0
0203-146-145	10.21	90.41	0.001	248.946	Free Surface	0 - 13:32 hrs	1.906	1.906	2.754	0.647	-158.536	29.11	37.438	0	0	0	3.754	0	0
0203-147-146	9.691	2,334.74	0.658	248.947	Free Surface	0 - 13:30 hrs	1.862	1.862	0.107	0.691	2,085.79	29.123	32.97	0	0	0	0	0	0
0203-148-147	15.381	252.174	0.002	248.947	Free Surface	0 - 13:30 hrs	2.731	2.731	0.987	0.447	3.226	29.129	24.788	0	0	0	0	0	0
0203-149-148	14.554	2,720.41	0.165	248.948	Free Surface	0 - 13:30 hrs	1.888	1.888	0.092	0.489	2,471.46	29.135	33.283	0	0	0	0	0	0
0203-150-149	7.733	78.841	0.002	248.95	Free Surface	0 - 13:30 hrs	1.55	1.55	3.158	0.933	-170.109	29.141	44.496	0	0	0	4.165	0	0
0203-151-150	8.225	2,435.01	1.458	248.952	Free Surface	0 - 13:30 hrs	1.627	1.628	0.102	0.846	2,186.06	29.147	43.666	0	0	0	0	0	0
0203-152-151	16.837	2,557.95	0.144	248.962	Free Surface	0 - 13:29 hrs	2.676	2.676	0.097	0.402	2,308.99	29.156	27.416	0	0	0	0	0	0
0203-153-152	8.005	344.331	0.082	248.972	Free Surface	0 - 13:26 hrs	2.37	2.37	0.723	0.88	95.36	29.166	29.843	0	0	0	0	0	0
0203-154-153	7.008	33.026	0.001	248.979	Exceeds Capacity	0 - 13:26 hrs	1.94	1.94	7.539	1	-215.953	29.173	35.833	1.527	1.752	1.527	7.605	1.527	0
0203-155-154	10.079	70.597	0.001	248.993	Free Surface	0 - 13:26 hrs	1.778	1.825	3.527	0.746	-178.396	29.184	37.231	0	0	0	4.521	0	0
0203-156-155	9.089	2,711.45	2.503	249.009	Free Surface	0 - 13:25 hrs	2.245	2.272	0.092	0.808	2,462.44	29.194	23.74	0	0	0	0	0	0
0203-157-156	11.338	119.826	0.002	249.017	Free Surface	0 - 13:23 hrs	2.511	2.584	2.078	0.638	-129.191	29.197	23.432	0	0	0	3.002	0	0
0203-158-157	19.416	423.315	0.002	249.023	Free Surface	0 - 13:23 hrs	2.1	2.14	0.588	0.388	174.292	29.2	26.184	0	0	0	0	0	0
0203-159-158	9.951	100.399	0.001	249.047	Free Surface	0 - 13:22 hrs	1.199	1.265	2.481	0.773	-148.648	29.21	51.393	0	0	0	3.436	0	0
0203-160-159	7.221	2,619.35	2.339	249.089	Free Surface	0 - 13:19 hrs	1.405	1.464	0.095	0.966	2,370.26	29.223	48.174	0	0	1.806	0	0	0
0203-161-160	7.818	3,015.45	4.818	249.118	Free Surface	0 - 13:19 hrs	3.223	3.566	0.083	0.603	2,766.33	29.228	18.871	0	0	0	0	0	0
0203-162-161	7.818	1,242.62	0.818	249.178	Free Surface	0 - 13:18 hrs	5.216	5.48	0.201	0.398	993.441	29.231	18.041	0	0	0	0	0	0
0203-163-428	7.946	723.967	0.687	237.757	Free Surface	0 - 13:32 hrs	4.138	4.142	0.328	0.628	486.21	27.311	13.376	0	0	0	0	0	0
0203-164-163	8.07	714.158	0.628	237.752	Free Surface	0 - 13:30 hrs	4.681	4.681	0.333	0.556	476.406	27.329	13.303	0	0	0	0	0	0
0203-165-364	8.07	2,155.64	5.723	237.754	Free Surface	0 - 13:29 hrs	4.212	4.212	0.11	0.609	1,917.89	27.343	13.46	0	0	0	0	0	0
0203-166-362	7.943	1,142.03	1.468	237.756	Free Surface	0 - 13:27 hrs	3.563	3.563	0.208	0.664	904.27	27.391	14.165	0	0	0	0	0	0
0203-167-166	8.144	114.204	0.071	237.757	Free Surface	0 - 13:27 hrs	4.239	4.239	2.082	0.94	-123.553	27.421	7.862	0	1.577	0	2.871	0	0
0203-168-167	8.144	444.795	1.081	237.785	Free Surface	0 - 13:25 hrs	4.001	4.001	0.535	0.992	207.01	27.434	7.867	0	0	1.577	0	0	0
0203-169-168	4.473	1,222.99	4.319	237.794	Backwater	0 - 13:23 hrs	3.087	3.087	0.194	1	985.197	27.445	18.555	1.453	1.453	3.167	0	0	0
0203-170-169	4.473	203.446	0.12	181.839	Backwater	0 - 13:07 hrs	2.361	3.488	0.894	1	21.607	20.195	18.555	1.453	1.575	1.453	0	1.453	0
0203-171-410	6.907	1,099.60	0.666	181.979	Free Surface	0 - 13:06 hrs	1.605	1.771	0.165	0.824	917.625	20.205	21.005	0	0	0	0	0	0
0203-172-171	6.907	848.777	0.397	182.081	Free Surface	0 - 13:04 hrs	1.702	1.939	0.215	0.78	666.696	20.211	20.947	0	0	0	0	0	0

Table B-1b. Existing System Analysis - Pipes/Channels
2-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-173-403	4.414	349.406	0.283	201.414	Backwater	0 - 12:14 hrs	2.536	2.54	0.576	1	147.992	20.299	21.335	1.53	1.565	1.552	0	1.46	0
0203-174-169	4.533	21.186	0.003	86.674	Exceeds Capacity	0 - 14:19 hrs	2.108	2.498	4.091	1	-65.488	7.254	14.018	1.371	1.451	1.371	3.513	1.371	0
0203-175-426	4.526	264.171	0.399	84.733	Free Surface	0 - 14:22 hrs	1.914	1.985	0.321	0.919	179.439	7.257	13.576	0	0	0	0	0	0
0203-176-175	4.505	162.954	0.141	84.346	Free Surface	0 - 14:22 hrs	1.905	1.963	0.518	0.865	78.607	7.254	14.223	0	0	0	0	0	0
0203-177-176	4.26	265.263	0.478	83.964	Free Surface	0 - 14:22 hrs	1.721	1.73	0.317	0.957	181.299	7.255	14.066	0	0	2.128	0	0	0
0203-178-177	4.484	537.161	2.016	94.172	Free Surface	0 - 12:34 hrs	2.113	2.114	0.175	0.871	442.989	7.297	13.145	0	0	2.092	0	0	0
0203-179-178	4.423	225.92	0.285	94.876	Free Surface	0 - 12:33 hrs	2.379	2.489	0.42	0.689	131.045	7.295	13.858	0	0	0	0	0	0
0203-180-179	11.458	179.059	0.002	95.237	Free Surface	0 - 12:33 hrs	1.964	2.074	0.532	0.263	83.822	7.297	20.251	0	0	0	0	0	0
0203-181-424	7.728	54.713	0.001	98.807	Free Surface	0 - 12:29 hrs	2.354	2.482	1.806	0.348	-44.094	7.305	20.474	0	0	0	1.437	0	0
0203-182-181	8.53	826.671	0.097	100.04	Free Surface	0 - 12:27 hrs	2.14	2.206	0.121	0.358	726.631	7.311	25.241	0	0	0	0	0	0
0203-183-182	8.571	1,197.10	0.206	100.838	Free Surface	0 - 12:26 hrs	1.631	1.648	0.084	0.397	1,096.26	7.316	25.347	0	0	0	0	0	0
0203-184-183	7.568	1,253.86	3.236	101.305	Free Surface	0 - 12:26 hrs	4.202	4.239	0.081	0.476	1,152.56	7.322	10.425	0	0	0	0	0	0
0203-185-184	7.408	864.065	1.475	13.412	Free Surface	0 - 12:30 hrs	0.541	1.091	0.016	0.474	850.653	0.658	11.279	0	0	0	0	0	0
0203-186-185	6.59	1,544.80	3.044	13.182	Free Surface	0 - 12:26 hrs	0.543	0.937	0.009	0.359	1,531.62	0.659	13.772	0	0	0	0	0	0
0203-187-246	7.439	443.039	0.112	90.512	Free Surface	0 - 12:22 hrs	2.793	2.956	0.204	0.462	352.526	6.671	19.047	0	0	0	0	0	0
0203-188-380	9.535	234.929	0.033	94.184	Free Surface	0 - 12:18 hrs	2.15	2.186	0.401	0.557	140.745	6.687	16.64	0	0	0	0	0	0
0203-189-188	10.121	1,440.98	1.382	97.204	Free Surface	0 - 12:17 hrs	2.466	2.518	0.067	0.553	1,343.77	6.694	14.344	0	0	0	0	0	0
0203-190-189	9.496	1,159.96	1.946	19.117	Free Surface	0 - 12:15 hrs	0.861	2.55	0.016	0.493	1,140.85	0.717	10.153	0	0	0	0	0	0
0203-191-190	11.035	1,486.19	4.607	20.656	Free Surface	0 - 12:15 hrs	2.721	3.582	0.014	0.253	1,465.53	0.718	5.436	0	0	0	0	0	0
0203-192-419	6.08	388.922	0.56	16.743	Free Surface	0 - 12:17 hrs	1.586	1.737	0.043	0.292	372.18	0.659	8.288	0	0	0	0	0	0
0203-193-192	4.437	919.169	2.701	8.711	Free Surface	0 - 12:17 hrs	3.015	3.17	0.009	0.121	910.459	0.362	10.394	0	0	0	0	0	0
0203-194-193	3.615	209.313	0.967	8.769	Free Surface	0 - 12:15 hrs	2.179	2.179	0.042	0.163	200.544	0.363	7.817	0	0	0	0	0	0
0203-195-402	4.497	425.77	0.454	283.646	Free Surface	0 - 12:23 hrs	3.618	3.619	0.666	0.965	142.124	20.276	18.83	0	0	1.688	0	0	0
0203-196-401	3.568	232.948	0.404	81.911	Free Surface	0 - 12:18 hrs	3.039	3.044	0.352	0.579	151.037	3.114	16.422	0	0	0	0	0	0
0203-197-196	3.568	505.968	1.907	62.19	Free Surface	0 - 12:18 hrs	2.925	2.929	0.123	0.479	443.778	2.412	15.32	0	0	0	0	0	0
0203-198-330	2.169	48.278	0.68	38.796	Free Surface	0 - 12:15 hrs	3.045	3.046	0.804	0.937	9.482	1.479	9.965	0	0.017	0	0	0	0
0203-199-197	5.362	628.759	0.855	62.401	Free Surface	0 - 12:17 hrs	3.954	3.955	0.099	0.311	566.358	2.412	14.512	0	0	0	0	0	0
0203-200-199	6.864	525.155	0.561	9.385	Free Surface	0 - 12:15 hrs	0.567	0.569	0.018	0.327	515.77	0.293	9.621	0	0	0	0	0	0
0203-201-202	14.057	1,337.49	0.537	19.608	Free Surface	0 - 12:15 hrs	2.467	2.843	0.015	0.265	1,317.88	1.197	4.333	0	0	0	0	0	0
0203-202-204	4.551	38.21	0.033	20.848	Free Surface	0 - 12:18 hrs	0.988	1.469	0.546	0.776	17.363	1.197	10.017	0	0	0	0	0	0
0203-203-204	4.685	59.632	0.106	36.256	Free Surface	0 - 12:18 hrs	2.572	2.935	0.608	0.634	23.376	1.519	8.553	0	0	0	0	0	0
0203-204-205	4.769	902.174	3.745	98.686	Free Surface	0 - 12:15 hrs	2.407	2.51	0.109	0.75	803.488	4.383	19.647	0	0	0	0	0	6
0203-205-394	4.769	274.159	0.346	98.156	Free Surface	0 - 12:15 hrs	2.467	2.674	0.358	0.735	176.004	4.37	20.953	0	0	0	0	0	24
0203-206-207	5.829	866.55	1.228	97.614	Free Surface	0 - 12:15 hrs	1.777	3.026	0.113	0.72	768.937	4.394	28.668	0	0	5.572	0	0	0
0203-207-209	8.65	1,034.29	0.319	106.222	Free Surface	0 - 12:15 hrs	0.835	1.044	0.103	0.846	928.062	4.328	34.489	0	0	0	0	0	0
0203-208-212	1.777	31.788	0.523	22.613	Free Surface	0 - 14:11 hrs	2.012	2.012	0.711	0.983	9.175	4.719	14.184	0	0	0.677	0	0	0
0203-209-208	1.163	9.217	1.556	22.613	Exceeds Capacity	0 - 14:10 hrs	7.785	7.785	2.453	1	-13.396	4.719	4.297	6.715	7.576	6.715	6.939	6.715	0
0203-210-209	5.187	692.46	5.419	81.237	Backwater	0 - 12:15 hrs	1.884	2.553	0.117	1	611.223	0.398	14.214	5.584	5.584	6.035	0	0	0
0203-211-210	3.936	59.684	0.584	13.282	Backwater	0 - 12:15 hrs	0.889	2.166	0.223	1	46.402	0.339	6.01	5.922	5.922	5.963	0	0	1
0203-212-213	1.777	27.411	0.389	22.613	Backwater	0 - 14:11 hrs	1.851	1.885	0.825	1	4.798	4.715	14.184	0.677	0.677	0.991	0	0	0
0203-213-217	5.579	277.504	0.202	29.385	Free Surface	0 - 12:18 hrs	1.325	2.075	0.106	0.425	248.119	5.05	13.104	0	0	0	0	0	0
0203-214-213	6.004	529.609	0.526	10.974	Free Surface	0 - 12:15 hrs	0.646	0.925	0.021	0.369	518.634	0.338	12.725	0	0	0	0	0	0
0203-215-214	6.004	1,441.56	3.896	11.915	Free Surface	0 - 12:15 hrs	1.333	1.386	0.008	0.234	1,429.64	0.339	9.986	0	0	0	0	0	0
0203-216-069	3.066	755.983	8.734	12.133	Free Surface	0 - 12:15 hrs	2.699	3.105	0.016	0.298	743.85	0.339	9.836	0	0	0	0	0	0
0203-217-397	4	240.254	2.091	29.987	Free Surface	0 - 12:32 hrs	1.273	1.833	0.125	0.703	210.267	5.049	9	0	0	0	0	0	0
0203-218-360	8	616.736	0.931	330.946	Free Surface	0 - 12:30 hrs	6.851	6.851	0.537	0.503	285.79	27.599	12	0	0	0	0	0	0
0203-219-218	15.742	3,098.77	0.197	98.332	Free Surface	0 - 12:30 hrs	1.46	1.742	0.032	0.368	3,000.44	5.436	23.454	0	0	0	0	0	0
0203-220-219	7.957	1,410.25	0.559	98.77	Free Surface	0 - 12:30 hrs	1.341	1.966	0.07	0.574	1,311.48	5.475	26.489	0	0	0	0	0	0
0203-221-352	6	472.126	0.361	229.677	Free Surface	0 - 12:15 hrs	5.186	5.281	0.486	0.925	242.448	16.59	8	0	0	0	0	0	0
0203-222-107	2	27.207	1.446	17.477	Backwater	0 - 13:10 hrs	5.638	5.681	0.642	1	9.729	1.325	1.999	0.827	0.827	1.398	0	0	1
0203-223-358	6	781.339	0.561	249.335	Backwater	0 - 12:21 hrs	4.156	4.156	0.319	1	532.004	20.296	10	0.831	0.9	0.831	0	0.831	0
0203-224-475	3	31.878	0.228	33.676	Exceeds Capacity	0 - 12:03 hrs	4.764	4.764	1.056	1	-1.799	1.93	3	1.359	1.362	1.4	0.046	1.359	1
0203-225-422	2.5	28.674	0.489	9.092	Free Surface	0 - 12:15 hrs	3.363	3.364	0.317	0.54	19.582	0.363	2.498	0	0	0	0	0	0
0203-226-227	3.5	48.818	0.235	64.177	Exceeds Capacity	0 - 12:15 hrs	6.67	6.67	1.315	1	-15.359	2.376	3.499	0.568	0.577	0.572	0.177	0.437	0
0203-227-076	3.5	40.108	0.159	64.186	Exceeds Capacity	0 - 12:15 hrs	6.671	6.671	1.6	1	-24.078	2.379	3.5	0.55	0.572	0.55	0.251	0.503	0
0203-228-077	4.5	123.55	0.395	10.149	Free Surface	0 - 12:30 hrs	1.148	2.961	0.082	0.714	113.401	0.254	4.4	0	0	0	0	0	0
0203-229-511	2.25	27.334	0.779	20.084	Backwater	0 - 12:03 hrs	5.051	5.051	0.735	1	7.249	1.202	2.25	0.548	0.552	0.549	0	0.544	0
0203-230-512	2.5	22.565	0.303	19.913	Free Surface	0 - 12:03 hrs	4.833	4.833	0.882	0.802	2.652	1.203	2.5	0	0.548	0	0	0	0
0203-231-514	3	56.333	0.713	19.834	Free Surface	0 - 12:06 hrs	4.529	4.68	0.352	0.619	36.499	1.199	3	0	0	0	0	0	0
0203-232-233	3.5	113.931	1.282	19.654	Free Surface	0 - 12:22 hrs	6.129	6.129	0.173	0.367	94.277	1.199	3.374	0	0	0	0	0	0
0203-233-516	3.5	100.268	0.993	19.654	Free Surface	0 - 12:22 hrs	5.034	5.233	0.196	0.426	80.613	1.2	3.46	0	0	0	0	0	0
0203-234-529	4	56.772	0.156	35.074	Free Surface	0 - 12:22 hrs	2.898	2.984	0.618	0.921	21.698	2.28	4	0	0	0	0	0	0
0203-235-236	3.5	54.672	0.295	35.073	Free Surface	0 - 12:22 hrs	5.065	5.066	0.642	0.676	19.599	2.282	3.489	0	0	0	0	0	0
0203-236-237	3.5	140.904	1.961	35.08	Free Surface	0 - 12:23 hrs	6.679	6.781	0.249	0.536	105.824	2.282	3.5	0	0	0	0	0	0
0203-237-071	3.5	113.012	1.262	35.074	Free Surface	0 - 12:25 hrs	5.339	5.446	0.31	0.648	77.939	2.282	3.488	0	0	0	0	0	0
0203-238-062	5	380.356	2.133	99.755	Backwater	0 - 12:10 hrs	5.105	5.15	0.262	1	280.601	4.83	4.996	0.198	0.237	0.199	0	0.198	0
0203-239-245	5	163.665	0.393	122.686	Free Surface	0 - 12:19 hrs	3.111	3.112	0.75	0.789	40.98	9.865	10	0	0	0	0	0	0
0203-240-494	4	124.539	0.752	34.49	Backwater	0 - 13:29 hrs	3.161	3.162	0.277	1	90.049	2.293	3.999	0.762	0.762	1.177	0	0.002	0
0203-241-254	3	38.818	0.339	20.445	Backwater	0 - 12:15 hrs	2.892	2.892	0.527	1	18.373	0.725	3	0.321	0.321	1.474	0	0	0
0203-242-243	4.333	114.727	0.416	99.873	Backwater	0 - 12:06 hrs	6.772	6.772	0.871	1	14.854	5.511	4.332	0.902	0.911	0.902	0	0.902	0
0203-243-361	4.333	74.203	0.174	99.876	Free Surface	0 - 12:06 hrs	7.032	7.033	1.346	0.947	-25.672	5.51	4.333	0	0.902	0	0.892	0	0
0203-244-462	5.737	112.706	0.521	95.457	Free Surface	0 - 13:41 hrs	3.496	3.499	0.847	0.994	17.249	16.18	6.184	0	4.45	0	0	0	0
0203-245-070	5	39.928	0.023	122.657	Free Surface	0 - 12:19 hrs	4.165	4.177	3.072	0.59	-82.729	9.861	10	0	0	0	2.518	0	0
0203-246-417	7.439	3,676.70	7.719	89.4	Free Surface	0 - 12:23 hrs	2.705	4.378	0.024	0.466	3,587.30	6.67	19.172	0	0	0	0	0	0
0203-247-602	12.356	1,517.96	0.118	108.279	Free Surface	0 - 16:02 hrs	2.698	2.706	0.071	0.232	1,409.68	38.626	18.832	0	0	0	0	0	0
0203-248-318	3	67.56	1.026	32.089	Backwater	0 - 15:04 hrs	4.54	4.54	0.475	1	35.471	7.395	2.999	6.5	6.563	6.5	0	6.5	0
0203-249-196	2.151	129.724	3.804	24.791	Free Surface	0 - 12:15 hrs	2.557	3.1	0.191	0.731	104.933	0.707	8.74	0	0	0.118	0	0	0
0203-250-545	3.91	89.055	0.375	76.378	Backwater	0 - 12:48 hrs	2.968	2.968	0.858	1	12.676	7.422	7.382	1.061	1.061	6.389	0	0.974	0
0203-251-546	5.09	136.033	0.361	35.808	Free Surface	0 - 12:03 hrs	1.416	1.444	0.263	0.805	100.225	7.406	7.682	0	0	0	0	0	0
0203-252-626	6.45	1,853.34	4.54	87.05	Free Surface	0 - 12:23 hrs	2.469	4.612	0.047	0.569	1,766.29	4.774	17.918	0	0	0	0	0	0
0203-253-434	5.141	97.055	0.011	24.161	Free Surface	0 - 12:22 hrs	0.313	0.32	0.249	0.765	72.894	0.946	37.639	0	0	0	0	0	0
0203-254-335	10.591	74.207	0	127.875	Free Surface	0 - 12:15 hrs	3.189	3.19	1.723	0.355	-53.668	7.058	22.03	0	0	0	0.807	0	0
0203-255-635	4.56	164.413	1.087	38.832	Free Surface	0 - 12:18 hrs	3.962	3.963	0.236	0.453	125.581	7.898	6.018	0	0	0	0	0	0
0203-256-085	4	33.719	0.055	45.425	Free Surface	0 - 12:19 hrs	3.71	3.711	1.347	0.94	-11.707	2.616	3.999	0	0	0.376	0.552	0	0
0203-257-321	4.392	206.69	0.099	28.877	Free Surface	0 - 13:04 hrs	1.002	1.178	0.14	0.53	177.813	2.717	24.775	0	0	0	0	0	0
0203-258-257	3	2.934	0.002	29.166	Free Surface	0 - 12:10 hrs	4.477	4.48	9.942	0.901	-26.232	2.717	3	0	1.494	0	7.609	0	0
0203-259-258	3	44.007	0.435	29.155	Backwater	0 - 12:10 hrs	4.125	4.125	0.663	1	14.852	2.718	2.999	1.423	1.423	1.494	0	1.406	0

Table B-1b. Existing System Analysis - Pipes/Channels
2-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-260-259	3	40.111	0.214	29.698	Backwater	0 - 12:10 hrs	4.201	4.392	0.74	1	10.413	2.72	2.999	1.412	1.417	1.423	0	1.408	0
0203-261-260	3	38.498	0.333	31.983	Backwater	0 - 12:07 hrs	4.702	4.704	0.831	1	6.515	2.719	3	1.416	1.454	1.417	0	1.412	0
0203-262-261	2.5	26.97	0.432	32.739	Exceeds Capacity	0 - 12:07 hrs	6.67	6.67	1.214	1	-5.77	2.718	2.5	1.492	1.517	1.495	1.467	1.488	0
0203-263-262	3	37.42	0.315	34.183	Backwater	0 - 12:06 hrs	4.836	4.836	0.914	1	3.237	2.736	2.999	1.458	1.462	1.476	0	1.453	0
0203-264-265	2	19.5	0.743	17.273	Backwater	0 - 12:15 hrs	5.498	5.862	0.886	1	2.228	0.51	2	0.05	0.05	0.126	0	0.046	0
0203-265-266	3	22.859	0.117	17.339	Backwater	0 - 12:15 hrs	2.455	2.455	0.759	1	5.52	0.518	3	0.033	0.093	0.033	0	0.033	0
0203-266-267	3	53.494	0.643	17.243	Free Surface	0 - 12:15 hrs	2.45	2.45	0.322	0.985	36.251	0.518	2.998	0	0.077	0	0	0	0
0203-267-318	3	49.041	0.541	17.21	Free Surface	0 - 12:15 hrs	2.444	2.444	0.351	0.985	31.831	0.517	2.999	0	0	6.5	0	0	0
0203-268-631	12.401	4,258.40	0.223	814.847	Free Surface	0 - 12:55 hrs	2.908	2.911	0.191	0.587	3,443.55	120.345	59.547	0	0	0	0	0	0
0203-269-268	3.496	26.348	0.192	33.058	Free Surface	0 - 12:48 hrs	3.572	3.572	1.255	0.708	-6.709	2.841	4.257	0	1.589	0	1.494	0	0
0203-270-658	12.11	5,684.14	1.865	108.744	Free Surface	0 - 12:30 hrs	0.805	1.484	0.019	0.602	5,575.40	6.629	31.461	0	0	0	0	0	0
0203-271-662	2.89	97.449	1.376	78.87	Backwater	0 - 12:15 hrs	4.919	4.919	0.809	1	18.579	2.989	6.37	0.122	0.122	0.688	0	0	0
0203-272-273	4	127.985	0.794	70.565	Free Surface	0 - 12:26 hrs	8.658	8.679	0.551	0.689	57.42	5.302	4	0	0	0	0	0	0
0203-273-617	10.9	5,582.39	1.231	70.081	Free Surface	0 - 13:18 hrs	0.446	1.196	0.013	0.557	5,512.31	5.279	36.852	0	0	0	0	0	0
0203-274-275	3.92	107.358	0.572	72.148	Free Surface	0 - 12:32 hrs	7.222	7.619	0.672	0.876	35.21	5.411	3.177	0	1.372	0	0	0	1
0203-275-276	4	208.467	0.182	72.114	Free Surface	0 - 12:32 hrs	3.319	3.437	0.346	0.776	136.353	5.413	7	0	0	0	0	0	0
0203-276-277	4.1	200.517	0.198	72.085	Free Surface	0 - 12:32 hrs	4.912	4.912	0.359	0.607	128.432	5.411	6.733	0	0	0	0	0	0
0203-277-629	4.23	291.179	3.455	72.08	Free Surface	0 - 12:32 hrs	4.23	5.446	0.248	0.689	219.098	5.41	6.875	0	0	0.121	0	0	0
0203-278-274	4	56.829	0.054	28.332	Backwater	0 - 12:19 hrs	1.417	1.417	0.499	1	28.497	1.229	5	1.175	1.175	1.364	0	0.242	2
0203-279-278	3.5	88.814	0.779	28.342	Backwater	0 - 12:18 hrs	2.946	2.946	0.319	1	60.472	1.231	3.498	0.419	0.419	1.404	0	0	1
0203-280-279	3.5	56.3	0.313	28.322	Backwater	0 - 12:18 hrs	2.944	3.777	0.503	1	27.977	1.227	3.497	0.41	0.41	0.419	0	0.002	0
0203-281-280	3	43.759	0.43	28.802	Backwater	0 - 12:07 hrs	4.075	4.075	0.658	1	14.957	1.222	3	0.417	0.417	0.429	0	0.407	0
0203-282-281	3	33.701	0.255	29.76	Backwater	0 - 12:07 hrs	4.212	4.212	0.883	1	3.941	1.221	2.999	0.41	0.436	0.411	0	0.409	0
0203-283-274	3.5	66.952	0.443	54.554	Backwater	0 - 12:59 hrs	5.67	5.67	0.815	1	12.398	4.187	3.498	1.376	1.376	1.417	0	1.046	1
0203-284-297	3.5	2.371	0.001	85.18	Exceeds Capacity	0 - 12:15 hrs	8.853	8.853	35.921	1	-82.809	3.675	3.495	1.472	1.507	1.472	12.367	1.472	0
0203-285-534	3	77.681	1.356	21.885	Free Surface	0 - 12:56 hrs	3.491	3.584	0.282	0.915	55.796	3.672	3	0	0	0.627	0	0	0
0203-286-285	3	90.715	1.85	20.399	Free Surface	0 - 12:57 hrs	4.467	4.929	0.225	0.68	70.317	3.672	3	0	0	0	0	0	0
0203-287-286	3	68.923	1.068	20.249	Free Surface	0 - 13:38 hrs	5.312	5.332	0.294	0.535	48.674	3.672	2.996	0	0	0	0	0	0
0203-288-287	3	52.782	0.626	20.249	Free Surface	0 - 13:37 hrs	4.239	4.26	0.384	0.64	32.533	3.672	2.996	0	0	0	0	0	0
0203-289-288	3	35.822	0.288	20.249	Free Surface	0 - 13:37 hrs	3.467	3.478	0.565	0.77	15.573	3.673	2.998	0	0	0	0	0	0
0203-290-304	2.5	33.019	0.648	20.249	Free Surface	0 - 13:36 hrs	4.91	4.91	0.613	0.783	12.77	3.676	2.497	0	4.507	0	0	0	0
0203-291-305	2.5	38.403	0.877	20.249	Backwater	0 - 13:34 hrs	4.125	4.125	0.527	1	18.154	3.677	2.5	4.562	4.562	4.598	0	4.503	2
0203-292-291	2	28.481	1.585	20.249	Backwater	0 - 13:34 hrs	6.446	6.446	0.711	1	8.231	3.678	2	4.521	4.521	4.622	0	0	1
0203-293-292	2	27.328	1.459	20.805	Backwater	0 - 11:59 hrs	6.651	6.683	0.761	1	6.523	3.681	1.999	4.521	4.612	4.521	0	4.521	1
0203-294-306	3.5	111.399	1.226	42.057	Free Surface	0 - 12:40 hrs	4.729	4.741	0.378	0.884	69.342	3.678	3.494	0	0	4.503	0	0	0
0203-295-294	3.5	77.262	0.59	42.083	Free Surface	0 - 12:38 hrs	4.85	5.082	0.545	0.853	35.179	3.677	3.5	0	0	0	0	0	0
0203-296-295	3.5	26.661	0.07	42.085	Free Surface	0 - 12:38 hrs	4.405	4.406	1.579	0.975	-15.424	3.674	3.5	0	1.502	0	1.542	0	0
0203-297-296	3.5	149.798	2.217	42.085	Backwater	0 - 12:38 hrs	4.374	4.374	0.281	1	107.713	3.673	3.498	1.472	1.472	1.502	0	0	0
0203-298-314	4.5	229.799	0.808	99.544	Backwater	0 - 12:41 hrs	6.259	7.058	0.433	1	130.255	9.985	4.457	1.603	1.603	2.43	0	0	3
0203-299-298	3	50.348	0.57	45.95	Backwater	0 - 12:02 hrs	6.501	6.501	0.913	1	4.398	2.897	3	1.039	1.04	1.61	0	1.038	0
0203-300-307	3	70.727	1.124	52.028	Backwater	0 - 12:30 hrs	7.36	7.372	0.736	1	18.7	5.317	2.999	1.656	2.174	1.656	0	1.656	0
0203-301-317	5	253.25	0.946	123.287	Backwater	0 - 14:00 hrs	6.279	6.279	0.487	1	129.963	15.276	4.994	3.537	3.538	3.598	0	2.639	0
0203-302-333	5.08	39.693	0.032	167.934	Exceeds Capacity	0 - 11:59 hrs	4.663	4.663	4.231	1	-128.241	22.604	7.536	3.923	4.051	3.923	4.599	3.7	0
0203-303-334	3	67.685	1.03	34.097	Backwater	0 - 11:57 hrs	4.824	4.831	0.504	1	33.587	2.654	2.997	3.552	3.554	3.569	0	1.985	0
0203-304-289	2.5	50.953	1.543	20.249	Free Surface	0 - 13:37 hrs	5.041	5.174	0.397	0.763	30.704	3.675	2.482	0	0	0	0	0	0
0203-305-290	2.5	28.637	0.487	20.249	Backwater	0 - 13:36 hrs	4.125	4.125	0.707	1	8.387	3.676	2.5	4.507	4.598	4.507	0	4.507	1
0203-306-293	2.5	45.114	1.21	20.844	Backwater	0 - 11:59 hrs	4.246	4.246	0.462	1	24.271	3.683	2.5	4.547	4.58	4.547	0	4.547	1
0203-307-308	3.5	108.726	1.168	52.026	Backwater	0 - 12:30 hrs	5.411	5.492	0.479	1	56.7	5.312	3.491	0.713	1.077	0.713	0	0.713	0
0203-308-309	3.5	95.984	0.91	52.017	Free Surface	0 - 12:30 hrs	5.436	5.49	0.542	0.989	43.967	5.302	3.488	0	0.713	0	0	0	0
0203-309-310	3.5	106.384	1.118	52.281	Free Surface	0 - 12:02 hrs	6.257	6.293	0.491	0.978	54.103	5.294	3.5	0	1.194	0	0	0	0
0203-310-311	3.5	121.546	1.459	52.649	Free Surface	0 - 12:00 hrs	6.792	8.003	0.433	0.988	68.897	5.285	3.498	0	0	2.012	0	0	0
0203-311-301	4	119.146	0.688	51.974	Backwater	0 - 12:30 hrs	4.136	4.62	0.436	1	67.172	5.237	3.96	2.003	2.003	3.58	0	0	0
0203-312-301	5	184.133	0.5	82.642	Backwater	0 - 12:00 hrs	4.209	4.765	0.449	1	101.491	9.953	4.905	2.813	2.813	3.538	0	0.003	0
0203-313-312	5	227.511	0.763	99.543	Backwater	0 - 12:41 hrs	5.07	6.04	0.438	1	127.968	9.945	4.999	2.745	2.746	2.814	0	0.002	3
0203-314-313	5	209.24	0.645	99.547	Backwater	0 - 12:27 hrs	5.07	5.659	0.476	1	109.694	9.937	4.956	2.27	2.27	2.746	0	1.079	4
0203-315-340	3.5	106.06	1.111	69.853	Backwater	0 - 12:00 hrs	7.26	7.26	0.659	1	36.207	7.009	3.477	2.212	2.212	2.247	0	0.541	0
0203-316-315	3.5	69.433	0.476	76.241	Exceeds Capacity	0 - 12:00 hrs	7.952	7.967	1.098	1	-6.807	7.009	3.469	2.209	2.321	2.21	0.012	2.208	0
0203-317-302	5.08	262.51	1.382	120.669	Backwater	0 - 12:02 hrs	3.351	3.351	0.46	1	141.841	15.325	7.536	3.587	3.587	4.051	0	0.001	0
0203-318-549	3	67.552	1.026	38.912	Free Surface	0 - 12:17 hrs	5.547	5.547	0.576	0.973	28.639	7.909	3	0	6.5	0	0	0	0
0203-319-556	4	56.408	0.154	43.977	Free Surface	0 - 12:18 hrs	5.288	5.288	0.78	0.629	12.431	3.345	3.999	0	0	0	0	0	0
0203-320-319	3	48.238	4.952	28.876	Free Surface	0 - 13:11 hrs	4.889	4.913	0.599	0.779	19.362	2.704	2.999	0	0	1.146	0	0	0
0203-321-320	4.392	162.289	0.061	28.877	Free Surface	0 - 13:07 hrs	1.409	1.502	0.178	0.447	133.412	2.707	20.875	0	0	0	0	0	0
0203-322-323	4	194.09	1.826	25.596	Backwater	0 - 12:47 hrs	2.037	2.771	0.132	1	168.495	3.186	3.998	2.902	2.902	18.725	0	0	0
0203-323-324	6	498.726	0.855	25.595	Free Surface	0 - 12:47 hrs	1.24	1.24	0.051	0.573	473.131	3.138	6	0	0	0	0	0	0
0203-324-008	11.346	4,998.01	0.94	25.595	Free Surface	0 - 12:48 hrs	3.52	3.52	0.005	0.089	4,972.42	3.156	12.202	0	0	0	0	0	13
0203-325-329	9.647	578.421	0.106	173.028	Free Surface	0 - 12:27 hrs	2.375	2.523	0.299	0.638	405.393	13.093	23.994	0	0	0	0	0	0
0203-326-327	6.218	1,235.41	1.437	87.192	Free Surface	0 - 12:15 hrs	3.524	3.528	0.071	0.368	1,148.22	2.614	16.466	0	0	0	0	0	0
0203-327-328	10	2,249.26	1.211	85.437	Free Surface	0 - 12:15 hrs	2.608	2.834	0.038	0.396	2,163.82	2.611	16.274	0	0	0	0	0	0
0203-328-133	4.533	193.213	0.927	163.409	Backwater	0 - 12:18 hrs	4.818	4.818	0.846	1	29.804	6.737	13.642	0.241	0.241	0.379	0	0.126	0
0203-329-195	9.647	621.526	0.122	168.909	Free Surface	0 - 12:33 hrs	3.373	3.391	0.272	0.526	452.616	13.045	19.789	0	0	0	0	0	0
0203-330-199	2.169	73.922	1.595	53.591	Free Surface	0 - 12:17 hrs	4.204	4.204	0.725	0.937	20.33	2.121	9.952	0	0	0.044	0	0	0
0203-331-332	5.08	73.265	0.108	144.346	Exceeds Capacity	0 - 15:07 hrs	4.345	4.352	1.97	1	-71.081	22.62	7.536	0.581	3.969	0.581	4.091	0.581	0
0203-332-665	6	917.899	0.494	144.407	Free Surface	0 - 15:07 hrs	2.556	2.569	0.157	0.959	773.492	22.614	12	0	0	0.523	0	0	0
0203-333-655	6	240.786	0.322	148.697	Backwater	0 - 11:59 hrs	2.127	2.14	0.618	1	92.089	22.72	12	3.859	3.859	3.871	0	0.002	0
0203-334-302	3.5	153.045	2.314	33.669	Backwater	0 - 11:57 hrs	3.5	3.5	0.22	1	119.376	2.7	3.5	3.572	3.572	4.797	0	0	0
0203-335-009	10.591	5,438.11	2.093	127.469	Free Surface	0 - 12:15 hrs	5.877	5.877	0.023	0.264	5,310.64	7.052	16.035	0	0	0	0	0	0
0203-336-222	2	26.059	1.327	17.454	Backwater	0 - 13:10 hrs	5.651	5.876	0.67	1	8.606	1.315	1.998	0.826	0.89	0.827	0	0.177	1
0203-337-486	4.5	213.147	1.175	60.823	Free Surface	0 - 12:37 hrs	7.362	7.719	0.285	0.516	152.324	9.039	4.499	0	0	0	0	0	0
0203-338-070	4.647	318.699	0.132	61.267	Free Surface	0 - 12:21 hrs	1.647	1.65	0.192	0.453	257.432	3.32	23.301	0	0	0	0	0	0
0203-339-189	4.819	2,243.90	2.013	93.74	Free Surface	0 - 12:15 hrs	1.009	1.009	0.042	0.601	2,150.16	6.018	51.057	0	0	0.538	0	0	0
0203-340-298	4	132.209	0.847	76.823	Backwater	0 - 13:22 hrs	6.113	6.113	0.581	1	55.386	7.046	3.999	1.634	2.237	1.634	0	1.632	3
0203-341-345	8	1,383.33	0.495	247.144	Free Surface	0 - 14:25 hrs	7.273	7.273	0.179	0.354	1,136.18	39.094	12	0	0	0	0	0	0
0203-342-350	3	84.516	1.606	49.313	Backwater	0 - 12:18 hrs	6.976	6.976	0.583	1	35.203	5.758	2.996	2.296	2.296	2.51	0	0.235	0
0203-343-344	6	212.05	0.251	132.688	Backwater	0 - 12:15 hrs	4.693	4.693	0.626	1	79.362	3.307	5.997	2.235	2.235	2.42	0	0.046	0
0203-344-382	2	14.788	0.427	28.414	Free Surface	0 - 13:25 hrs	9.429	9.533	1.921	0.92	-13.626	3.336	2	0	3.422	0	2.999	0	0
0203-345-002	10.792	35,212.01	40.439	291.349	Free Surface	0 - 13:48 hrs	8.981	8.981	0.008	0.176	34,920.66	44.807	27.356	0	0	0	0	0	0
0203-346-345	7.846	738.424	0.86	46.028	Free Surface	0 - 12:41 hrs	2.197	2.197	0.062	0.239	692.396	5.734	11.856	0	0	0	0	0	0

Table B-1b. Existing System Analysis - Pipes/Channels
2-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-347-346	3	53.584	0.645	46.029	Free Surface	0 - 12:41 hrs	8.581	8.581	0.859	0.71	7.556	5.738	2.99	0	2.59	0	0	0	0
0203-348-347	7.265	454.602	0.802	46.124	Free Surface	0 - 12:33 hrs	1.016	1.81	0.101	0.689	408.478	5.744	9.467	0	0	0	0	0	0
0203-349-348	3	31.929	0.229	46.792	Exceeds Capacity	0 - 12:22 hrs	6.62	6.698	1.466	1	-14.863	5.747	2.999	2.219	2.649	2.219	2.548	2.219	0
0203-350-349	7.191	473.764	1.015	48.001	Free Surface	0 - 12:18 hrs	0.908	1.314	0.101	0.903	425.763	5.756	9.539	0	0	0	0	0	0
0203-351-551	7.04	318.643	0.203	44.062	Free Surface	0 - 12:15 hrs	4.285	4.487	0.138	0.28	274.581	1.33	8.03	0	0	0	0	0	0
0203-352-363	6.945	878.302	0.362	227.602	Free Surface	0 - 12:15 hrs	4.6	4.637	0.259	0.797	650.701	16.582	9.607	0	0	0	0	0	0
0203-353-354	7.03	983.531	0.483	235.362	Free Surface	0 - 12:21 hrs	6.859	6.862	0.239	0.594	748.17	17.843	9.481	0	0	0	0	0	0
0203-354-114	7.03	1,353.80	0.915	235.901	Free Surface	0 - 12:21 hrs	7.912	8.031	0.174	0.527	1,117.90	17.838	9.461	0	0	0	0	0	0
0203-355-356	6	934.066	0.802	234.345	Free Surface	0 - 12:22 hrs	4.997	5.472	0.251	0.782	699.721	17.824	10	0	0	0	0	0	0
0203-356-113	8.464	2,294.28	2.604	267.577	Free Surface	0 - 12:22 hrs	6.043	6.484	0.117	0.761	2,026.71	19.513	8.668	0	0	0.623	0	0	0
0203-357-223	6	829.961	0.633	250.384	Backwater	0 - 12:21 hrs	4.173	4.173	0.302	1	579.577	20.304	10	0.9	0.954	0.9	0	0.9	0
0203-358-359	7.321	274.216	0.535	248.306	Free Surface	0 - 12:37 hrs	5.137	5.138	0.906	0.913	25.91	20.269	8.11	0	0.575	0	0	0	0
0203-359-112	7.321	466.386	1.548	270.438	Free Surface	0 - 12:37 hrs	5.595	5.596	0.58	0.913	195.947	22.174	8.107	0	0	1.126	0	0	0
0203-360-111	16.67	50,175.86	7.084	330.934	Free Surface	0 - 12:32 hrs	6.534	6.534	0.007	0.144	49,844.93	27.587	37.161	0	0	0	0	0	0
0203-361-220	7.957	146.481	0.006	99.821	Free Surface	0 - 12:10 hrs	2.565	2.673	0.681	0.444	46.66	5.493	21.879	0	0	0	0	0	0
0203-362-165	7.943	1,483.04	2.475	237.754	Free Surface	0 - 13:29 hrs	3.621	3.621	0.16	0.654	1,245.28	27.382	14.156	0	0	0	0	0	0
0203-363-117	6.945	873.512	0.358	226.308	Free Surface	0 - 12:17 hrs	4.655	4.666	0.259	0.782	647.204	16.567	9.606	0	0	0	0	0	0
0203-364-164	8.07	2,005.71	4.955	237.754	Free Surface	0 - 13:29 hrs	5.897	5.897	0.119	0.458	1,767.96	27.34	13.006	0	0	0	0	0	0
0203-365-461	5.5	515.198	2.354	174.88	Backwater	0 - 12:42 hrs	7.361	7.361	0.339	1	340.318	16.205	5.497	1.64	1.64	4.515	0	0.001	0
0203-366-367	6	500.191	1.395	138.229	Backwater	0 - 13:07 hrs	4.889	4.889	0.276	1	361.962	16.117	5.987	4.646	4.646	6.451	0	0.588	0
0203-367-368	3.377	255.263	2.077	269.225	Exceeds Capacity	0 - 12:11 hrs	7.877	7.877	1.055	1	-13.962	31.28	19.528	2.739	2.739	3.712	0.491	1.285	0
0203-368-370	6	157.161	0.804	205.268	Backwater	0 - 12:03 hrs	5.702	5.702	1.306	1	-48.108	31.265	6	4.926	4.926	5.527	3.658	0	0
0203-369-427	4	474.879	0.305	85.521	Backwater	0 - 14:21 hrs	1.71	1.787	0.18	1	389.358	7.259	14	1.624	1.63	1.633	0	0.058	0
0203-370-118	4.513	345.587	0.998	198.458	Free Surface	0 - 12:03 hrs	4.218	4.23	0.574	0.988	147.13	31.239	21.428	0	0	4.195	0	0	0
0203-372-373	8.563	802.787	0.948	212.939	Free Surface	0 - 13:18 hrs	2.329	4.505	0.265	0.986	589.848	33.112	19.12	0	0	4.044	0	0	0
0203-373-377	7	177.398	0.45	212.703	Exceeds Capacity	0 - 13:18 hrs	4.341	4.341	1.199	1	-35.305	33.167	7	5.206	5.225	5.206	3.553	5.203	0
0203-374-375	3.862	144.305	0.401	195.336	Exceeds Capacity	0 - 14:26 hrs	5.069	5.069	1.354	1	-51.031	33.091	17.32	4.578	4.578	4.91	4.255	4.362	0
0203-375-376	7.377	166.742	0.058	195.316	Free Surface	0 - 14:26 hrs	3.453	3.453	1.171	0.789	-28.574	33.074	14.633	0	0	0	4.119	0	0
0203-376-341	11.182	2,080.21	1.59	195.312	Free Surface	0 - 14:26 hrs	7.019	7.668	0.094	0.384	1,884.90	33.067	11.529	0	0	0	0	0	0
0203-377-374	7	43.345	0.027	210.439	Exceeds Capacity	0 - 13:23 hrs	4.295	4.295	4.855	1	-167.094	33.092	7	5.103	5.206	5.103	5.845	5.103	0
0203-378-379	3	78.635	1.39	66.104	Backwater	0 - 12:56 hrs	9.352	9.352	0.841	1	12.53	3.772	2.999	0.908	0.908	0.989	0	0.899	0
0203-379-242	4	89.876	0.391	66.106	Backwater	0 - 12:56 hrs	5.261	5.261	0.736	1	23.77	3.772	3.999	0.903	0.903	0.934	0	0.882	0
0203-380-187	9.535	663.228	0.26	91.304	Free Surface	0 - 12:22 hrs	3.116	3.121	0.138	0.453	571.925	6.677	13.733	0	0	0	0	0	0
0203-381-134	4.101	493.715	1.219	109.282	Free Surface	0 - 12:15 hrs	2.357	2.445	0.221	0.786	384.433	4.143	29.967	0	0	0.173	0	0	0
0203-382-339	9	320.398	0.393	28.402	Free Surface	0 - 13:29 hrs	6.203	6.253	0.089	0.141	291.996	3.327	4	0	0	0	0	0	0
0203-383-384	4.91	116.495	0.091	117.857	Exceeds Capacity	0 - 12:08 hrs	2.204	2.208	1.012	1	-1.362	40.017	12.036	11.825	11.89	11.825	0.045	0.015	0
0203-384-576	4.91	75.684	0.038	108.247	Free Surface	0 - 15:15 hrs	3.133	3.133	1.43	0.666	-32.563	39.272	11.681	0	11.825	0	11.988	0	0
0203-385-057	1.5	12.834	1.493	4.281	Backwater	0 - 12:07 hrs	2.423	2.423	0.334	1	8.553	0.127	1.5	0.453	0.453	0.923	0	0.001	0
0203-386-385	1.25	8.204	1.613	4.257	Backwater	0 - 12:07 hrs	1.734	2.979	0.259	1	3.948	0.128	1.248	0.388	0.388	0.497	0	0.001	0
0203-387-059	1.5	11.672	1.235	8.18	Backwater	0 - 12:07 hrs	4.629	4.629	0.701	1	3.492	0.223	1.5	0.369	0.369	0.44	0	0.116	0
0203-388-387	1.25	7.721	1.429	8.16	Backwater	0 - 12:07 hrs	3.325	3.325	0.528	1	-0.439	0.223	1.249	0.324	0.324	0.403	0	0	0
0203-389-113	1.75	11.978	0.571	14.921	Exceeds Capacity	0 - 12:02 hrs	6.203	6.203	1.246	1	-2.943	0.764	1.75	4.82	4.82	16.479	0.162	0.646	0
0203-390-389	1.25	5.902	0.835	14.925	Exceeds Capacity	0 - 12:02 hrs	6.081	6.081	1.264	1	-9.023	0.764	1.25	4.97	4.97	7.64	0.17	0.943	0
0203-391-123	6.887	598.08	0.367	200.26	Free Surface	0 - 12:26 hrs	3.333	3.35	0.335	0.705	397.82	7.79	22.871	0	0	0	0	0	0
0203-392-121	17.772	12,618.16	0.808	199.788	Free Surface	0 - 12:29 hrs	4.069	4.232	0.016	0.188	12,418.37	7.767	25.901	0	0	0	0	0	0
0203-393-201	14.057	3,408.70	3.486	19.654	Free Surface	0 - 12:22 hrs	3.065	3.425	0.006	0.249	3,389.04	1.2	4.007	0	0	0	0	0	0
0203-394-395	4	77.157	0.289	51.269	Free Surface	0 - 12:15 hrs	4.289	4.289	0.664	0.905	25.888	2.247	4	0	0.082	0	0	0	9
0203-395-206	5.829	807.214	1.066	98.071	Free Surface	0 - 12:15 hrs	3.721	3.724	0.121	0.497	709.143	4.382	17.942	0	0	0	0	0	3
0203-396-211	1.807	81.029	6.177	13.276	Backwater	0 - 12:15 hrs	1.567	2.234	0.164	1	67.753	0.342	9.996	1.799	1.799	6.491	0	0	0
0203-397-398	4	5.609	0.001	30.348	Free Surface	0 - 12:33 hrs	1.203	1.713	5.41	0.773	-24.739	5.047	9	0	0	0	7.745	0	0
0203-398-239	4	56.247	0.115	30.743	Free Surface	0 - 12:33 hrs	1.258	2.593	0.547	0.76	25.504	5.045	9	0	0	0	0	0	0
0203-399-400	3	59.881	0.806	15.855	Free Surface	0 - 12:15 hrs	3.272	3.273	0.265	0.648	44.026	0.645	3	0	0	0	0	0	0
0203-400-330	3.82	39.41	0.21	15.469	Free Surface	0 - 12:15 hrs	2.267	2.268	0.393	0.618	23.941	0.644	5.743	0	0	0	0	0	0
0203-401-195	4	182.264	1.61	79.365	Free Surface	0 - 12:19 hrs	7.991	7.991	0.435	0.737	102.899	3.107	3.999	0	0	0.317	0	0	0
0203-402-173	4.497	396.477	0.394	216.121	Backwater	0 - 12:36 hrs	2.655	2.655	0.545	1	180.357	20.285	18.833	1.454	1.688	1.454	0	1.454	0
0203-403-404	4	36.617	0.007	197.548	Exceeds Capacity	0 - 12:14 hrs	2.39	2.391	5.395	1	-160.931	20.291	21	1.654	1.731	1.654	6.093	1.654	0
0203-404-405	6.83	653.514	0.416	195.105	Free Surface	0 - 12:14 hrs	3.403	3.419	0.299	0.652	458.409	20.284	17.326	0	0	0	0	0	0
0203-405-406	4	1,076.74	0.63	190.696	Backwater	0 - 12:15 hrs	2.603	2.632	0.177	1	886.041	20.277	21	1.584	1.589	1.596	0	0.671	0
0203-406-407	6.363	925.76	0.729	185.971	Free Surface	0 - 12:25 hrs	2.177	2.609	0.201	0.779	739.788	20.266	19.339	0	0	0	0	0	0
0203-407-408	4	686.455	0.256	184.589	Backwater	0 - 12:25 hrs	2.197	2.197	0.269	1	501.866	20.251	21	1.898	1.907	1.901	0	1.841	0
0203-408-409	6.078	408.194	0.133	183.902	Free Surface	0 - 12:26 hrs	1.91	2.201	0.451	0.868	224.292	20.244	20.871	0	0	0	0	0	0
0203-409-172	6.078	295.612	0.07	182.329	Free Surface	0 - 13:02 hrs	1.769	2.186	0.617	0.856	113.283	20.225	20.866	0	0	0	0	0	0
0203-410-170	8	246.927	0.244	181.936	Free Surface	0 - 13:07 hrs	4.241	4.986	0.368	0.673	64.992	20.201	4	0	0	0	0	0	0
0203-411-412	3	112.659	2.853	25.002	Free Surface	0 - 12:15 hrs	5.244	5.269	0.222	0.639	87.657	1.178	2.998	0	0	0	0	0	0
0203-412-413	3	98.132	2.165	24.929	Free Surface	0 - 12:15 hrs	5.028	5.029	0.254	0.661	73.203	1.178	2.999	0	0	0	0	0	0
0203-413-414	3	75.537	1.283	24.848	Free Surface	0 - 12:15 hrs	6.654	6.655	0.329	0.522	50.689	1.178	2.998	0	0	0	0	0	0
0203-414-339	3	94.644	2.014	24.537	Free Surface	0 - 12:15 hrs	9.25	9.25	0.259	0.401	70.107	1.175	2.921	0	0	0	0	0	0
0203-415-416	2	17.553	0.602	21.081	Free Surface	0 - 12:15 hrs	7.503	7.503	1.201	0.838	-3.528	0.718	1.999	0	0.272	0	0.127	0	0
0203-416-191	4.928	659.285	2.587	20.925	Free Surface	0 - 12:15 hrs	3.063	3.066	0.032	0.328	638.361	0.718	8.448	0	0	0	0	0	0
0203-417-418	6	304.449	4.893	89.079	Free Surface	0 - 12:25 hrs	4.569	4.6	0.293	0.653	215.37	6.669	5.999	0	0	0	0	0	0
0203-418-184	6.773	478.547	0.151	88.615	Free Surface	0 - 12:26 hrs	1.49	1.507	0.185	0.56	389.932	6.666	21.439	0	0	0	0	0	0
0203-419-420	2	21.115	8.248	13.848	Free Surface	0 - 12:22 hrs	6.229	6.229	0.656	0.673	7.268	0.66	1.999	0	0.224	0	0	0	0
0203-420-186	6.59	1,773.95	4.014	13.847	Free Surface	0 - 12:22 hrs	2.182	3.306	0.008	0.151	1,760.10	0.659	11.024	0	0	0	0	0	0
0203-421-192	5.831	443.929	2.958	8.845	Free Surface	0 - 12:15 hrs	3.497	3.504	0.02	0.175	435.084	0.298	3.495	0	0	0	0	0	0
0203-422-423	3	49.047	0.541	9.012	Free Surface	0 - 12:15 hrs	3.072	3.074	0.184	0.433	40.035	0.364	2.969	0	0	0	0	0	0
0203-423-501	3	108.54	2.648	8.988	Free Surface	0 - 12:15 hrs	6.298	6.298	0.083	0.256	99.552	0.363	2.607	0	0	0	0	0	0
0203-424-425	5	849.536	0.219	97.225	Free Surface	0 - 12:30 hrs	1.959	2.116	0.114	0.505	752.311	7.303	20	0	0	0	0	0	0
0203-425-180	11.155	5,446.72	0.483	95.874	Free Surface	0 - 12:32 hrs	1.2	1.369	0.018	0.256	5,350.85	7.299	41.298	0	0	0	0	0	0
0203-426-369	4	471.649	0.301	85.213	Backwater	0 - 14:22 hrs	1.679	1.745	0.181	1	386.436	7.259	14	1.62	1.631	1.63	0	0.086	0
0203-427-174	4.533	224.617	0.327	86.056	Free Surface	0 - 14:21 hrs	2.059	2.21	0.383	0.993	138.561	7.258	14.018	0	0	1.451	0	0	0
0203-428-507	8	1,551.51	0.228	237.807	Free Surface	0 - 13:33 hrs	2.399	2.402	0.153	0.689	1,313.70	27.291	18	0	0	0	0	0	0
0203-429-162	12.147	1,032.00	0.184	249.134	Free Surface	0 - 13:17 hrs	4.031	4.031	0.241	0.359	782.864	29.257	17.28	0	0	0	0	0	0
0203-430-240	3	42.608	0.408	34.33	Backwater	0 - 13:29 hrs	4.952	5.086	0.806	1	8.278	2.292	2.989	1.177	1.265	1.216	0	0.226	0
0203-431-513	2	29.241	1.671	20.106	Backwater	0 - 12:03 hrs	6.4	6.4	0.688	1	9.136	1.202	2	0.545	0.564	0.546	0	0.545	0
0203-432-433	5	128.573	0.244	13.193	Free Surface	0 - 12:25 hrs	0.89	0.892	0.103	0.728	115.38	0.437	4.998	0	0	0	0	0	0
0203-433-253	4.946	221.964	0.118	14.265	Free Surface	0 - 12:25 hrs	0.252	0.256	0.064	0.78	207.699	0.435	23.979	0	0	0	0	0	0
0203-434-435	5	107.609	0.171	53.886	Free Surface	0 - 12:18 hrs	4.319	4.337	0.501	0.612	53.723	2.518	5	0	0	0	0	0	0

Table B-1b. Existing System Analysis - Pipes/Channels
2-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-435-138	6.268	2,359.30	1.346	53.169	Free Surface	0 - 12:19 hrs	1.36	1.514	0.023	0.394	2,306.13	2.517	32.588	0	0	0	0	0	0
0203-437-438	5.5	449.896	1.795	40.031	Free Surface	0 - 12:38 hrs	7.993	7.993	0.089	0.264	409.865	2.469	4.846	0	0	0	0	0	0
0203-438-135	9.15	6,022.25	7.055	40.035	Free Surface	0 - 12:38 hrs	4.753	4.754	0.007	0.176	5,982.22	2.469	10.095	0	0	0	0	0	0
0203-439-440	3	87.529	1.722	60.215	Backwater	0 - 12:23 hrs	8.519	8.519	0.688	1	27.313	4.599	2.994	1.308	1.308	3.812	0	1.307	0
0203-440-441	3	80.476	1.456	29.909	Backwater	0 - 13:21 hrs	4.231	4.231	0.372	1	50.567	4.585	2.999	3.823	3.823	3.869	0	0	0
0203-441-442	3	14.501	0.047	29.834	Exceeds Capacity	0 - 13:27 hrs	4.221	4.221	2.057	1	-15.334	4.585	3	3.807	3.869	3.807	3.947	3.807	0
0203-442-443	3	43.012	0.416	29.836	Free Surface	0 - 13:33 hrs	4.318	4.335	0.694	0.944	13.175	4.586	2.999	0	3.807	0	0	0	0
0203-443-444	3	81.077	1.478	29.835	Free Surface	0 - 13:27 hrs	5.206	5.214	0.368	0.759	51.242	4.587	2.999	0	0	0	0	0	0
0203-444-445	3	93.201	1.953	30.05	Free Surface	0 - 13:18 hrs	9.002	9.093	0.322	0.479	63.151	4.58	2.999	0	0	0	0	0	0
0203-445-446	3	81.206	1.482	29.9	Free Surface	0 - 13:19 hrs	5.423	5.491	0.368	0.728	51.306	4.582	3	0	0	3.805	0	0	0
0203-446-447	3	51.337	0.592	29.907	Free Surface	0 - 13:19 hrs	5.483	5.569	0.583	0.785	21.43	4.58	2.998	0	3.811	0	0	0	0
0203-447-448	3	125.519	3.541	33.12	Free Surface	0 - 13:17 hrs	5.907	7.347	0.264	0.785	92.399	4.581	2.998	0	0	1.283	0	0	0
0203-448-452	4	240.383	2.801	72.791	Free Surface	0 - 12:04 hrs	6.233	6.252	0.303	0.986	167.592	7.675	4	0	0.912	0	0	0	0
0203-449-450	3	160.418	5.785	56.96	Backwater	0 - 12:03 hrs	8.063	8.063	0.355	1	103.458	3.096	2.998	0.887	0.926	0.888	0	0.886	0
0203-450-451	3	71.197	1.139	52.385	Backwater	0 - 12:19 hrs	7.411	7.411	0.736	1	18.812	3.094	3	0.888	0.888	1.357	0	0.001	0
0203-451-448	3.5	31.481	0.098	44.11	Exceeds Capacity	0 - 12:03 hrs	4.585	4.585	1.401	1	-12.63	3.097	3.492	1.26	1.307	1.263	1.28	1.26	0
0203-452-453	4	164.465	1.311	76.937	Backwater	0 - 12:03 hrs	7.384	7.603	0.468	1	87.528	7.672	3.998	0.205	0.205	1.2	0	0	0
0203-453-454	4	184.959	1.658	73.315	Backwater	0 - 12:03 hrs	7.106	7.372	0.396	1	111.645	7.663	3.991	1.212	1.212	1.47	0	0	0
0203-454-455	4.5	211.484	1.157	71.804	Backwater	0 - 13:30 hrs	4.55	5.119	0.34	1	139.68	7.677	4.5	1.456	1.456	1.493	0	0.001	0
0203-455-457	4.5	164.682	0.701	111.165	Backwater	0 - 13:17 hrs	6.99	6.99	0.675	1	53.516	8.886	4.498	1.542	1.542	1.557	0	0.226	0
0203-456-455	2	39.779	3.092	24.73	Backwater	0 - 13:37 hrs	7.872	7.872	0.622	1	15.048	1.202	2	1.586	1.586	3.437	0	0	0
0203-457-458	5.5	268.326	0.638	143.058	Backwater	0 - 12:18 hrs	6.021	6.021	0.533	1	125.268	13.444	5.5	1.47	1.47	1.695	0	0	0
0203-458-365	5.5	112.891	0.113	147.196	Exceeds Capacity	0 - 13:17 hrs	6.196	6.196	1.304	1	-34.305	13.489	5.497	1.639	1.695	1.64	1.564	1.639	0
0203-459-460	3.5	120.316	1.43	54.078	Backwater	0 - 12:18 hrs	5.621	5.621	0.449	1	66.238	2.73	3.497	0.712	0.716	1.013	0	0.698	0
0203-460-365	3.5	92.077	0.838	54.077	Backwater	0 - 12:18 hrs	5.621	5.83	0.587	1	38	2.711	3.5	1.566	1.566	1.688	0	0.478	0
0203-461-244	5.737	36.296	0.054	172.048	Exceeds Capacity	0 - 12:07 hrs	6.251	6.251	4.74	1	-135.752	16.218	6.184	4.338	4.385	4.45	4.341	3.97	0
0203-462-119	5.737	112.77	0.521	95.484	Free Surface	0 - 13:42 hrs	4.179	4.249	0.847	0.942	17.287	16.184	6.112	0	0	0	0	0	0
0203-463-465	3.5	87.513	0.757	61.248	Free Surface	0 - 12:59 hrs	6.763	6.961	0.7	0.892	26.265	7.597	3.494	0	2.773	0	0	0	0
0203-464-463	3	66.062	0.981	61.248	Backwater	0 - 12:59 hrs	8.665	8.665	0.927	1	4.814	7.599	3	2.777	2.777	2.806	0	2.775	0
0203-465-466	4	108.88	0.575	61.247	Free Surface	0 - 13:00 hrs	7.525	7.525	0.563	0.617	47.634	7.6	3.998	0	0	0	0	0	0
0203-466-367	4	154.166	1.152	61.328	Free Surface	0 - 12:34 hrs	6.309	8.447	0.398	0.739	92.838	7.603	3.991	0	0	1.354	0	0	0
0203-467-485	3.94	223.265	0.212	69.076	Backwater	0 - 15:38 hrs	2.552	2.552	0.309	1	154.189	7.718	8.105	3.665	3.665	3.67	0	1.616	0
0203-468-469	3	124.699	3.495	30.053	Backwater	0 - 12:03 hrs	4.252	4.416	0.241	1	94.646	1.911	2.992	1.588	1.591	1.589	0	0.098	2
0203-469-470	3	45.052	0.456	26.074	Backwater	0 - 12:04 hrs	3.689	4.051	0.579	1	18.978	1.935	2.999	1.589	1.589	3.621	0	0	1
0203-470-471	3	35.858	0.289	26.07	Backwater	0 - 12:04 hrs	3.688	3.688	0.727	1	9.788	1.937	2.998	3.621	3.621	3.776	0	1.164	3
0203-471-473	3	98.839	2.196	26.061	Backwater	0 - 12:04 hrs	3.687	3.687	0.264	1	72.778	1.936	2.987	3.776	3.776	4.121	0	0.029	3
0203-472-013	4.033	172.862	0.159	84.826	Free Surface	0 - 13:27 hrs	3.532	3.673	0.491	0.964	88.036	7.713	7.045	0	1.632	0	0	0	0
0203-473-372	3	49.747	0.556	26.049	Backwater	0 - 12:04 hrs	3.685	3.685	0.524	1	23.698	1.935	3	4.121	4.121	4.185	0	0.029	2
0203-474-242	3	65.121	0.953	47.94	Backwater	0 - 12:17 hrs	6.782	6.782	0.736	1	17.181	1.743	3	0.923	0.923	1.344	0	0.369	0
0203-475-476	3	58.078	0.758	33.66	Backwater	0 - 12:03 hrs	4.762	4.762	0.58	1	24.418	1.931	3	1.431	1.441	1.512	0	1.359	2
0203-476-359	3	24.18	0.131	33.654	Exceeds Capacity	0 - 12:03 hrs	4.761	4.761	1.392	1	-9.474	1.93	3	1.586	1.611	1.663	0.709	1.347	1
0203-477-478	3	55.864	0.702	40.481	Backwater	0 - 12:02 hrs	5.765	6.164	0.725	1	15.384	3.103	2.999	1.703	1.703	1.718	0	0.01	0
0203-478-479	3	52.374	0.617	38.745	Backwater	0 - 12:03 hrs	5.481	5.481	0.74	1	13.629	3.105	3	1.724	1.724	2.437	0	0.007	1
0203-479-480	3	4.209	0.004	38.75	Exceeds Capacity	0 - 12:03 hrs	5.482	5.482	9.207	1	-34.541	3.102	2.999	2.419	2.482	2.419	4.9	2.419	3
0203-480-342	3	3.562	0.003	39.011	Exceeds Capacity	0 - 12:03 hrs	5.629	5.629	10.953	1	-35.449	3.1	2.999	2.296	2.419	2.296	5.779	2.296	1
0203-481-482	3	74.134	1.235	60.761	Backwater	0 - 12:52 hrs	8.596	8.596	0.82	1	13.374	9.108	2.999	3.681	3.681	3.687	0	3.679	0
0203-482-483	3	65.191	0.955	60.761	Free Surface	0 - 12:52 hrs	9.115	9.126	0.932	0.915	4.431	9.095	3	0	3.687	0	0	0	0
0203-483-484	3.5	127.295	1.601	61.288	Free Surface	0 - 11:52 hrs	9.531	9.62	0.481	0.639	66.006	9.06	3.464	0	0	0	0	0	0
0203-484-337	4.5	186.418	0.899	60.761	Free Surface	0 - 12:53 hrs	7.959	7.959	0.326	0.484	125.658	9.045	4.498	0	0	0	0	0	0
0203-485-006	3.9	296.101	0.613	69.199	Backwater	0 - 15:38 hrs	3.088	3.09	0.234	1	226.903	7.719	6.636	3.631	3.677	3.631	0	2.808	0
0203-486-487	5	258.438	0.985	61.936	Free Surface	0 - 12:08 hrs	6.949	7.451	0.24	0.49	196.502	9.048	4.999	0	0	0	0	0	0
0203-487-488	5	256.983	0.974	68.238	Free Surface	0 - 12:38 hrs	4.833	5.835	0.266	0.773	188.744	9.048	4.995	0	0	0.788	0	0	0
0203-488-491	6	195.36	0.213	194.996	Free Surface	0 - 12:15 hrs	7.303	7.303	0.998	0.899	0.364	15.467	6	0	0.555	0	0	0	0
0203-489-488	3.5	167.486	2.771	35.053	Backwater	0 - 12:37 hrs	3.643	3.643	0.209	1	132.432	0.307	3.498	0.553	0.553	0.608	0	0.05	0
0203-490-489	3.5	116.974	1.352	21.775	Backwater	0 - 12:37 hrs	2.618	3.81	0.186	1	95.199	0.324	3.5	0.17	0.17	0.553	0	0	0
0203-491-221	6	442.205	1.09	193.431	Free Surface	0 - 12:15 hrs	7.401	7.771	0.437	0.871	248.774	15.477	5.999	0	0	0	0	0	0
0203-492-221	3.5	68.221	0.46	38.359	Free Surface	0 - 12:15 hrs	4.068	4.166	0.562	0.953	29.862	1.106	3.499	0	0.07	0	0	0	0
0203-493-421	3	95.492	2.05	8.959	Free Surface	0 - 12:15 hrs	4.218	4.218	0.094	0.341	86.533	0.298	2.842	0	0	0	0	0	0
0203-494-254	4	74.23	0.267	108.065	Exceeds Capacity	0 - 12:19 hrs	8.6	8.6	1.456	1	-33.835	6.356	3.999	0.647	1.177	0.647	0.635	0.645	0
0203-495-241	2.5	20.372	0.247	20.427	Exceeds Capacity	0 - 12:15 hrs	4.161	4.161	1.003	1	-0.055	0.726	2.499	0.302	0.331	0.302	0.002	0.302	0
0203-496-497	3	50.948	0.583	9.822	Free Surface	0 - 12:15 hrs	2.447	2.529	0.193	0.553	41.127	0.295	3	0	0	0	0	0	0
0203-497-498	3	15.612	0.055	9.725	Free Surface	0 - 12:15 hrs	2.172	2.172	0.623	0.606	5.888	0.295	2.999	0	0	0	0	0	0
0203-498-499	3	24.975	0.14	9.69	Free Surface	0 - 12:15 hrs	2.785	2.786	0.388	0.494	15.285	0.295	2.999	0	0	0	0	0	0
0203-499-500	3	51.689	0.601	9.661	Free Surface	0 - 12:15 hrs	4.981	4.981	0.187	0.319	42.028	0.295	2.788	0	0	0	0	0	0
0203-500-200	6.864	1,240.30	3.132	9.648	Free Surface	0 - 12:15 hrs	1.049	1.05	0.008	0.205	1,230.65	0.294	8.149	0	0	0	0	0	0
0203-501-194	3.615	519.532	5.96	8.984	Free Surface	0 - 12:15 hrs	2.802	2.808	0.017	0.134	510.549	0.363	7.671	0	0	0	0	0	0
0203-502-503	3.5	74.926	0.555	36.049	Free Surface	0 - 12:15 hrs	5.097	5.097	0.481	0.689	38.877	1.362	3.499	0	0	0	0	0	0
0203-503-504	3.5	106.95	1.13	35.782	Free Surface	0 - 12:15 hrs	7.489	7.49	0.335	0.497	71.168	1.361	3.499	0	0	0	0	0	0
0203-504-198	3.075	230.775	0.995	39.246	Free Surface	0 - 12:15 hrs	2.167	2.17	0.17	0.59	191.53	1.481	15.759	0	0	0	0	0	0
0203-505-504	3	58.702	0.775	3.822	Free Surface	0 - 12:15 hrs	1.637	1.805	0.065	0.365	54.88	0.12	2.886	0	0	0	0	0	0
0203-506-430	2.5	30.24	0.544	35.094	Exceeds Capacity	0 - 12:03 hrs	7.149	7.149	1.161	1	-4.854	2.3	2.499	1.424	1.479	1.429	0.756	1.135	0
0203-507-429	8	765.468	0.056	249.139	Free Surface	0 - 13:15 hrs	2.615	2.615	0.325	0.662	516.33	29.279	18	0	0	0	0	0	0
0203-508-509	7.34	1,006.51	1.616	67.755	Free Surface	0 - 12:15 hrs	1.096	2.784	0.067	0.821	938.759	1.782	22.752	0	0	0	0	0	0
0203-509-517	7.66	974.388	1.962	65.823	Free Surface	0 - 12:15 hrs	1.98	2.034	0.068	0.891	908.565	1.78	5.3	0	0	0	0	0	0
0203-510-095	3	255.354	14.657	55.494	Backwater	0 - 12:02 hrs	7.851	7.851	0.217	1	199.86	6.02	2.987	2.368	2.368	2.389	0	0.002	2
0203-511-230	2.5	96.373	5.521	19.715	Backwater	0 - 12:03 hrs	4.016	4.016	0.205	1	76.658	1.203	2.5	0.54	0.54	0.548	0	0.001	0
0203-512-231	2.5	51.032	1.548	19.752	Free Surface	0 - 12:04 hrs	6.328	6.456	0.387	0.61	31.28	1.202	2.469	0	0	0	0	0	0
0203-513-229	2	34.719	2.355	20.097	Backwater	0 - 12:03 hrs	6.397	6.397	0.579	1	14.622	1.202	2	0.546	0.546	0.552	0	0.545	0
0203-514-515	3	39.502	0.351	19.654	Free Surface	0 - 12:21 hrs	4.378	4.378	0.498	0.607	19.848	1.197	2.998	0	0	0	0	0	0
0203-515-232	3	84.046	1.588	19.654	Free Surface	0 - 12:21 hrs	5.708	5.753	0.234	0.49	64.392	1.198	2.999	0	0	0	0	0	0
0203-516-393	3.5	136.994	1.854	19.654	Free Surface	0 - 12:22 hrs	3.076	3.076	0.143	0.63	117.34	1.2	3.487	0	0	0	0	0	0
0203-517-048	8.92	861.063	0.529	64.11	Free Surface	0 - 12:15 hrs	0.87	0.962	0.074	0.785	796.954	1.777	21.861	0	0	0	0	0	0
0203-518-519	2.4	58.661	0.743	35.358	Backwater	0 - 12:17 hrs	4.837	4.837	0.603	1	23.303	1.533	3.797	0.396	0.396	0.686	0	0.374	0
0203-519-203	5.134	201.594	1.52	35.44	Free Surface	0 - 12:15 hrs	4.245	4.403	0.176	0.603	166.154	1.525	5.387	0	0	0	0	0	0
0203-520-006	7.17	2,505.53	1.421	163.517	Free Surface	0 - 12:25 hrs	3.606	3.606	0.065	0.341	2,342.02	21.629	25.901	0	0	0	0	0	0
0203-521-526	3.5	87.303	0.753	36.175	Backwater	0 - 12:02 hrs	3.76	3.76	0.414	1	51.128	2.278	3.5	0.915	0.922	0.915	0	0.915	2
0203-522-521	3.5	35.258	0.123	36.208	Exceeds Capacity	0 - 12:02 hrs	3.763	3.763	1.027	1	-0.95	2.278	3.499	0.921	0.93	0.922	0.033	0.92	2

Table B-1b. Existing System Analysis - Pipes/Channels
2-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-523-524	3.5	68.693	0.466	36.273	Backwater	0 - 12:02 hrs	3.77	3.77	0.528	1	32.42	2.278	3.499	0.935	0.94	0.935	0	0.934	3
0203-524-522	3.5	51.644	0.263	36.237	Backwater	0 - 12:02 hrs	3.766	3.766	0.702	1	15.408	2.278	3.5	0.929	0.935	0.93	0	0.928	3
0203-525-033	16.9	11,949.49	1.886	128.543	Free Surface	0 - 12:44 hrs	5.051	5.063	0.011	0.157	11,820.94	20.337	14.783	0	0	0	0	0	0
0203-526-527	3.5	30.056	0.089	36.219	Free Surface	0 - 12:02 hrs	4.004	4.004	1.205	0.96	-6.163	2.278	3.5	0	0.915	0	0.923	0	0
0203-527-528	3.5	101.622	1.02	35.231	Free Surface	0 - 12:03 hrs	4.204	4.284	0.347	0.946	66.391	2.278	3.491	0	0	0	0	0	0
0203-528-234	4	131.535	0.839	35.076	Free Surface	0 - 12:22 hrs	2.944	3.32	0.267	0.9	96.459	2.279	3.999	0	0	0	0	0	0
0203-529-235	4	77.78	0.293	35.073	Free Surface	0 - 12:22 hrs	3.05	3.05	0.451	0.86	42.707	2.282	4	0	0	0	0	0	0
0203-530-001	9.53	528.594	0.062	119.721	Free Surface	0 - 12:49 hrs	0.689	0.791	0.226	0.934	408.873	19.007	26.979	0	0	0	0	0	0
0203-531-055	2.5	55.941	1.86	36.673	Backwater	0 - 12:15 hrs	7.471	7.471	0.656	1	19.268	1.094	2.491	0.156	0.156	0.306	0	0.001	0
0203-532-580	9.45	2,462.51	1.34	108.247	Free Surface	0 - 15:25 hrs	3.044	3.044	0.044	0.344	2,354.26	38.5	19.58	0	0	0	0	0	0
0203-533-538	3	287.313	0.382	87.357	Free Surface	0 - 13:11 hrs	4.414	4.417	0.304	0.55	199.956	13.577	12	0	0	0	0	0	0
0203-534-535	3	63.109	0.895	22.888	Free Surface	0 - 12:56 hrs	3.864	4.607	0.363	0.976	40.221	3.673	2.997	0	0.627	0	0	0	0
0203-535-542	3	89.294	1.792	30.953	Free Surface	0 - 12:56 hrs	4.793	6.922	0.347	0.976	58.341	3.664	2.975	0	0	0.896	0	0	0
0203-536-537	3.5	3.806	0.001	83.352	Exceeds Capacity	0 - 12:04 hrs	8.663	8.663	21.901	1	-79.547	7.424	3.499	0.895	1.516	0.895	15.001	0.895	0
0203-537-539	4	126.979	0.781	83.128	Backwater	0 - 12:06 hrs	6.777	7.04	0.655	1	43.851	7.423	4	0.847	0.86	0.849	0	0.846	0
0203-538-608	4.87	3,433.72	7.246	87.372	Free Surface	0 - 13:11 hrs	5.843	5.92	0.025	0.29	3,346.35	13.564	12.282	0	0	0	0	0	0
0203-539-540	4	145.306	1.023	79.529	Backwater	0 - 12:32 hrs	6.329	6.329	0.547	1	65.776	7.428	4	0.849	0.849	0.936	0	0	0
0203-540-541	4	152.206	1.123	79.53	Free Surface	0 - 12:32 hrs	7.078	7.808	0.523	0.842	72.676	7.426	3.999	0	0.942	0	0	0	0
0203-541-543	4	189.82	1.746	79.488	Free Surface	0 - 12:33 hrs	7.068	7.387	0.419	0.842	110.332	7.435	3.999	0	0	0.91	0	0	0
0203-542-536	3.5	129.193	1.649	38.051	Backwater	0 - 12:56 hrs	4.039	4.062	0.295	1	91.143	3.663	3.5	0.876	0.876	1.516	0	0	0
0203-543-544	4	159.361	1.231	79.487	Backwater	0 - 12:33 hrs	6.325	6.325	0.499	1	79.874	7.428	4	0.884	0.91	0.884	0	0.884	0
0203-544-650	4.04	121.062	0.856	79.483	Backwater	0 - 12:33 hrs	3.406	3.406	0.657	1	41.579	7.428	7.247	0.856	0.875	0.864	0	0.845	0
0203-545-251	3.91	3.866	0.001	37.835	Exceeds Capacity	0 - 12:03 hrs	1.514	1.523	9.788	1	-33.969	7.409	7.382	5.345	6.389	5.345	14.813	5.345	0
0203-546-548	3.5	28.097	0.056	34.713	Exceeds Capacity	0 - 12:03 hrs	1.24	1.24	1.235	1	-6.616	7.404	8	6.413	6.422	6.413	5.999	6.412	0
0203-547-600	6.67	1,344.78	0.969	92.677	Free Surface	0 - 12:36 hrs	1.064	1.884	0.069	0.794	1,252.10	13.509	33.298	0	0	0	0	0	0
0203-548-651	3.89	111.91	0.698	33.731	Backwater	0 - 12:03 hrs	1.537	1.586	0.301	1	78.179	7.403	7.177	4.445	4.445	5.048	0	0	0
0203-549-633	4.49	145.474	0.523	38.906	Free Surface	0 - 12:17 hrs	2.051	2.053	0.267	0.598	106.568	7.908	7.812	0	0	0	0	0	0
0203-550-638	10.26	9,226.24	2.917	864.959	Free Surface	0 - 12:59 hrs	2.102	2.102	0.094	0.956	8,361.28	130.263	68.606	0	0	0.444	0	0	0
0203-551-550	3.5	380.538	14.306	43.758	Free Surface	0 - 12:17 hrs	6.405	6.424	0.115	0.67	336.78	1.33	3.5	0	0	15.866	0	0	0
0203-552-553	3	16.916	0.609	25.596	Exceeds Capacity	0 - 12:45 hrs	3.621	3.621	1.513	1	-8.679	3.202	3	2.8	2.848	2.802	2.863	2.8	0
0203-553-322	4	109.183	0.578	25.596	Free Surface	0 - 12:47 hrs	2.038	2.674	0.234	0.997	83.587	3.195	3.999	0	0	2.902	0	0	0
0203-554-555	3	91.986	1.902	22.159	Free Surface	0 - 12:15 hrs	5.787	6.587	0.241	0.534	69.827	0.644	3	0	0	0	0	0	0
0203-555-319	4	59.203	0.17	21.129	Free Surface	0 - 12:15 hrs	1.824	1.954	0.357	0.907	38.074	0.644	3.999	0	0	0	0	0	0
0203-556-558	4.5	250.472	1.622	43.932	Free Surface	0 - 12:18 hrs	4.35	4.455	0.175	0.639	206.541	3.343	4.5	0	0	1.673	0	0	0
0203-557-584	14	1,993.65	1.603	433.871	Free Surface	0 - 12:17 hrs	8.631	8.678	0.218	0.605	1,559.78	53.651	6	0	0	0	0	0	0
0203-558-644	17.29	23,504.65	1.58	942.911	Free Surface	0 - 13:03 hrs	4.346	4.392	0.04	0.332	22,561.74	140.042	51.974	0	0	0	0	0	0
0203-559-547	8.04	86.352	0.001	89.636	Free Surface	0 - 12:36 hrs	1.684	3.033	1.038	0.499	-3.284	13.517	27.604	0	0	0	1.699	0	0
0203-560-564	4.58	457.706	1.81	362.932	Backwater	0 - 12:14 hrs	7.049	7.049	0.793	1	94.774	14.206	19.156	0.102	0.102	0.664	0	0.094	0
0203-561-565	5	246.32	1.547	237.345	Free Surface	0 - 12:21 hrs	7.413	7.413	0.964	0.803	8.975	14.213	8	0	0.719	0	0	0	3
0203-562-590	4.43	15.809	0.103	48.007	Free Surface	0 - 14:26 hrs	7.333	7.333	3.037	0.693	-32.197	8.179	5.61	0	4.54	0	5.148	0	0
0203-563-562	5.67	87.661	1.863	73.902	Backwater	0 - 12:23 hrs	4.543	4.543	0.843	1	13.759	8.18	3.577	2.526	2.526	4.459	0	1.572	0
0203-564-561	4.58	331.093	0.947	237.983	Backwater	0 - 12:18 hrs	4.622	4.937	0.719	1	93.11	14.249	19.156	0.664	0.664	0.761	0	0	3
0203-565-566	6.13	3,871.66	1.408	236.563	Free Surface	0 - 12:27 hrs	1.824	1.855	0.061	0.53	3,635.10	14.218	68.804	0	0	0	0	0	1
0203-566-567	4.89	320.067	1.093	237.784	Free Surface	0 - 12:15 hrs	5.376	5.431	0.743	0.954	82.283	14.16	18.034	0	0	0	0	0	0
0203-567-568	7.77	909.854	0.572	236.748	Free Surface	0 - 12:18 hrs	3.729	4.042	0.26	0.662	673.106	14.144	21.789	0	0	0	0	0	0
0203-568-569	6.66	552.088	0.267	246.309	Free Surface	0 - 12:26 hrs	4.112	4.315	0.446	0.682	305.78	14.122	23.892	0	0	0	0	0	0
0203-569-570	5.1	1,171.14	0.51	253.702	Free Surface	0 - 13:03 hrs	1.485	2.258	0.217	0.892	917.44	14.286	83.192	0	0	0.727	0	0	0
0203-570-571	4.54	290.106	1.015	216.627	Backwater	0 - 12:59 hrs	4.805	4.805	0.747	1	73.479	14.079	17.729	0.876	0.876	10.3	0	0	0
0203-571-572	7.53	767.629	0.506	217.411	Free Surface	0 - 13:00 hrs	1.988	1.99	0.283	0.996	550.218	13.884	20.731	0	0	1.427	0	0	0
0203-572-573	10	155.838	0.002	217.88	Free Surface	0 - 13:00 hrs	1.618	1.621	1.398	0.913	-62.042	13.735	15	0	0	0	0.979	0	0
0203-573-574	8.35	39.275	0	542.957	Exceeds Capacity	0 - 12:30 hrs	3.133	3.133	13.825	1	-503.682	41.744	35.504	1.051	1.121	1.051	8.958	1.051	0
0203-574-575	6.44	19.662	0.001	487.313	Exceeds Capacity	0 - 12:17 hrs	5.196	5.196	24.785	1	-467.651	41.714	18.158	11.938	11.953	11.938	16.702	11.938	0
0203-575-383	4.91	96.731	0.063	138.36	Backwater	0 - 12:03 hrs	2.626	2.629	1.43	1	-41.63	40.633	12.036	11.89	11.89	12.164	12.084	0	0
0203-576-577	13.143	8,486.87	3.432	108.247	Free Surface	0 - 15:15 hrs	4.081	4.125	0.013	0.191	8,378.63	39.167	14.902	0	0	0	0	0	0
0203-577-578	13.143	1,842.63	0.162	108.247	Free Surface	0 - 15:17 hrs	3.253	3.394	0.059	0.224	1,734.38	39.103	16.19	0	0	0	0	0	0
0203-578-579	12.6	3,409.35	0.426	108.247	Free Surface	0 - 15:18 hrs	1.736	1.767	0.032	0.272	3,301.11	39.001	23.173	0	0	0	0	0	0
0203-579-247	16	13,470.77	1.049	108.251	Free Surface	0 - 16:02 hrs	1.121	1.121	0.008	0.242	13,362.52	38.779	25	0	0	0	0	0	0
0203-580-582	9.94	1,281.46	0.17	108.249	Free Surface	0 - 15:22 hrs	2.682	3.02	0.084	0.355	1,173.21	38.419	22.791	0	0	0	0	0	0
0203-581-592	3	67.993	1.039	65.661	Free Surface	0 - 12:14 hrs	9.332	9.332	0.966	0.99	2.332	1.831	2.999	0	0.262	0	0	0	0
0203-582-583	8.81	4,032.92	2.092	111.125	Free Surface	0 - 15:57 hrs	2.023	4.194	0.028	0.524	3,921.79	38.386	30.191	0	0	0	0	0	0
0203-583-584	11.75	15,533.00	2.768	117.856	Free Surface	0 - 15:59 hrs	0.547	1.069	0.008	0.606	15,415.15	38.335	59.637	0	0	0	0	0	0
0203-584-585	13.35	2,358.24	0.069	513.124	Free Surface	0 - 12:27 hrs	1.73	1.796	0.218	0.602	1,845.12	91.884	52.322	0	0	0	0	0	0
0203-585-586	13.32	3,869.75	0.284	512.471	Free Surface	0 - 12:27 hrs	2.214	2.297	0.132	0.597	3,357.28	91.834	42.064	0	0	0	0	0	0
0203-586-587	14.17	4,356.39	0.461	511.163	Free Surface	0 - 12:30 hrs	3.009	3.331	0.117	0.582	3,845.23	91.761	40.146	0	0	0	0	0	0
0203-587-588	13.84	7,989.37	1.179	509.249	Free Surface	0 - 12:30 hrs	1.855	1.881	0.064	0.679	7,480.12	91.643	45.369	0	0	0	0	0	0
0203-588-589	15.24	7,355.74	0.878	507.767	Free Surface	0 - 12:32 hrs	2.479	2.527	0.069	0.578	6,847.97	91.467	41.169	0	0	0	0	0	0
0203-589-612	16.27	3,369.78	0.088	505.561	Free Surface	0 - 12:33 hrs	2.634	2.951	0.15	0.448	2,864.22	91.319	42.621	0	0	0	0	0	0
0203-590-591	2.03	69.27	1.283	47.988	Free Surface	0 - 14:27 hrs	3.77	3.77	0.693	0.922	21.282	8.173	10.387	0	0	4.494	0	0	0
0203-591-593	2.62	73.4	1.343	47.971	Free Surface	0 - 14:29 hrs	5.474	5.474	0.654	0.714	25.429	8.17	6.213	0	0	0	0	0	0
0203-592-611	4	95.093	0.438	64.835	Free Surface	0 - 12:15 hrs	5.654	5.949	0.682	0.86	30.258	1.821	4	0	0	1.477	0	0	0
0203-593-594	3.6	453.849	1.331	47.964	Free Surface	0 - 14:30 hrs	1.462	1.963	0.106	0.66	405.885	8.171	19.445	0	0	4.415	0	0	0
0203-594-595	2.19	35.906	0.524	43.092	Exceeds Capacity	0 - 16:10 hrs	3.283	3.283	1.2	1	-7.186	8.147	11.638	4.977	4.977	5.017	4.776	4.929	0
0203-595-596	3.06	64.797	0.373	43.092	Free Surface	0 - 16:13 hrs	3.013	3.013	0.665	0.77	21.705	8.14	8.125	0	0	0	0	0	0
0203-596-597	2.33	73.112	1.685	43.092	Free Surface	0 - 16:14 hrs	3.766	3.766	0.589	0.901	30.02	8.133	10.101	0	0	4.969	0	0	0
0203-597-598	7.08	393.884	0.474	43.092	Free Surface	0 - 16:15 hrs	3.284	3.284	0.109	0.357	350.792	8.128	8.225	0	0	0	0	0	0
0203-598-599	6.15	520.803	0.782	43.175	Free Surface	0 - 12:32 hrs	1.628	2.396	0.083	0.587	477.628	8.126	13.826	0	0	0	0	0	0
0203-599-679	4.583	13.78	0.012	45.225	Exceeds Capacity	0 - 12:32 hrs	1.629	3.124	3.282	1	-31.445	8.118	6.25	0.071	0.314	0.071	5.85	0.071	0
0203-600-601	6.67	1,189.60	0.758	448.398	Backwater	0 - 12:15 hrs	2.925	5.095	0.377	1	741.202	53.667	38.079	0.223	0.223	0.39	0	0	0
0203-601-557	9.29	10,571.93	4.543	436.938	Free Surface	0 - 12:15 hrs	1.312	4.215	0.041	0.873	10,134.99	53.664	68.219	0	0	0	0	0	0
0203-602-532	9	3,094.64	0.323	108.247	Free Surface	0 - 15:23 hrs	1.898	1.898	0.035	0.274	2,986.40	38.536	24	0	0	0	0	0	0
0203-603-604	4.549	95.959	0.384	87.359	Free Surface	0 - 13:08 hrs	3.37	3.37	0.91	0.98	8.6	13.531	7.32	0	3.8	0	0	0	0
0203-604-605	4.539	43.632	0.049	87.359	Free Surface	0 - 13:08 hrs	3.059	3.059	2.002	0.897	-43.726	13.543	7.8	0	0	0	3.953	0	0
0203-605-606	4.52	148.955	0.689	87.359	Free Surface	0 - 13:10 hrs	4.366	4.366	0.586	0.697	61.597	13.559	7.17	0	0	0	0	0	0
0203-606-607	3.356	295.43	1.499	87.358	Free Surface	0 - 13:10 hrs	3.675	3.675	0.296	0.654	208.072	13.57	12.855	0	0	0	0	0	0
0203-607-533	3.063	600.121	1.062	87.358	Free Surface	0 - 13:11 hrs	4.633	4.648	0.146	0.62	512.763	13.578	11.407	0	0	0	0	0	0
0203-608-609	6.23	920.531	0.657	87.326	Free Surface	0 - 13:14 hrs	5.219	5.323	0.095	0.428	833.205	13.554	8.254	0	0	0	0	0	0
0203-609-610	8.2	2,600.98	0.173	87.753	Free Surface	0 - 12:40 hrs	1.56	1.871	0.034	0.49	2,513.23	13.533	24.22	0	0	0	0	0	0

Table B-1b. Existing System Analysis - Pipes/Channels
2-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-610-559	8.04	117.505	0.003	88.922	Free Surface	0 - 12:37 hrs	1.549	2.082	0.757	0.51	28.583	13.521	28.186	0	0	0	0	0	0
0203-611-621	15.12	3,023.71	0.281	598.657	Free Surface	0 - 12:29 hrs	3.786	4.004	0.198	0.589	2,425.05	98.519	30.581	0	0	0	0	0	0
0203-612-611	11.76	7,994.65	1.202	577.975	Free Surface	0 - 12:30 hrs	1.856	1.884	0.072	0.701	7,416.67	96.794	54.756	0	0	0	0	0	0
0203-613-614	13.8	4,726.46	0.449	589.542	Free Surface	0 - 12:30 hrs	2.393	2.604	0.125	0.684	4,136.92	98.355	45.367	0	0	0	0	0	0
0203-614-615	14.09	134.302	0	579.688	Free Surface	0 - 12:33 hrs	2.57	2.826	4.316	0.707	-445.386	98.145	39.574	0	0	0	11.753	0	0
0203-615-616	16.66	3,218.90	0.047	566.617	Free Surface	0 - 12:33 hrs	1.644	1.794	0.176	0.59	2,652.28	97.878	61.182	0	0	0	0	0	0
0203-616-617	12.01	1,156.69	0.039	549.358	Free Surface	0 - 12:38 hrs	1.899	2.14	0.475	0.803	607.333	97.493	52.998	0	0	0	0	0	0
0203-617-618	10.93	4,117.66	0.453	599.429	Free Surface	0 - 12:52 hrs	1.626	1.821	0.146	0.884	3,518.23	102.307	52.383	0	0	0	0	0	0
0203-618-619	10.66	2,216.36	0.228	598.113	Free Surface	0 - 12:57 hrs	1.725	2.002	0.27	0.944	1,618.25	102.119	59.108	0	0	0	0	0	0
0203-619-620	11.76	1,212.85	0.102	598.2	Free Surface	0 - 13:03 hrs	2.647	3.434	0.493	0.826	614.649	101.888	39.19	0	0	0	0	0	0
0203-620-622	13.9	5,243.80	0.147	600.17	Free Surface	0 - 13:07 hrs	1.238	1.424	0.114	0.647	4,643.63	101.759	62.582	0	0	0	0	0	0
0203-621-613	13.58	3,962.39	0.558	596.713	Free Surface	0 - 12:30 hrs	3.418	3.743	0.151	0.636	3,365.68	98.482	34.533	0	0	0	0	0	0
0203-622-623	1.76	230.845	0.512	612.5	Exceeds Capacity	0 - 13:07 hrs	7.944	7.944	2.653	1	-381.655	103.318	64.23	14.398	14.398	14.912	4.926	12.793	0
0203-623-676	7.33	4,490.61	0.149	703.077	Free Surface	0 - 12:48 hrs	3.641	3.642	0.157	0.648	3,787.54	109.879	57.078	0	0	0	0	0	0
0203-624-623	4.01	549.756	2.467	108.311	Backwater	0 - 12:34 hrs	2.079	2.277	0.197	1	441.444	6.634	20.41	0.033	0.033	2.472	0	0	0
0203-625-270	11.2	3,720.17	1.794	118.115	Free Surface	0 - 12:14 hrs	1.434	1.844	0.032	0.628	3,602.05	6.622	25.359	0	0	0	0	0	0
0203-626-657	3.86	270.391	1.937	146.722	Backwater	0 - 12:15 hrs	4.452	4.452	0.543	1	123.669	6.74	13.226	0.632	0.633	0.731	0	0.002	0
0203-627-252	6.45	380.355	0.191	52.094	Free Surface	0 - 12:27 hrs	2.689	2.747	0.137	0.379	328.262	2.982	13.425	0	0	0	0	0	0
0203-628-629	6.99	10,583.69	1.162	716.258	Free Surface	0 - 12:51 hrs	5.136	6	0.068	0.565	9,867.44	111.366	49.429	0	0	0	0	0	0
0203-629-630	8.41	10,075.58	0.756	786.033	Free Surface	0 - 12:51 hrs	3.819	4.461	0.078	0.714	9,289.54	118.06	50.309	0	0	0	0	0	0
0203-630-268	12.401	1,060.03	0.014	783.499	Free Surface	0 - 12:52 hrs	2.684	2.687	0.739	0.603	276.532	117.77	60.706	0	0	0	0	0	0
0203-631-632	12.016	1,549.05	0.035	823.391	Free Surface	0 - 12:56 hrs	3.413	3.416	0.532	0.566	725.659	121.418	57.114	0	0	0	0	0	0
0203-632-637	9.93	7,174.33	1.141	823.037	Free Surface	0 - 12:57 hrs	4.099	4.11	0.115	0.514	6,351.30	121.254	54.515	0	0	0	0	0	0
0203-633-634	4.51	102.646	0.306	38.885	Free Surface	0 - 12:17 hrs	2.623	2.623	0.379	0.518	63.762	7.905	7.069	0	0	0	0	0	0
0203-634-255	4.56	151.447	0.923	38.852	Free Surface	0 - 12:18 hrs	3.368	3.368	0.257	0.515	112.595	7.901	6.226	0	0	0	0	0	0
0203-635-636	6.75	673.062	1.181	38.816	Free Surface	0 - 12:18 hrs	1.834	2.017	0.058	0.475	634.246	7.895	11.346	0	0	0	0	0	0
0203-636-637	11.29	4,138.85	0.961	37	Free Surface	0 - 12:21 hrs	0.718	1.015	0.009	0.396	4,101.85	7.864	26.054	0	0	0	0	0	0
0203-637-550	10.26	9,217.28	2.911	856.584	Free Surface	0 - 12:59 hrs	3.877	3.902	0.093	0.651	8,360.70	129.072	52.427	0	0	0	0	0	0
0203-638-639	17.23	13,754.19	1.014	865.018	Free Surface	0 - 13:00 hrs	2.965	2.966	0.063	0.516	12,889.17	130.097	47.468	0	0	0	0	0	0
0203-639-640	11.92	1,425.16	0.041	901.314	Free Surface	0 - 12:57 hrs	3.947	3.949	0.632	0.561	523.848	135.593	46.338	0	0	0	0	0	0
0203-640-641	13.4	6,157.15	0.482	900.941	Free Surface	0 - 12:59 hrs	4.026	4.028	0.146	0.473	5,256.21	135.46	47.917	0	0	0	0	0	0
0203-641-642	7.11	1,605.32	0.414	900.642	Free Surface	0 - 13:00 hrs	3.995	3.996	0.561	0.946	704.673	135.262	49.374	0	0	0	0	0	0
0203-642-643	17.21	1,925.72	0.009	905.734	Free Surface	0 - 13:02 hrs	4.122	4.123	0.47	0.321	1,019.98	135.972	54.638	0	0	0	0	0	0
0203-643-558	17.29	19,135.11	1.047	905.554	Free Surface	0 - 13:03 hrs	5.232	5.234	0.047	0.282	18,229.56	135.798	48.646	0	0	0	0	0	0
0203-644-645	22.03	20,938.12	0.668	942.636	Free Surface	0 - 13:03 hrs	4.443	4.445	0.045	0.327	19,995.48	139.913	45.695	0	0	0	0	0	0
0203-645-646	23.07	16,084.02	0.29	942.306	Free Surface	0 - 13:04 hrs	3.545	3.545	0.059	0.328	15,141.71	139.663	50.012	0	0	0	0	0	0
0203-646-007	23.07	17,808.79	0.355	942.259	Free Surface	0 - 13:06 hrs	6.524	6.524	0.053	0.212	16,866.53	139.545	40.785	0	0	0	0	0	0
0203-647-351	3.6	105.916	0.448	43.974	Free Surface	0 - 12:15 hrs	2.596	2.596	0.415	0.742	61.942	1.332	10.455	0	0	0	0	0	0
0203-648-647	3.6	105.904	0.448	28.879	Free Surface	0 - 12:15 hrs	1.933	1.95	0.273	0.689	77.025	0.846	9.927	0	0	0	0	0	0
0203-649-647	4.97	241.168	0.392	17.156	Free Surface	0 - 12:15 hrs	1.293	1.393	0.071	0.437	224.011	0.489	10.315	0	0	0	0	0	0
0203-650-250	4.04	90.812	0.482	79.471	Backwater	0 - 12:33 hrs	3.405	3.405	0.875	1	11.342	7.425	7.247	0.864	0.864	1.037	0	0.846	0
0203-651-248	4.17	61.813	0.13	32.084	Free Surface	0 - 15:04 hrs	1.133	1.263	0.519	0.985	29.729	7.399	7.995	0	0	3.243	0	0	0
0203-652-653	3	89.924	1.818	72.394	Backwater	0 - 12:03 hrs	10.242	10.242	0.805	1	17.53	5.27	2.998	1.275	1.275	1.285	0	1.274	0
0203-653-654	3.5	89.147	0.785	68.449	Free Surface	0 - 12:03 hrs	8.133	8.251	0.768	0.821	20.698	5.309	3.492	0	1.266	0	0	0	0
0203-654-656	4	192.782	1.801	69.432	Free Surface	0 - 12:04 hrs	8.034	8.281	0.36	0.659	123.35	5.331	3.964	0	0	0	0	0	0
0203-655-661	6	544.482	0.174	145.098	Backwater	0 - 14:26 hrs	2.015	2.015	0.266	1	399.384	22.715	12	3.867	3.871	3.867	0	3.866	0
0203-656-272	4	136.969	0.538	68.486	Free Surface	0 - 12:26 hrs	6.226	6.761	0.5	0.84	68.483	5.325	3.997	0	0	0	0	0	0
0203-657-625	3.86	140.903	0.526	134.272	Backwater	0 - 12:14 hrs	4.074	4.074	0.953	1	6.631	6.597	13.226	0.731	0.731	0.9	0	0.127	0
0203-658-671	4.5	115.357	1.52	108.647	Backwater	0 - 12:33 hrs	4.829	4.829	0.942	1	6.71	6.638	5	0.804	0.859	0.804	0	0.804	0
0203-659-624	3.98	491.176	1.802	108.591	Free Surface	0 - 12:33 hrs	5.146	5.648	0.221	0.955	382.586	6.638	5.805	0	0	0.132	0	0	0
0203-660-552	3	65.969	0.978	25.596	Backwater	0 - 12:45 hrs	3.621	3.621	0.388	1	40.374	3.207	2.999	2.846	2.853	2.847	0	2.846	0
0203-661-331	6	229.475	0.292	144.346	Backwater	0 - 15:07 hrs	2.005	2.005	0.629	1	85.129	22.667	12	3.867	3.867	3.879	0	0.002	0
0203-662-663	3.5	64.069	0.406	55.741	Backwater	0 - 12:07 hrs	5.824	5.824	0.87	1	8.328	2.992	3.499	0.619	0.626	0.62	0	0.617	0
0203-663-664	3.5	155.483	2.388	52.102	Backwater	0 - 12:26 hrs	5.415	5.415	0.335	1	103.381	2.992	3.5	0.62	0.62	0.634	0	0.617	0
0203-664-627	3.5	130.884	1.692	52.102	Free Surface	0 - 12:26 hrs	5.803	5.962	0.398	0.889	78.782	2.991	3.5	0	0.634	0	0	0	0
0203-665-673	6	506.09	0.15	144.445	Backwater	0 - 15:07 hrs	2.425	2.438	0.285	1	361.644	22.603	12	0.449	0.523	0.449	0	0.449	0
0203-666-667	3	55.113	0.683	42.78	Backwater	0 - 12:15 hrs	6.052	6.052	0.776	1	12.333	1.798	2.998	0.362	0.363	0.362	0	0.306	0
0203-667-668	3	70.995	1.133	42.789	Backwater	0 - 12:15 hrs	6.053	6.053	0.603	1	28.206	1.801	2.999	0.385	0.385	0.495	0	0.149	0
0203-668-669	3	88.178	1.748	35.007	Backwater	0 - 12:21 hrs	4.952	4.952	0.397	1	53.171	1.805	2.999	0.538	0.538	0.603	0	0.4	0
0203-669-670	3	23.852	0.128	35.007	Exceeds Capacity	0 - 12:21 hrs	4.952	4.952	1.468	1	-11.155	1.805	3	0.399	0.603	0.399	0.506	0.398	0
0203-670-252	3.5	2.598	0.001	35.007	Free Surface	0 - 12:21 hrs	4.515	4.525	13.474	0.751	-32.409	1.802	3.499	0	0	0	5.139	0	0
0203-671-672	4.5	224.625	0.609	108.646	Backwater	0 - 12:33 hrs	4.829	4.829	0.484	1	115.979	6.638	5	0.672	0.804	0.672	0	0.672	0
0203-672-659	4.5	193.383	0.451	108.646	Free Surface	0 - 12:33 hrs	5.401	5.441	0.562	0.903	84.737	6.638	5	0	0.672	0	0	0	0
0203-673-677	6	624.338	0.228	144.488	Backwater	0 - 15:07 hrs	2.438	2.453	0.231	1	479.85	22.415	12	0.449	0.449	0.641	0	0	0
0203-674-675	4	103.697	0.521	47.851	Free Surface	0 - 12:15 hrs	3.919	3.919	0.461	0.936	55.846	1.662	3.998	0	0.041	0	0	0	0
0203-675-676	4	75.888	0.279	46.998	Free Surface	0 - 12:15 hrs	5.06	5.06	0.619	0.693	28.89	1.656	4	0	0	0	0	0	0
0203-676-628	7.33	4,266.06	0.134	716.941	Free Surface	0 - 12:49 hrs	4.566	4.582	0.168	0.562	3,549.12	111.422	56.855	0	0	0	0	0	0
0203-677-679	6	286.566	0.048	144.574	Backwater	0 - 15:06 hrs	2.442	2.513	0.505	1	141.992	22.388	12	0.593	0.641	0.594	0	0.405	0
0203-678-283	3.5	73.608	0.535	65.797	Backwater	0 - 12:08 hrs	6.839	6.839	0.894	1	7.812	4.207	3.498	0.812	0.812	1.376	0	0.811	0
0203-679-600	7.55	1,792.78	0.744	187.678	Free Surface	0 - 15:10 hrs	1.889	2.216	0.105	0.912	1,605.10	30.482	46.997	0	0	0	0	0	0
0203-680-681	3	36.722	0.303	39.532	Exceeds Capacity	0 - 12:03 hrs	5.593	5.593	1.077	1	-2.81	2.86	2.983	1.457	1.487	1.458	0.137	1.457	0
0203-681-682	3	60.903	0.834	39.127	Backwater	0 - 12:03 hrs	5.535	5.535	0.642	1	21.776	2.86	2.976	1.467	1.467	1.508	0	0.159	0
0203-682-683	4	80.161	0.311	38.629	Backwater	0 - 12:03 hrs	3.802	3.917	0.482	1	41.532	2.86	3.997	1.264	1.316	1.264	0	1.264	0
0203-683-684	4	120.044	0.698	37.948	Backwater	0 - 12:03 hrs	4.118	4.358	0.316	1	82.096	2.86	3.999	1.264	1.264	1.376	0	0	1
0203-684-685	4	88.644	0.381	35.483	Backwater	0 - 12:11 hrs	2.824	3.053	0.4	1	53.161	2.86	3.998	1.376	1.376	1.543	0	0	1
0203-685-686	4.5	201.454	1.049	35.447	Backwater	0 - 12:11 hrs	2.229	2.229	0.176	1	166.008	2.858	4.5	1.453	1.453	1.476	0	0	2
0203-686-687	4.5	8.888	0.002	35.426	Exceeds Capacity	0 - 12:11 hrs	2.227	2.23	3.986	1	-26.538	2.857	4.499	1.449	1.476	1.449	2.278	1.449	2
0203-687-269	7.321	16.942	0.011	35.076	Free Surface	0 - 12:11 hrs	1.972	2.507	2.07	0.794	-18.134	2.856	4.765	0	0	0	1.723	0	1
0203-688-689	3	20.487	0.094	28.754	Free Surface	0 - 12:15 hrs	4.795	4.795	1.404	0.794	-8.267	0.906	2.999	0	0.08	0	0.21	0	0
0203-689-631	3.333	69.94	0.627	27.395	Free Surface	0 - 12:15 hrs	6.579	6.579	0.392	0.505	42.545	0.895	3.333	0	0	0	0	0	0
CDT-395	3.75	65.819	0.296	46.818	Free Surface	0 - 12:15 hrs	4.37	4.37	0.711	0.932	19.001	2.134	3.75	0	0.171	0	0	0	9

Table B-2a. Existing System Analysis - Nodes
5-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-001	9.391	275.781	Below Link Crown	2.399	0 - 12:59 hrs	0	135.407	0	24.901	0.143	0	0	0	0	0	0	0 - 00:00 hrs
0203-002	7.496	275.856	Below Maximum Depth	1.604	0 - 12:15 hrs	32.293	32.293	0.755	0.755	0	12.92	4.496	1.604	0	0	0	0 - 00:00 hrs
0203-003	6.941	275.901	Below Link Crown	2.929	0 - 12:59 hrs	0	152.367	0	24.296	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-004	7.805	278.145	Below Link Crown	0.825	0 - 12:32 hrs	122.17	158.69	4.208	24.314	0.017	0	0	0	0	0	0	0 - 00:00 hrs
0203-005	6.16	280.51	Surcharged	-1.91	0 - 12:18 hrs	301.613	301.613	8.196	18.327	0.002	9.714	1.99	0	0.768	4.851	118.735	0 - 12:04 hrs
0203-006	5.377	280.327	Surcharged	-1.207	0 - 12:18 hrs	0	70.993	0	10.456	0.001	8.135	1.207	0	0.03	4.068	5.543	0 - 12:04 hrs
0203-007	3.2	284.78	Below Link Crown	0.55	0 - 14:03 hrs	0	86.589	0	9.799	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-008	3.783	285.863	Below Maximum Depth	2.187	0 - 14:03 hrs	0	86.589	0	9.796	0.001	1.206	0.033	2.187	0	0	0	0 - 00:00 hrs
0203-009	4.839	280.439	Surcharged	-0.499	0 - 14:33 hrs	0	64.613	0	9.828	0.001	10.278	0.759	0	0.016	5.069	2.244	0 - 11:59 hrs
0203-010	4.375	286.575	Below Link Crown	1.025	0 - 14:03 hrs	0	86.591	0	9.792	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-011	2.831	292.541	Below Link Crown	1.089	0 - 14:02 hrs	0	86.596	0	9.802	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-012	3.447	293.587	Below Maximum Depth	2.103	0 - 14:02 hrs	0	86.596	0	9.805	0.001	1.664	0.047	2.103	0	0	0	0 - 00:00 hrs
0203-013	3.846	294.606	Below Link Crown	0.194	0 - 14:02 hrs	0	86.599	0	9.81	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-014	6.231	297.841	Below Maximum Depth	0.969	0 - 13:23 hrs	0	101.975	0	9.83	0.001	3.926	0.731	0.969	0	0	0	0 - 00:00 hrs
0203-015	5.234	298.734	Below Link Crown	3.006	0 - 13:22 hrs	0	101.999	0	9.837	-0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-016	8.334	315.814	Below Maximum Depth	3.986	0 - 12:47 hrs	0	62.114	0	4.892	-0.001	3.091	4.404	3.986	0	0	0	0 - 00:00 hrs
0203-017	5.561	296.971	Surcharged	-0.061	0 - 13:42 hrs	0	101.973	0	9.824	0.001	2.067	0.061	0	0.031	1.032	2.183	0 - 13:22 hrs
0203-018	4.965	296.085	Surcharged	-0.585	0 - 13:56 hrs	0	101.928	0	9.792	0.001	4.971	0.93	0	0.459	2.382	21.529	0 - 12:00 hrs
0203-019	5.767	321.687	Surcharged	-0.367	0 - 12:30 hrs	75.486	75.486	2.19	2.191	0	2.976	2.767	0	0.325	1.487	50.348	0 - 12:15 hrs
0203-020	6.536	321.046	Surcharged	-0.186	0 - 12:48 hrs	0	40.832	0	2.233	0.001	2.993	3.536	0	0.032	1.121	3.122	0 - 12:22 hrs
0203-021	6.184	320.624	Below Maximum Depth	0.036	0 - 12:00 hrs	0	40.486	0	2.221	0.001	2.976	3.114	0.036	0	0	0	0 - 00:00 hrs
0203-022	2.227	271.217	Below Link Crown	8.783	0 - 12:15 hrs	0	147.708	0	25.894	0.016	0	0	0	0	0	0	0 - 00:00 hrs
0203-023	7.282	319.692	Surcharged	-0.492	0 - 12:47 hrs	0	39.908	0	2.211	0	3.031	4.132	0	0.221	1.293	19.829	0 - 12:15 hrs
0203-024	7.571	319.461	Surcharged	-0.29	0 - 12:18 hrs	97.56	102.415	2.703	4.906	0.003	2.679	4.361	0	0.184	0.739	40.327	0 - 12:15 hrs
0203-025	5.399	311.329	Surcharged	-0.459	0 - 12:47 hrs	0	62.114	0	4.887	0.001	3.206	1.899	0	0.057	1.3	4.363	0 - 12:18 hrs
0203-026	3.96	309.44	Below Maximum Depth	1.26	0 - 12:47 hrs	0	62.906	0	4.879	0.001	2.465	0.45	1.26	0	0	0	0 - 00:00 hrs
0203-027	5.692	305.872	Below Maximum Depth	1.838	0 - 12:27 hrs	0	59.203	0	4.889	0.002	2.694	1.692	1.838	0	0	0	0 - 00:00 hrs
0203-028	4.997	304.827	Below Maximum Depth	2.693	0 - 12:03 hrs	0	59.203	0	4.886	0.001	2.518	0.497	2.693	0	0	0	0 - 00:00 hrs
0203-029	6.917	303.807	Surcharged	-0.467	0 - 12:22 hrs	0	77.451	0	4.956	0.002	3.061	2.417	0	0.466	1.312	77.451	0 - 12:10 hrs
0203-030	6.917	303.727	Below Link Crown	0.773	0 - 12:18 hrs	0	79.093	0	4.982	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-031	3.221	272.221	Below Link Crown	5.109	0 - 12:15 hrs	39.056	39.056	1.133	1.134	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-032	6.428	274.558	Surcharged	-0.298	0 - 12:18 hrs	66.041	66.041	1.653	1.654	0	1.275	3.928	0	0.13	0.554	27.494	0 - 12:15 hrs
0203-033	2.916	264.926	Below Link Crown	14.074	0 - 12:18 hrs	0	184.094	0	27.515	0.009	0	0	0	0	0	0	0 - 00:00 hrs
0203-034	4.465	280.835	Surcharged	-0.385	0 - 14:36 hrs	0	86.557	0	9.808	-0.007	10.228	0.385	0	2.793	5.108	52.512	0 - 12:30 hrs
0203-035	1.932	287.122	Below Link Crown	3.458	0 - 14:03 hrs	0	86.596	0	9.796	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-036	3.471	289.891	Below Link Crown	1.869	0 - 14:02 hrs	0	86.595	0	9.797	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-037	7.757	303.697	Surcharged	-0.097	0 - 12:15 hrs	189.176	189.176	4.934	9.851	0.001	0.363	0.097	0	0.039	0.181	26.03	0 - 12:15 hrs
0203-038	5.398	300.068	Surcharged	-0.368	0 - 13:17 hrs	0	153.563	0	9.798	0.003	3.803	0.398	0	0.729	1.902	51.923	0 - 12:15 hrs
0203-039	2.599	290.849	Below Link Crown	1.284	0 - 14:02 hrs	0	86.595	0	9.797	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-040	2.516	282.876	Below Link Crown	1.604	0 - 14:08 hrs	0	86.591	0	9.802	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-041	4.927	279.127	Surcharged	-0.867	0 - 13:11 hrs	0	164.967	0	18.002	0.001	9.006	0.867	0	0.759	4.502	60.791	0 - 12:18 hrs
0203-042	5.071	278.751	Surcharged	-0.911	0 - 13:18 hrs	0	114.719	0	18.015	0.001	9.189	0.911	0	1.017	4.594	114.312	0 - 12:18 hrs
0203-043	6.368	278.238	Below Link Crown	2.262	0 - 12:45 hrs	0	112.844	0	17.999	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-044	6.744	278.224	Below Link Crown	1.926	0 - 12:40 hrs	0	109.54	0	17.997	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-045	6.7	278.21	Below Link Crown	4.22	0 - 12:38 hrs	0	103.688	0	17.993	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-046	7.433	278.203	Below Link Crown	9.497	0 - 12:37 hrs	0	100.663	0	17.989	0.037	0	0	0	0	0	0	0 - 00:00 hrs
0203-047	6.69	278.18	Below Link Crown	10.22	0 - 12:33 hrs	0	101.482	0	17.992	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-048	7.244	278.174	Below Link Crown	1.776	0 - 12:33 hrs	0	105.725	0	20.194	0.014	0	0	0	0	0	0	0 - 00:00 hrs
0203-049	7.776	278.166	Below Link Crown	0.284	0 - 12:33 hrs	0	106.491	0	20.133	0.016	0	0	0	0	0	0	0 - 00:00 hrs
0203-050	7.786	278.156	Below Link Crown	0.274	0 - 12:33 hrs	0	106.865	0	20.121	0.019	0	0	0	0	0	0	0 - 00:00 hrs
0203-051	7.692	275.872	Below Link Crown	1.838	0 - 12:59 hrs	0	149.576	0	24.296	0.02	0	0	0	0	0	0	0 - 00:00 hrs
0203-052	5.419	315.212	Below Maximum Depth	2.588	0 - 12:04 hrs	20.988	20.988	0.605	0.605	0	0.936	2.419	2.588	0	0	0	0 - 00:00 hrs
0203-053	5.668	314.681	Below Maximum Depth	2.019	0 - 12:04 hrs	0	20.981	0	0.605	0	0.941	2.538	2.019	0	0	0	0 - 00:00 hrs
0203-054	6.606	315.506	Below Maximum Depth	0.183	0 - 12:33 hrs	0	20.986	0	0.605	0	0.943	3.606	0.183	0	0	0	0 - 00:00 hrs
0203-055	5.678	313.145	Surcharged	-0.145	0 - 12:18 hrs	0	68.279	0	2.058	0	1.035	2.178	0	0.089	0.468	24.273	0 - 12:15 hrs
0203-056	6.35	312.3	Surcharged	0	0 - 12:36 hrs	0	43.992	0	2.037	0	1.086	2.679	0	0	0.001	4.436	0 - 12:36 hrs
0203-057	6.211	310.809	Surcharged	-0.159	0 - 12:22 hrs	0	43.991	0	2.2	0.001	1.135	2.561	0	0.037	0.513	11.21	0 - 12:36 hrs
0203-058	6.652	310.273	Surcharged	-0.004	0 - 12:37 hrs	0	50.374	0	2.459	0.001	1.145	3.152	0	0	0.001	8.226	0 - 12:37 hrs
0203-059	4.866	309.636	Below Maximum Depth	0.964	0 - 12:15 hrs	0	8.827	0	0.269	0	1.057	1.809	0.964	0	0	0	0 - 00:00 hrs
0203-060	2.609	310.519	Below Link Crown	6.962	0 - 12:41 hrs	0	35.465	0	3.095	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-061	2.978	309.346	Below Link Crown	5.455	0 - 12:15 hrs	0	35.387	0	3.095	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-062	6.47	307.36	Below Maximum Depth	7.955	0 - 12:15 hrs	0	101.329	0	6.447	0.002	0.84	1.26	7.955	0	0	0	0 - 00:00 hrs
0203-063	6.457	305.722	Below Maximum Depth	17.292	0 - 12:15 hrs	0	100.521	0	6.437	0.006	0.92	1.139	17.292	0	0	0	0 - 00:00 hrs
0203-064	5.687	304.061	Below Maximum Depth	16.519	0 - 12:15 hrs	0	99.033	0	6.427	-0.001	0.506	0.574	16.519	0	0	0	0 - 00:00 hrs
0203-065	6.194	302.225	Below Maximum Depth	8.075	0 - 12:15 hrs	0	98.101	0	6.43	0.002	1.184	1.194	8.075	0	0	0	0 - 00:00 hrs
0203-066	5.203	300.959	Below Maximum Depth	7.582	0 - 12:15 hrs	0	98.099	0	6.428	0.001	0.421	0.203	7.582	0	0	0	0 - 00:00 hrs
0203-067	4.405	299.449	Below Link Crown	4.451	0 - 12:15 hrs	0	98.102	0	6.427	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-068	0.651	304.394	Below Link Crown	2.506	0 - 12:15 hrs	0	16.22	0	0.461	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-069	1.492	305.98	Below Link Crown	1.62	0 - 12:15 hrs	0	16.535	0	0.461	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-070	2.195	295.172	Below Link Crown	10.728	0 - 12:21 hrs	0	198.584	0	18.439	0.018	0	0	0	0	0	0	0 - 00:00 hrs
0203-071	2.229	311.74	Below Link Crown	2.246	0 - 12:21 hrs	0	35.419	0	3.095	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-072	2.718	311.247	Below Link Crown	4.453	0 - 12:08 hrs	9.483	9.483	0.351	0.351	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-073	4.149	311.044	Below Link Crown	4.422	0 - 12:10 hrs	0	14.488	0	0.368	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-074	3.936	310.831	Below Link Crown	3.181	0 - 12:08 hrs	0	19.985	0	0.383	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-075	5.094	310.786	Below Link Crown	2.878	0 - 12:22 hrs	0	24.841	0	0.409	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-076	7.47	310.781	Surcharged	-0.171	0 - 12:22 hrs	0	91.231	0	3.858	0	1.594	1.38	0	0.172	0.73	45.871	0 - 12:10 hrs
0203-077	3.473	311.124	Below Link Crown	3.476	0 - 12:08 hrs	0	12.197	0	0.36	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-078	6.554	309.626	Below Maximum Depth	0.446	0 - 12:22 hrs	0	45.686	0	3.832	0	1.886	3.054	0.446	0	0	0	0 - 00:00 hrs
0203-079	6.837	308.226	Below Maximum Depth	1.635	0 - 12:52 hrs	0	45.686	0	3.834	0	2.005	3.337	1.635	0	0	0	0 - 00:00 hrs
0203-080	5.86	307.153	Below Maximum Depth	2.17	0 - 12:52 hrs	0	45.686	0	3.836	0	1.906	2.36	2.17	0	0	0	0 - 00:00 hrs
0203-081	5.877	305.577	Below Maximum Depth	1.677	0 - 12:19 hrs	0	45.686	0	3.838	0	2.082	2.371	1.677	0	0	0	0 - 00:00 hrs
0203-082	4.928	304.475	Below Maximum Depth	1.948	0 - 12:19 hrs	0	45.686	0	3.838	0	1.942	1.398	1.948	0	0	0	0 - 00:00 hrs
0203-083	3.837	303.384	Below Link Crown	1.116	0 - 12:18 hrs	0	45.686	0	3.838	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-084	4.392	302.645	Below Maximum Depth	4.099	0 - 12:18 hrs	0	45.689	0	3.838	0	1.543	0.266	4.099	0	0	0	0 - 00:00 hrs

Table B-2a. Existing System Analysis - Nodes
5-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-085	3.548	301.185	Below Link Crown	5.665	0 - 12:17 hrs	0	45.69	0	3.837	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-086	2.92	299.998	Below Link Crown	5.237	0 - 12:15 hrs	0	45.706	0	3.835	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-087	3.642	299.125	Below Link Crown	3.475	0 - 12:15 hrs	0	47.407	0	4.116	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-088	1.814	304.926	Below Link Crown	4.382	0 - 12:15 hrs	28.3	28.3	1	1	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-089	2.441	302.729	Below Link Crown	4.906	0 - 12:15 hrs	0	28.214	0	1	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-090	2.03	301.123	Below Link Crown	5.222	0 - 12:15 hrs	0	28.017	0	0.999	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-091	2.048	299.128	Below Link Crown	5.209	0 - 12:15 hrs	0	27.841	0	1.127	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-092	2.875	298.264	Below Link Crown	4.936	0 - 12:15 hrs	0	47.372	0	3.986	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-093	2.94	297.359	Below Link Crown	3.041	0 - 12:15 hrs	0	25.706	0	0.842	-0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-094	2.276	296.329	Below Link Crown	4.371	0 - 12:18 hrs	0	72.865	0	4.821	-0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-095	5.099	272.899	Below Maximum Depth	2.401	0 - 13:22 hrs	0	53.745	0	7.584	0.002	6.636	1.599	2.401	0	0	0	0 - 00:00 hrs
0203-096	4.643	271.043	Below Maximum Depth	2.057	0 - 13:22 hrs	0	53.789	0	7.602	0	6.632	1.113	2.057	0	0	0	0 - 00:00 hrs
0203-097	4.511	269.161	Below Maximum Depth	2.139	0 - 13:10 hrs	0	53.708	0	7.622	0.001	6.617	0.511	2.139	0	0	0	0 - 00:00 hrs
0203-098	4.281	268.161	Below Maximum Depth	2.339	0 - 13:11 hrs	0	53.235	0	7.622	0.001	6.562	0.211	2.339	0	0	0	0 - 00:00 hrs
0203-099	3.861	267.181	Below Link Crown	2.419	0 - 13:11 hrs	0	52.668	0	7.62	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-100	3.958	266.058	Below Link Crown	2.842	0 - 13:11 hrs	0	52.668	0	7.619	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-101	3.47	264.9	Below Link Crown	3.6	0 - 13:11 hrs	0	52.668	0	7.617	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-102	2.861	263.521	Below Link Crown	3.779	0 - 13:12 hrs	0	52.668	0	7.614	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-103	3.074	262.464	Below Link Crown	4.306	0 - 13:15 hrs	0	52.667	0	7.612	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-104	2.783	261.23	Below Link Crown	4.61	0 - 13:48 hrs	0	52.667	0	7.61	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-105	3.253	292.273	Surcharged	-0.373	0 - 12:36 hrs	65.197	65.197	1.665	1.665	0	4.399	1.253	0	0.353	2.117	49.134	0 - 12:15 hrs
0203-106	2.463	290.881	Below Maximum Depth	2.399	0 - 12:23 hrs	0	17.494	0	1.663	0	2.959	0.463	2.399	0	0	0	0 - 00:00 hrs
0203-107	3.593	284.983	Below Maximum Depth	0.607	0 - 12:21 hrs	0	17.523	0	1.656	0	4.158	1.593	0.607	0	0	0	0 - 00:00 hrs
0203-108	3.791	283.161	Below Maximum Depth	1.539	0 - 12:21 hrs	0	17.529	0	1.658	0	1.99	1.291	1.539	0	0	0	0 - 00:00 hrs
0203-109	2.179	245.412	Below Link Crown	18.688	0 - 12:47 hrs	0	333.553	0	34.87	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-110	2.891	247.71	Below Link Crown	17.99	0 - 12:47 hrs	0	333.563	0	34.871	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-111	2.546	249.943	Below Link Crown	14.157	0 - 12:47 hrs	0	333.571	0	34.87	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-112	7.547	262.649	Surcharged	-0.149	0 - 13:15 hrs	0	276.215	0	28.059	0.02	3.415	0.226	0	1.048	1.704	42.416	0 - 12:37 hrs
0203-113	9.796	271.562	Surcharged	-0.962	0 - 12:26 hrs	0	310.2	0	25.665	0.013	2.076	1.332	0	0.148	1.023	50.928	0 - 12:15 hrs
0203-114	5.043	275.45	Below Link Crown	1.987	0 - 12:22 hrs	0	260.345	0	22.632	0.011	0	0	0	0	0	0	0 - 00:00 hrs
0203-115	7.644	283.451	Below Link Crown	1.506	0 - 12:19 hrs	0	246.475	0	20.989	0.025	0	0	0	0	0	0	0 - 00:00 hrs
0203-116	4.615	283.745	Below Link Crown	5.345	0 - 12:19 hrs	0	252.358	0	20.999	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-117	5.487	285.553	Below Link Crown	1.458	0 - 12:17 hrs	0	253.04	0	21.002	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-118	6.618	273.281	Below Link Crown	1.985	0 - 14:22 hrs	0	198.25	0	39.682	0.018	0	0	0	0	0	0	0 - 00:00 hrs
0203-119	5.458	285.713	Below Link Crown	1.878	0 - 12:38 hrs	0	97.971	0	20.567	0.02	0	0	0	0	0	0	0 - 00:00 hrs
0203-120	6.28	255.062	Below Link Crown	16.238	0 - 12:30 hrs	0	235.607	0	10.188	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-121	3.245	255.33	Below Link Crown	14.57	0 - 12:30 hrs	0	235.802	0	10.191	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-122	4.683	256.983	Below Link Crown	20.657	0 - 12:27 hrs	0	235.921	0	10.207	0.013	0	0	0	0	0	0	0 - 00:00 hrs
0203-123	4.966	257.366	Below Link Crown	20.274	0 - 12:27 hrs	0	236.034	0	10.218	0.012	0	0	0	0	0	0	0 - 00:00 hrs
0203-124	5.41	258.543	Below Link Crown	2.557	0 - 12:26 hrs	0	236.333	0	10.222	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-125	1.693	265.723	Below Link Crown	5.031	0 - 12:27 hrs	0	69.999	0	1.739	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-126	2.851	267.749	Below Link Crown	3.323	0 - 12:27 hrs	0	70.041	0	1.74	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-127	1.881	269.658	Below Link Crown	2.651	0 - 12:26 hrs	0	70.238	0	1.744	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-128	4.308	271.848	Below Link Crown	0.652	0 - 12:26 hrs	110.984	110.984	3.548	3.685	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-129	4.35	271.888	Below Link Crown	1.112	0 - 12:23 hrs	38.888	83.173	1.297	3.222	0.021	0	0	0	0	0	0	0 - 00:00 hrs
0203-130	5.228	259.714	Below Link Crown	2.708	0 - 12:23 hrs	0	169.77	0	8.487	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-131	5.707	260.643	Below Link Crown	2.457	0 - 12:22 hrs	0	170.966	0	8.494	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-132	5.207	263.109	Below Link Crown	2.891	0 - 12:18 hrs	0	171.389	0	8.498	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-133	5.217	265.307	Below Link Crown	1.598	0 - 12:17 hrs	0	171.554	0	8.504	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-134	4.655	269.355	Surcharged	-0.122	0 - 12:25 hrs	0	142.361	0	5.272	0.008	0.938	0.122	0	0.242	0.468	75.012	0 - 12:15 hrs
0203-135	2.117	265.357	Below Link Crown	7.043	0 - 13:11 hrs	0	52.11	0	3.121	-0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-136	3.004	273.144	Below Link Crown	3.856	0 - 12:36 hrs	0	52.673	0	3.145	0.016	0	0	0	0	0	0	0 - 00:00 hrs
0203-137	3.279	273.419	Below Link Crown	3.581	0 - 12:33 hrs	0	59.805	0	3.178	0.033	0	0	0	0	0	0	0 - 00:00 hrs
0203-138	2.905	273.585	Below Link Crown	3.415	0 - 12:32 hrs	0	67.085	0	3.182	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-139	3.22	275.27	Below Link Crown	5.83	0 - 12:19 hrs	0	14.861	0	0.555	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-140	3.117	275.277	Below Link Crown	5.923	0 - 12:19 hrs	0	14.066	0	0.557	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-141	2.352	275.292	Below Link Crown	6.308	0 - 12:19 hrs	0	19.573	0	0.56	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-142	1.389	275.597	Below Link Crown	7.213	0 - 12:15 hrs	20.286	20.286	0.559	0.559	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-143	1.556	252.826	Below Link Crown	24.786	0 - 13:53 hrs	0	262.897	0	40.88	0.032	0	0	0	0	0	0	0 - 00:00 hrs
0203-144	1.912	253.182	Below Link Crown	24.43	0 - 13:52 hrs	0	262.9	0	40.912	0.031	0	0	0	0	0	0	0 - 00:00 hrs
0203-145	6.564	258.174	Below Link Crown	12.176	0 - 13:51 hrs	0	262.899	0	40.946	0.034	0	0	0	0	0	0	0 - 00:00 hrs
0203-146	6.831	258.441	Below Link Crown	3.379	0 - 13:51 hrs	0	262.9	0	40.964	0.017	0	0	0	0	0	0	0 - 00:00 hrs
0203-147	6.767	258.627	Below Link Crown	8.773	0 - 13:51 hrs	0	262.9	0	40.972	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-148	7.219	259.079	Below Link Crown	8.321	0 - 13:51 hrs	0	262.901	0	40.981	0.009	0	0	0	0	0	0	0 - 00:00 hrs
0203-149	7.286	259.296	Below Link Crown	7.808	0 - 13:51 hrs	0	262.902	0	40.989	0.009	0	0	0	0	0	0	0 - 00:00 hrs
0203-150	7.42	259.43	Below Link Crown	0.97	0 - 13:51 hrs	0	262.904	0	40.998	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-151	6.771	259.561	Below Link Crown	10.339	0 - 13:51 hrs	0	262.909	0	41.011	0.013	0	0	0	0	0	0	0 - 00:00 hrs
0203-152	7.047	260.297	Below Link Crown	9.79	0 - 13:49 hrs	0	262.915	0	41.023	0.013	0	0	0	0	0	0	0 - 00:00 hrs
0203-153	7.336	260.666	Below Link Crown	0.672	0 - 13:48 hrs	0	262.918	0	41.032	0.009	0	0	0	0	0	0	0 - 00:00 hrs
0203-154	7.595	260.925	Below Link Crown	2.575	0 - 13:48 hrs	0	262.925	0	41.045	0.013	0	0	0	0	0	0	0 - 00:00 hrs
0203-155	7.81	261.14	Below Link Crown	2.46	0 - 13:48 hrs	0	262.932	0	41.057	0.012	0	0	0	0	0	0	0 - 00:00 hrs
0203-156	7.249	261.379	Below Link Crown	4.121	0 - 13:48 hrs	0	262.935	0	41.061	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-157	7.603	261.733	Below Link Crown	11.867	0 - 13:48 hrs	0	262.937	0	41.065	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-158	7.846	261.976	Below Link Crown	11.624	0 - 13:47 hrs	0	262.945	0	41.076	0.011	0	0	0	0	0	0	0 - 00:00 hrs
0203-159	7.938	262.068	Below Link Crown	2.032	0 - 13:47 hrs	0	262.958	0	41.09	0.014	0	0	0	0	0	0	0 - 00:00 hrs
0203-160	6.934	262.172	Below Link Crown	0.928	0 - 13:47 hrs	0	262.967	0	41.098	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-161	2.919	262.517	Below Link Crown	4.983	0 - 13:45 hrs	0	262.987	0	41.108	0.01	0	0	0	0	0	0	0 - 00:00 hrs
0203-162	3.681	267.292	Below Link Crown	8.508	0 - 12:33 hrs	0	262.97	0	41.136	0.029	0	0	0	0	0	0	0 - 00:00 hrs
0203-163	4.565	272.567	Below Link Crown	3.993	0 - 13:56 hrs	0	248.253	0	38.357	0.021	0	0	0	0	0	0	0 - 00:00 hrs
0203-164	4.703	275.205	Below Link Crown	3.367	0 - 13:59 hrs	0	248.254	0	38.368	0.01	0	0	0	0	0	0	0 - 00:00 hrs
0203-165	7.147	278.147	Below Link Crown	4.603	0 - 13:57 hrs	0	248.254	0	38.413	0.043	0	0	0	0	0	0	0 - 00:00 hrs
0203-166	7.318	280.229	Below Link Crown	0.871	0 - 13:57 hrs	0	248.256	0	38.451	0.031	0	0	0	0	0	0	0 - 00:00 hrs
0203-167	8.682	281.682	Surcharged	-0.482	0 - 13:56 hrs	0	248.271	0	38.48	0.021	5.903	0.538	0	0.03	2.927	2.333	0 - 12:30 hrs
0203-168	8.339	282.997	Surcharged	-0.097	0 - 13:56 hrs	0	248.374	0	38.492	0.012	4.091	0.195	0	0.008	1.495	0.83	0 - 13:18 hrs

Table B-2a. Existing System Analysis - Nodes
5-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-169	5.149	283.639	Below Maximum Depth	0.083	0 - 13:55 hrs	0	248.378	0	38.492	0.002	5.578	0.613	0.083	0	0	0	0 - 00:00 hrs
0203-170	5.403	284.052	Below Link Crown	4.948	0 - 13:52 hrs	0	189.111	0	28.411	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-171	5.941	285.091	Below Link Crown	1.009	0 - 13:44 hrs	0	189.252	0	28.42	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-172	5.493	285.265	Below Link Crown	1.435	0 - 13:42 hrs	0	189.474	0	28.43	0.012	0	0	0	0	0	0	0 - 00:00 hrs
0203-173	5.026	287.4	Surcharged	-0.5	0 - 13:30 hrs	0	248.224	0	28.533	0.006	5.71	0.529	0	1.055	2.841	63.118	0 - 12:33 hrs
0203-174	5.212	283.705	Surcharged	-0.605	0 - 13:56 hrs	0	92.102	0	10.086	0.003	5.708	0.679	0	0.083	2.8	5.154	0 - 12:41 hrs
0203-175	4.312	283.99	Below Link Crown	0.214	0 - 13:59 hrs	0	89.983	0	10.092	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-176	4.293	284.057	Below Link Crown	0.212	0 - 13:59 hrs	0	89.508	0	10.093	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-177	5.272	284.161	Surcharged	-0.761	0 - 14:00 hrs	0	116.061	0	10.126	0.015	7.125	0.788	0	0.983	3.561	58.693	0 - 12:33 hrs
0203-178	3.728	284.254	Below Link Crown	0.756	0 - 13:52 hrs	0	117.143	0	10.121	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-179	3.278	284.954	Below Link Crown	8.246	0 - 12:34 hrs	0	117.626	0	10.128	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-180	3.536	285.212	Below Link Crown	7.988	0 - 12:33 hrs	0	118.413	0	10.132	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-181	3.318	285.947	Below Link Crown	5.253	0 - 12:32 hrs	0	122.534	0	10.144	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-182	3.582	286.354	Below Link Crown	4.989	0 - 12:30 hrs	0	123.715	0	10.15	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-183	3.998	286.561	Below Link Crown	4.573	0 - 12:30 hrs	0	124.401	0	10.156	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-184	4.066	287.609	Below Link Crown	3.502	0 - 12:26 hrs	0	124.744	0	10.159	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-185	3.849	287.622	Below Link Crown	3.559	0 - 12:26 hrs	0	16.273	0	0.955	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-186	1.785	287.633	Below Link Crown	4.867	0 - 12:26 hrs	0	15.935	0	0.957	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-187	4.208	290.051	Below Link Crown	5.349	0 - 12:23 hrs	0	114.146	0	9.216	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-188	6.1	293.266	Below Link Crown	4.034	0 - 12:19 hrs	0	119.432	0	9.235	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-189	6.021	293.587	Below Link Crown	4.113	0 - 12:18 hrs	0	133.821	0	9.284	0.046	0	0	0	0	0	0	0 - 00:00 hrs
0203-190	4.316	293.622	Below Link Crown	6.778	0 - 12:18 hrs	0	23.409	0	1.013	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-191	1.973	300.409	Below Link Crown	9.091	0 - 12:18 hrs	0	23.412	0	1.015	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-192	1.597	293.677	Below Link Crown	4.523	0 - 12:23 hrs	0	23.601	0	0.957	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-193	0.616	298.507	Below Link Crown	3.821	0 - 12:17 hrs	0	11.829	0	0.534	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-194	0.769	302.131	Below Link Crown	2.846	0 - 12:15 hrs	0	12.089	0	0.535	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-195	4.972	289.569	Below Link Crown	4.731	0 - 12:26 hrs	155.306	351.362	5.767	28.524	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-196	2.552	297.672	Below Link Crown	2.308	0 - 12:15 hrs	0	105.102	0	4.484	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-197	1.279	298.661	Below Link Crown	4.139	0 - 12:18 hrs	0	75.974	0	3.538	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-198	2.706	309.311	Below Link Crown	0.389	0 - 12:17 hrs	0	49.901	0	2.197	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-199	2.379	303.155	Below Link Crown	4.545	0 - 12:17 hrs	0	76.222	0	3.543	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-200	2.496	303.176	Below Link Crown	4.424	0 - 12:17 hrs	0	12.434	0	0.396	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-201	4.339	312.237	Below Link Crown	9.763	0 - 13:10 hrs	0	19.74	0	1.776	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-202	3.891	309.391	Below Link Crown	10.209	0 - 12:15 hrs	0	19.812	0	1.775	-0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-203	3.399	309.625	Below Link Crown	1.775	0 - 12:15 hrs	0	36.663	0	2.123	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-204	3.869	309.36	Below Link Crown	1.54	0 - 12:15 hrs	60.02	113.9	2.411	6.305	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-205	4.008	309.108	Below Link Crown	1.572	0 - 12:15 hrs	0	113.272	0	6.304	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-206	2.903	306.573	Below Link Crown	2.926	0 - 14:51 hrs	0	112.447	0	6.305	-0.012	0	0	0	0	0	0	0 - 00:00 hrs
0203-207	7.365	306.557	Below Link Crown	1.285	0 - 14:57 hrs	0	112.01	0	6.326	0.018	0	0	0	0	0	0	0 - 00:00 hrs
0203-208	1.887	299.491	Below Maximum Depth	0.009	0 - 12:18 hrs	0	23.388	0	6.751	0.001	0.496	0.11	0.009	0	0	0	0 - 00:00 hrs
0203-209	8.277	306.555	Below Link Crown	0.445	0 - 14:59 hrs	0	113.581	0	8.583	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-210	6.755	306.555	Surcharged	-1.055	0 - 14:59 hrs	0	104.517	0	2.464	0	17.542	1.568	0	1.805	8.608	104.511	0 - 12:12 hrs
0203-211	6.603	306.555	Surcharged	-0.655	0 - 14:59 hrs	0	18.207	0	0.608	0	18.164	2.667	0	0.326	6.944	14.306	0 - 12:33 hrs
0203-212	2.368	298.818	Below Maximum Depth	5.262	0 - 12:18 hrs	0	23.388	0	6.75	0.002	2.814	0.591	5.262	0	0	0	0 - 00:00 hrs
0203-213	2.469	298.29	Below Link Crown	3.535	0 - 12:18 hrs	0	36.241	0	7.208	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-214	2.407	298.307	Below Link Crown	3.64	0 - 12:18 hrs	0	16.185	0	0.462	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-215	0.785	299.382	Below Link Crown	5.318	0 - 12:15 hrs	0	16.222	0	0.461	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-216	0.742	306.442	Below Link Crown	2.325	0 - 12:15 hrs	16.575	16.575	0.461	0.461	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-217	2.705	298.045	Below Link Crown	3.244	0 - 12:18 hrs	0	34.532	0	7.205	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-218	5.83	259.76	Below Link Crown	10.035	0 - 12:45 hrs	0	333.609	0	34.878	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-219	5.962	259.892	Below Link Crown	9.78	0 - 12:45 hrs	0	99.603	0	6.894	0.032	0	0	0	0	0	0	0 - 00:00 hrs
0203-220	3.23	260.111	Below Link Crown	4.727	0 - 12:45 hrs	0	99.829	0	6.907	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-221	6.524	289.524	Below Maximum Depth	3.096	0 - 12:15 hrs	0	258.565	0	21.032	0.002	0.23	0.324	3.096	0	0	0	0 - 00:00 hrs
0203-222	3.106	287.026	Below Maximum Depth	3.954	0 - 12:21 hrs	0	17.502	0	1.658	0	2.33	1.106	3.954	0	0	0	0 - 00:00 hrs
0203-223	8.392	269.592	Surcharged	-0.462	0 - 12:41 hrs	0	254.054	0	25.627	0.007	2.499	2.392	0	0.005	0.995	6.355	0 - 13:12 hrs
0203-224	6.774	267.854	Surcharged	-0.394	0 - 12:41 hrs	85.857	85.857	2.442	2.443	0	3.968	3.774	0	0.45	1.889	63.075	0 - 12:15 hrs
0203-225	1.622	308.282	Below Link Crown	6.448	0 - 12:15 hrs	12.351	12.351	0.535	0.535	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-226	14.034	318.054	Surcharged	-0.024	0 - 12:15 hrs	82.359	82.359	3.486	3.487	0	2.02	10.534	0	0.009	0.125	8.082	0 - 12:15 hrs
0203-227	10.786	314.406	Surcharged	-0.156	0 - 12:18 hrs	0	74.837	0	3.469	0.001	2.007	7.286	0	0.007	0.162	2.64	0 - 12:11 hrs
0203-228	3.203	311.203	Below Link Crown	6.067	0 - 12:08 hrs	0	9.793	0	0.354	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-229	4.011	330.601	Below Maximum Depth	6.209	0 - 12:02 hrs	0	20.284	0	1.773	0	2.209	1.761	6.209	0	0	0	0 - 00:00 hrs
0203-230	3.078	327.578	Below Maximum Depth	2.572	0 - 12:02 hrs	0	19.741	0	1.776	0	2.201	0.578	2.572	0	0	0	0 - 00:00 hrs
0203-231	1.56	322.94	Below Link Crown	4.9	0 - 12:03 hrs	0	19.833	0	1.78	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-232	1.386	318.246	Below Link Crown	6.884	0 - 12:26 hrs	0	19.74	0	1.781	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-233	1.2	315.7	Below Link Crown	7.59	0 - 12:07 hrs	0	19.74	0	1.78	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-234	3.833	319.583	Below Link Crown	1.757	0 - 12:30 hrs	0	35.421	0	3.098	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-235	3.336	318.586	Below Link Crown	2.474	0 - 12:30 hrs	0	35.42	0	3.095	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-236	1.427	316.427	Below Link Crown	2.933	0 - 12:26 hrs	0	35.42	0	3.095	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-237	2.352	313.352	Below Link Crown	4.658	0 - 12:37 hrs	0	35.421	0	3.094	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-238	6.585	308.585	Below Maximum Depth	7.835	0 - 12:15 hrs	25.741	101.422	0.892	6.452	0.001	0.998	1.585	7.835	0	0	0	0 - 00:00 hrs
0203-239	4.276	297.776	Below Link Crown	6.914	0 - 12:18 hrs	0	130.166	0	13.629	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-240	9.461	276.911	Surcharged	-0.051	0 - 12:38 hrs	0	34.638	0	2.919	0.015	1.728	5.461	0	0.007	0.038	29.124	0 - 12:38 hrs
0203-241	4.276	270.276	Below Maximum Depth	7.014	0 - 12:15 hrs	0	26.373	0	0.92	0	1.133	1.246	7.014	0	0	0	0 - 00:00 hrs
0203-242	8.321	265.671	Surcharged	-0.061	0 - 12:37 hrs	0	105.95	0	6.909	0.002	2.782	3.988	0	0.082	0.711	7.03	0 - 12:45 hrs
0203-243	8.787	265.757	Below Maximum Depth	0.563	0 - 12:45 hrs	0	99.923	0	6.923	0.001	2.707	4.454	0.563	0	0	0	0 - 00:00 hrs
0203-244	6.238	289.359	Surcharged	-0.501	0 - 14:18 hrs	0	172.755	0	20.567	0.002	11.781	0.501	0	4.586	5.89	84.498	0 - 12:03 hrs
0203-245	3.947	296.947	Below Link Crown	6.523	0 - 12:18 hrs	0	130.08	0	13.627	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-246	3.647	289.3	Below Link Crown	3.8	0 - 12:25 hrs	0	112.161	0	9.209	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-247	3.39	297.146	Below Link Crown	12.61	0 - 15:57 hrs	0	109.332	0	40.949	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-248	4.346	283.808	Below Maximum Depth	1.782	0 - 13:49 hrs	0	32.76	0	9.373	0.005	12.787	0.176	1.782	0	0	0	0 - 00:00 hrs
0203-249	1.116	303.716	Below Link Crown	2.484	0 - 12:15 hrs	32.784	32.784	0.945	0.946	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-250	4.512	285.262	Surcharged	-0.462	0 - 13:26 hrs	0	80.047	0	9.409	0.006	3.096	0.472	0	0.116	1.547	5.695	0 - 12:08 hrs
0203-251	4.241	284.219	Below Link Crown	2.411	0 - 14:17 hrs	0	37.236	0	9.381	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-252	1.793	294.283	Below Link Crown	4.717	0 - 12:32 hrs	0	88.773	0	6.021	0.002	0	0	0	0	0	0	0 - 00:00 hrs

Table B-2a. Existing System Analysis - Nodes
5-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-253	4.46	275.23	Below Link Crown	3.9	0 - 12:18 hrs	23.279	28.707	0.646	1.228	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-254	4.728	269.115	Below Link Crown	6.706	0 - 12:15 hrs	0	134.095	0	8.914	0.015	0	0	0	0	0	0	0 - 00:00 hrs
0203-255	2.575	278.523	Below Link Crown	7.375	0 - 12:26 hrs	0	39.264	0	10.008	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-256	4.292	301.902	Below Maximum Depth	4.858	0 - 12:17 hrs	0	45.69	0	3.838	0.001	1.62	0.292	4.858	0	0	0	0 - 00:00 hrs
0203-257	2.41	280.64	Below Link Crown	2.035	0 - 13:18 hrs	0	29.092	0	3.418	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-258	3.617	281.847	Below Maximum Depth	4.173	0 - 12:07 hrs	0	29.092	0	3.421	0.003	4.582	0.617	4.173	0	0	0	0 - 00:00 hrs
0203-259	4.984	284.464	Below Maximum Depth	1.046	0 - 12:07 hrs	0	29.666	0	3.425	0.001	4.453	1.984	1.046	0	0	0	0 - 00:00 hrs
0203-260	4.625	285.175	Below Maximum Depth	1.655	0 - 12:07 hrs	0	31.851	0	3.439	0.002	4.445	1.625	1.655	0	0	0	0 - 00:00 hrs
0203-261	4.451	285.951	Below Maximum Depth	1.829	0 - 12:07 hrs	0	33.251	0	3.439	0.002	4.515	1.451	1.829	0	0	0	0 - 00:00 hrs
0203-262	6.147	289.367	Surcharged	-0.357	0 - 13:17 hrs	0	37.112	0	3.417	0.002	4.544	3.147	0	0.03	2.244	8.524	0 - 12:03 hrs
0203-263	6.495	290.885	Surcharged	-0.265	0 - 12:57 hrs	65.656	65.656	3.428	3.43	0	4.526	3.495	0	0.371	2.249	35.473	0 - 12:15 hrs
0203-264	2.726	289.726	Surcharged	-0.126	0 - 12:18 hrs	23.52	23.52	0.652	0.652	0	0.592	0.726	0	0.017	0.293	6.193	0 - 12:15 hrs
0203-265	3.229	284.449	Below Maximum Depth	1.951	0 - 12:19 hrs	0	17.428	0	0.647	-0.004	0.606	0.229	1.951	0	0	0	0 - 00:00 hrs
0203-266	3.123	284.023	Below Maximum Depth	1.897	0 - 12:22 hrs	0	17.516	0	0.651	0	0.558	0.063	1.897	0	0	0	0 - 00:00 hrs
0203-267	2.953	283.733	Below Link Crown	2.217	0 - 12:26 hrs	0	17.341	0	0.651	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-268	7.445	280.459	Below Link Crown	5.031	0 - 13:00 hrs	0	874.492	0	145.016	0.273	0	0	0	0	0	0	0 - 00:00 hrs
0203-269	5.825	285.989	Below Link Crown	1.511	0 - 12:52 hrs	0	35.091	0	3.614	0.01	0	0	0	0	0	0	0 - 00:00 hrs
0203-270	7.736	290.256	Below Link Crown	4.444	0 - 12:48 hrs	0	119.583	0	8.384	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-271	5.59	308.18	Surcharged	-0.03	0 - 12:18 hrs	102.309	102.309	3.775	3.777	0	0.597	2.7	0	0.019	0.204	12.924	0 - 12:15 hrs
0203-272	3.599	294.729	Below Link Crown	5.291	0 - 12:18 hrs	0	68.669	0	6.725	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-273	3.302	290.172	Below Link Crown	7.628	0 - 13:00 hrs	0	71.275	0	6.73	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-274	5.67	291.53	Below Maximum Depth	0.88	0 - 12:04 hrs	0	73.002	0	6.86	0.004	3.905	1.65	0.88	0	0	0	0 - 00:00 hrs
0203-275	2.98	287.16	Below Link Crown	6.22	0 - 12:45 hrs	0	72.979	0	6.859	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-276	3.282	286.552	Below Link Crown	6.828	0 - 12:45 hrs	0	72.956	0	6.85	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-277	1.735	284.655	Below Link Crown	2.545	0 - 12:45 hrs	0	72.939	0	6.839	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-278	5.792	291.792	Below Maximum Depth	0.688	0 - 12:04 hrs	0	28.772	0	1.544	0.002	3.456	1.792	0.688	0	0	0	0 - 00:00 hrs
0203-279	5.32	292.88	Surcharged	0	0 - 12:04 hrs	0	28.766	0	1.543	0	1.396	1.82	0	0	0	2.276	0 - 12:04 hrs
0203-280	4.71	292.85	Surcharged	0	0 - 12:04 hrs	0	30.407	0	1.56	0	1.377	1.21	0	0	0.003	8.363	0 - 12:04 hrs
0203-281	4.945	293.985	Below Maximum Depth	0.705	0 - 12:03 hrs	0	31.491	0	1.561	0	1.38	1.695	0.705	0	0	0	0 - 00:00 hrs
0203-282	4.764	294.414	Surcharged	-0.244	0 - 12:22 hrs	52.021	52.021	1.552	1.552	0	1.424	1.764	0	0.104	0.687	23.436	0 - 12:15 hrs
0203-283	5.418	292.998	Surcharged	-0.548	0 - 13:22 hrs	0	66.011	0	5.303	0.001	3.949	1.918	0	0.573	1.969	23.658	0 - 12:06 hrs
0203-284	9.748	335.458	Surcharged	-0.038	0 - 12:18 hrs	111.304	111.304	4.656	4.658	0	4.307	6.248	0	0.03	0.261	16.468	0 - 12:15 hrs
0203-285	2.646	307.146	Below Link Crown	2.854	0 - 12:34 hrs	0	20.5	0	4.653	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-286	1.679	307.679	Below Link Crown	3.161	0 - 12:36 hrs	0	20.369	0	4.654	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-287	1.662	309.362	Below Link Crown	1.728	0 - 14:14 hrs	0	20.369	0	4.654	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-288	2.234	310.574	Below Link Crown	1.876	0 - 14:14 hrs	0	20.369	0	4.656	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-289	2.407	311.407	Below Link Crown	3.133	0 - 14:14 hrs	0	20.37	0	4.659	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-290	2.673	314.673	Below Maximum Depth	5.857	0 - 14:11 hrs	0	20.37	0	4.662	0.001	12.258	0.173	5.857	0	0	0	0 - 00:00 hrs
0203-291	3.466	316.766	Below Maximum Depth	2.654	0 - 11:55 hrs	0	20.37	0	4.664	0	12.351	0.966	2.654	0	0	0	0 - 00:00 hrs
0203-292	4.08	321.89	Below Maximum Depth	3.99	0 - 11:55 hrs	0	21.815	0	4.658	0.001	12.283	2.08	3.99	0	0	0	0 - 00:00 hrs
0203-293	4.259	323.999	Below Maximum Depth	0.531	0 - 14:11 hrs	0	21.755	0	4.658	0	12.331	1.529	0.531	0	0	0	0 - 00:00 hrs
0203-294	2.809	326.039	Below Link Crown	1.251	0 - 14:08 hrs	0	43.004	0	4.663	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-295	3.395	327.395	Below Link Crown	6.645	0 - 12:56 hrs	0	43.006	0	4.658	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-296	4.408	328.458	Below Maximum Depth	4.882	0 - 12:51 hrs	0	43.006	0	4.658	0.001	4.3	0.908	4.882	0	0	0	0 - 00:00 hrs
0203-297	3.815	329.525	Surcharged	-0.315	0 - 12:48 hrs	0	94.968	0	4.67	-0.006	4.248	0.315	0	0.626	2.114	53.494	0 - 12:11 hrs
0203-298	6.69	316.22	Surcharged	0	0 - 11:57 hrs	0	106.318	0	12.562	-0.006	4.532	2.19	0	0	0	12.513	0 - 11:57 hrs
0203-299	6.077	319.917	Surcharged	-0.347	0 - 12:30 hrs	134.657	134.657	3.672	3.673	0	2.989	3.077	0	0.564	1.486	88.719	0 - 12:15 hrs
0203-300	5.606	320.586	Surcharged	-0.376	0 - 12:45 hrs	221.56	221.56	6.71	6.713	0	5.971	2.606	0	1.413	2.869	169.409	0 - 12:15 hrs
0203-301	9.084	309.084	Surcharged	-0.624	0 - 14:47 hrs	0	130.925	0	19.322	0.011	9.65	4.084	0	0.583	3.789	41.93	0 - 15:44 hrs
0203-302	10.538	305.728	Surcharged	-0.608	0 - 14:44 hrs	204.171	351.18	6.206	28.761	0.042	10.811	5.458	0	2.649	4.814	196.452	0 - 12:15 hrs
0203-303	6.201	306.951	Surcharged	-0.381	0 - 12:40 hrs	119.219	119.219	3.322	3.323	0	9.708	3.201	0	0.694	2.837	90.477	0 - 12:15 hrs
0203-304	1.429	312.779	Below Link Crown	1.761	0 - 14:12 hrs	0	20.37	0	4.659	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-305	3.312	315.642	Surcharged	-0.082	0 - 14:11 hrs	0	20.37	0	4.664	0.001	12.412	0.812	0	0	5.57	0.096	0 - 11:55 hrs
0203-306	4.544	324.874	Surcharged	-0.434	0 - 14:11 hrs	0	42.978	0	4.671	0.001	12.262	1.044	0	1.289	6.112	22.855	0 - 12:44 hrs
0203-307	3.668	317.868	Below Maximum Depth	2.362	0 - 13:00 hrs	0	52.263	0	6.726	0	4.647	0.168	2.362	0	0	0	0 - 00:00 hrs
0203-308	3.635	316.135	Below Maximum Depth	4.715	0 - 13:26 hrs	0	52.26	0	6.723	0.001	4.845	0.135	4.715	0	0	0	0 - 00:00 hrs
0203-309	3.641	314.311	Below Maximum Depth	3.539	0 - 13:48 hrs	0	52.256	0	6.713	0	3.307	0.041	3.539	0	0	0	0 - 00:00 hrs
0203-310	3.534	312.674	Below Link Crown	4.986	0 - 14:22 hrs	0	52.329	0	6.707	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-311	7.35	312.91	Surcharged	0	0 - 11:57 hrs	0	53.719	0	6.69	-0.001	5.688	3.35	0	0	0	8.145	0 - 11:57 hrs
0203-312	8.102	310.102	Surcharged	-0.502	0 - 14:18 hrs	0	99.836	0	12.698	0.007	7.721	3.102	0	1.076	3.798	39.953	0 - 15:42 hrs
0203-313	7.561	311.811	Surcharged	-0.001	0 - 11:56 hrs	0	99.871	0	12.611	0.002	7.584	2.561	0	0	0.002	9.592	0 - 11:56 hrs
0203-314	7.61	313.1	Surcharged	0	0 - 13:22 hrs	0	99.834	0	12.618	0.003	6.333	2.61	0	0	0.025	0.056	0 - 13:27 hrs
0203-315	5.58	320.21	Below Maximum Depth	0.84	0 - 11:56 hrs	0	71.182	0	8.913	-0.004	6.217	1.94	0.84	0	0	0	0 - 00:00 hrs
0203-316	6.802	322.852	Surcharged	-0.382	0 - 12:52 hrs	279.645	279.645	8.934	8.939	0	6.405	3.302	0	1.982	3.106	217.019	0 - 12:15 hrs
0203-317	8.687	306.807	Surcharged	-0.277	0 - 15:00 hrs	0	123.436	0	19.274	0.004	9.74	3.607	0	0.635	3.628	55.688	0 - 15:59 hrs
0203-318	4.128	283.267	Below Maximum Depth	2.323	0 - 12:26 hrs	0	39.286	0	10.021	0.003	17.209	1.128	2.323	0	0	0	0 - 00:00 hrs
0203-319	4.65	272.35	Below Maximum Depth	11.13	0 - 12:15 hrs	0	53.876	0	4.222	0.005	0.221	0.65	11.13	0	0	0	0 - 00:00 hrs
0203-320	1.68	279.672	Below Link Crown	4.569	0 - 13:23 hrs	0	29.091	0	3.41	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-321	2.258	280.55	Below Link Crown	6.052	0 - 13:19 hrs	0	29.092	0	3.417	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-322	4.637	274.772	Below Maximum Depth	1.228	0 - 12:56 hrs	0	25.923	0	4.065	0.01	7.801	0.637	1.228	0	0	0	0 - 00:00 hrs
0203-323	5.446	274.555	Below Link Crown	28.065	0 - 12:56 hrs	0	25.923	0	4.055	0.047	0	0	0	0	0	0	0 - 00:00 hrs
0203-324	1.453	274.368	Below Link Crown	28.252	0 - 12:56 hrs	0	25.923	0	4.012	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-325	6.443	292.587	Below Link Crown	8.173	0 - 12:29 hrs	0	197.398	0	18.42	0.084	0	0	0	0	0	0	0 - 00:00 hrs
0203-326	2.067	273.015	Below Link Crown	4.785	0 - 12:15 hrs	112.819	112.819	3.252	3.253	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-327	3.039	270.139	Below Link Crown	6.961	0 - 12:15 hrs	0	111.87	0	3.253	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-328	5.747	268.951	Below Link Crown	4.349	0 - 12:15 hrs	0	193.473	0	8.515	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-329	6.147	291.573	Below Link Crown	4.787	0 - 12:33 hrs	0	187.653	0	18.337	0.055	0	0	0	0	0	0	0 - 00:00 hrs
0203-330	2.355	307.217	Below Link Crown	1.483	0 - 12:18 hrs	0	67.476	0	3.152	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-331	7.306	301.306	Below Maximum Depth	0.044	0 - 16:05 hrs	0	146.255	0	28.719	0.035	10.4	1.306	0.044	0	0	0	0 - 00:00 hrs
0203-332	5.516	299.016	Below Link Crown	0.584	0 - 12:36 hrs	0	146.254	0	28.674	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-333	7.255	302.255	Surcharged	-0.975	0 - 15:56 hrs	0	168.479	0	28.75	0.025	10.362	1.255	0	0.646	5.179	33.8	0 - 12:11 hrs
0203-334	6.757	306.397	Surcharged	-0.017	0 - 14:45 hrs	0	35.264	0	3.307	-0.001	9.715	3.227	0	0	0.006	5.284	0 - 14:44 hrs
0203-335	2.909	267.296	Below Link Crown	11.804	0 - 12:15 hrs	0	133.573	0	8.9	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-336	2.826	289.036	Below Maximum Depth	5.524	0 - 12:21 hrs	0	17.496	0	1.661	0	2.57	0.826	5.524	0	0	0	0 - 00:00 hrs

Table B-2a. Existing System Analysis - Nodes
5-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-337	2.224	303.114	Below Link Crown	4.886	0 - 12:15 hrs	0	61.072	0	11.436	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-338	2.243	295.873	Below Link Crown	2.404	0 - 12:19 hrs	0	71.263	0	4.824	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-339	1.073	296.123	Below Link Crown	7.977	0 - 12:15 hrs	54.719	113.429	2.215	8.276	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-340	6.605	316.735	Surcharged	-0.585	0 - 13:27 hrs	0	69.209	0	8.9	0	6.294	2.605	0	0.301	2.263	9.303	0 - 12:19 hrs
0203-341	3.231	260.253	Below Link Crown	8.247	0 - 15:21 hrs	0	250.126	0	49.587	0.011	0	0	0	0	0	0	0 - 00:00 hrs
0203-342	6.164	271.892	Surcharged	-1.292	0 - 12:22 hrs	0	63.843	0	6.977	0.002	4.252	1.303	0	0.04	2.103	14.506	0 - 12:11 hrs
0203-343	13.71	314.996	Surcharged	-0.086	0 - 12:03 hrs	134.178	134.178	4.627	4.628	0	7.89	7.71	0	0.01	0.047	32.197	0 - 12:03 hrs
0203-344	9.334	308.445	Surcharged	-0.245	0 - 13:17 hrs	0	151.163	0	4.66	0.002	8.198	3.189	0	0.884	4.033	123.149	0 - 12:12 hrs
0203-345	2.525	256.562	Below Link Crown	8.267	0 - 14:30 hrs	0	294.198	0	56.525	0.031	0	0	0	0	0	0	0 - 00:00 hrs
0203-346	1.268	258.221	Below Link Crown	6.578	0 - 12:37 hrs	0	46.642	0	6.954	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-347	6.01	264.706	Below Link Crown	1.255	0 - 12:36 hrs	0	46.793	0	6.958	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-348	4.275	264.789	Below Link Crown	3.011	0 - 12:36 hrs	0	47.647	0	6.961	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-349	7.336	268.731	Below Maximum Depth	0.306	0 - 12:30 hrs	0	48.821	0	6.97	0.008	0.704	0.145	0.306	0	0	0	0 - 00:00 hrs
0203-350	6.155	268.77	Below Link Crown	1.036	0 - 12:30 hrs	0	50.206	0	6.973	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-351	3.011	278.491	Below Link Crown	4.269	0 - 12:17 hrs	0	56.039	0	1.688	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-352	5.774	287.907	Below Link Crown	1.171	0 - 12:15 hrs	0	258.542	0	21.025	0.009	0	0	0	0	0	0	0 - 00:00 hrs
0203-353	5.827	282.392	Below Link Crown	1.203	0 - 12:19 hrs	0	260.033	0	22.637	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-354	3.081	278.798	Below Link Crown	3.949	0 - 12:19 hrs	0	259.945	0	22.636	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-355	5.537	274.056	Below Link Crown	1.417	0 - 12:22 hrs	0	259.169	0	22.618	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-356	5.066	272.82	Below Link Crown	3.48	0 - 12:22 hrs	76.427	303.648	2.161	24.775	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-357	9.032	270.446	Surcharged	-0.316	0 - 12:41 hrs	0	300.615	0	25.637	0.008	1.979	0.568	0	0.336	0.951	49.977	0 - 12:22 hrs
0203-358	7.709	268.741	Surcharged	-0.341	0 - 12:41 hrs	0	253.971	0	25.614	0.01	2.001	0.388	0	0.017	0.991	6.792	0 - 12:15 hrs
0203-359	6.164	265.914	Below Link Crown	1.186	0 - 12:47 hrs	0	276.288	0	28.024	0.01	0	0	0	0	0	0	0 - 00:00 hrs
0203-360	2.263	253.07	Below Link Crown	14.43	0 - 12:45 hrs	0	333.576	0	34.878	0.012	0	0	0	0	0	0	0 - 00:00 hrs
0203-361	3.888	260.747	Below Link Crown	5.883	0 - 12:38 hrs	0	99.93	0	6.921	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-362	3.539	278.859	Below Link Crown	4.404	0 - 13:57 hrs	0	248.255	0	38.42	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-363	6.315	286.775	Below Link Crown	0.63	0 - 12:17 hrs	0	255.05	0	21.008	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-364	2.939	276.905	Below Link Crown	5.131	0 - 13:57 hrs	0	248.254	0	38.374	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-365	8.728	295.128	Below Maximum Depth	0.472	0 - 13:04 hrs	0	175.792	0	20.593	-0.001	4.724	3.228	0.472	0	0	0	0 - 00:00 hrs
0203-366	12.175	285.459	Surcharged	-0.259	0 - 12:37 hrs	0	174.196	0	20.908	0.004	3.243	0.274	0	1.037	1.621	174.193	0 - 12:15 hrs
0203-367	13.323	285.772	Surcharged	-2.76	0 - 12:15 hrs	309.057	368.935	9.467	40.04	0.016	4.058	4.108	0	0.118	1.844	38.084	0 - 12:03 hrs
0203-368	10.211	276.872	Surcharged	-0.555	0 - 14:03 hrs	0	275.405	0	39.665	0.005	10.182	2.29	0	3.017	4.922	83.608	0 - 12:15 hrs
0203-369	6.189	283.85	Below Maximum Depth	1.469	0 - 13:56 hrs	0	91.053	0	10.089	0.002	6.047	0.841	1.469	0	0	0	0 - 00:00 hrs
0203-370	8.229	275.126	Surcharged	-0.005	0 - 14:22 hrs	0	203.549	0	39.722	0	1.387	0.008	0	0.015	0.674	1.361	0 - 14:11 hrs
0203-371	0	270.605	Below Link Invert	4.595	0 - 00:00 hrs	0	0	0	0	0	48	0	4.595	0	0	0	0 - 00:00 hrs
0203-372	8.53	272.824	Below Link Crown	0.186	0 - 14:21 hrs	0	215.573	0	42.059	0.015	0	0	0	0	0	0	0 - 00:00 hrs
0203-373	14.857	272.42	Surcharged	-1.901	0 - 14:22 hrs	0	215.25	0	42.02	0.005	11.047	1.901	0	0.045	5.524	14.437	0 - 12:02 hrs
0203-374	13.052	270.544	Surcharged	-0.544	0 - 15:41 hrs	0	212.777	0	42.019	0.022	12.096	5.103	0	1.022	5.175	18.392	0 - 12:57 hrs
0203-375	6.207	265.573	Below Link Crown	5.127	0 - 15:51 hrs	0	198.238	0	42.011	0.019	0	0	0	0	0	0	0 - 00:00 hrs
0203-376	5.505	264.888	Below Link Crown	6.527	0 - 15:56 hrs	0	198.245	0	41.99	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-377	13.95	271.446	Surcharged	-1.446	0 - 14:22 hrs	0	215.02	0	42.107	0.014	13.791	6.95	0	0.347	5.544	26.168	0 - 12:06 hrs
0203-378	10.555	271.455	Surcharged	-0.242	0 - 12:37 hrs	139.326	139.326	4.72	4.723	0	2.773	7.555	0	0.563	1.315	82.376	0 - 12:15 hrs
0203-379	8.796	267.268	Below Maximum Depth	3.945	0 - 12:45 hrs	0	68.415	0	4.729	0.001	2.753	4.796	3.945	0	0	0	0 - 00:00 hrs
0203-380	5.404	292.404	Below Link Crown	4.896	0 - 12:21 hrs	0	116.438	0	9.227	0.012	0	0	0	0	0	0	0 - 00:00 hrs
0203-381	2.586	272.074	Below Link Crown	1.526	0 - 12:15 hrs	144.763	144.763	5.268	5.271	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-382	1.691	299.691	Below Link Crown	8.509	0 - 16:01 hrs	0	28.647	0	4.603	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-383	5.698	316.768	Below Maximum Depth	0.932	0 - 15:45 hrs	0	133.634	0	42.802	0	24.062	0.788	0.932	0	0	0	0 - 00:00 hrs
0203-384	5.753	314.753	Below Maximum Depth	1.617	0 - 15:45 hrs	0	116.912	0	42.197	0.74	23.993	0.843	1.617	0	0	0	0 - 00:00 hrs
0203-385	4.952	310.55	Below Maximum Depth	0	0 - 12:04 hrs	0	4.802	0	0.199	0	1.36	3.452	0	0.011	0.473	1.221	0 - 12:22 hrs
0203-386	3.892	310.49	Below Maximum Depth	0	0 - 12:04 hrs	6.528	8.817	0.212	0.243	0	1.235	2.642	0	0.088	0.526	8.814	0 - 12:15 hrs
0203-387	4.493	310.264	Below Maximum Depth	0.126	0 - 12:15 hrs	0	8.839	0	0.268	0	1.183	2.993	0.126	0	0	0	0 - 00:00 hrs
0203-388	3.839	310.61	Below Maximum Depth	0	0 - 12:03 hrs	11.995	11.995	0.293	0.293	0	1.094	2.589	0	0.026	0.25	6.566	0 - 12:15 hrs
0203-389	9.579	272.345	Below Maximum Depth	0.415	0 - 12:26 hrs	0	14.523	0	0.885	0.001	12.719	7.829	0.415	0	0	0	0 - 00:00 hrs
0203-390	9.71	272.91	Surcharged	0	0 - 12:00 hrs	36.535	36.535	1.096	1.096	0	13.289	8.46	0	0.209	0.754	27.76	0 - 12:15 hrs
0203-391	5.55	258.035	Below Link Crown	5.273	0 - 12:27 hrs	0	236.1	0	10.22	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-392	4.167	256.45	Below Link Crown	13.65	0 - 12:29 hrs	0	235.842	0	10.193	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-393	2.628	313.506	Below Link Crown	11.494	0 - 12:26 hrs	0	19.74	0	1.777	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-394	4.548	308.785	Below Link Crown	1.125	0 - 12:15 hrs	0	112.543	0	6.3	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-395	3.424	307.554	Below Link Crown	3.652	0 - 12:15 hrs	0	112.462	0	6.302	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-396	2.359	306.556	Below Maximum Depth	3.544	0 - 14:57 hrs	18.316	18.316	0.46	0.46	0	12.782	0.552	3.544	0	0	0	0 - 00:00 hrs
0203-397	3.331	297.964	Below Link Crown	3.325	0 - 12:18 hrs	0	34.28	0	7.204	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-398	3.23	297.863	Below Link Crown	3.132	0 - 12:18 hrs	0	34.305	0	7.203	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-399	1.232	309.875	Below Link Crown	2.972	0 - 12:15 hrs	21.332	21.332	0.958	0.958	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-400	3.119	308.527	Below Link Crown	0.703	0 - 12:15 hrs	0	21.176	0	0.958	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-401	2.744	294.958	Below Link Crown	4.442	0 - 12:21 hrs	0	108.613	0	4.485	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-402	5.207	287.704	Surcharged	-0.704	0 - 13:14 hrs	0	344.074	0	28.517	0.021	6.054	0.71	0	1.465	3.027	143.067	0 - 12:18 hrs
0203-403	4.979	287.08	Below Maximum Depth	1.395	0 - 13:32 hrs	0	202.918	0	28.497	0.008	5.832	0.565	1.395	0	0	0	0 - 00:00 hrs
0203-404	4.716	286.817	Below Link Crown	2.183	0 - 13:33 hrs	0	198.536	0	28.481	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-405	4.775	286.407	Below Link Crown	2.093	0 - 13:36 hrs	0	195.942	0	28.462	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-406	4.757	286.164	Below Link Crown	1.736	0 - 13:37 hrs	0	191.233	0	28.46	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-407	5.769	285.926	Below Link Crown	0.594	0 - 13:38 hrs	0	189.806	0	28.462	0.01	0	0	0	0	0	0	0 - 00:00 hrs
0203-408	5.619	285.684	Below Link Crown	0.459	0 - 13:40 hrs	0	189.7	0	28.453	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-409	5.53	285.53	Below Link Crown	0.57	0 - 13:41 hrs	0	189.649	0	28.447	0.017	0	0	0	0	0	0	0 - 00:00 hrs
0203-410	6.116	284.966	Below Link Crown	1.934	0 - 13:45 hrs	0	189.154	0	28.416	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-411	2.147	309.755	Below Link Crown	2.495	0 - 12:15 hrs	31.983	31.983	1.462	1.463	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-412	2.686	308.497	Below Link Crown	4.203	0 - 12:15 hrs	0	31.897	0	1.462	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-413	2.142	306.925	Below Link Crown	5.675	0 - 12:15 hrs	0	31.819	0	1.463	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-414	1.628	303.832	Below Link Crown	2.458	0 - 12:15 hrs	0	31.681	0	1.463	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-415	5.744	309.349	Surcharged	-0.049	0 - 12:17 hrs	28.193	28.193	1.01	1.01	0	1.431	3.744	0	0.008	0.198	4.798	0 - 12:15 hrs
0203-416	1.409	304.164	Below Link Crown	3.536	0 - 12:17 hrs	0	23.413	0	1.015	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-417	4.523	289.093	Below Link Crown	2.916	0 - 12:25 hrs	0	110.47	0	9.207	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-418	4.424	287.788	Below Link Crown	4.043	0 - 12:26 hrs	0	110.027	0	9.207	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-419	3.64	293.564	Below Link Crown	2.536	0 - 12:23 hrs	0	22.827	0	0.957	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-420	0.711	288.432	Below Link Crown	5.879	0 - 12:14 hrs	0	15.935	0	0.956	0	0	0	0	0	0	0	0 - 00:00 hrs

Table B-2a. Existing System Analysis - Nodes
5-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-421	1.077	301.219	Below Link Crown	4.781	0 - 12:15 hrs	0	12.62	0	0.424	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-422	1.727	307.477	Below Link Crown	1.723	0 - 12:15 hrs	0	12.228	0	0.535	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-423	1.434	306.84	Below Link Crown	5.76	0 - 12:15 hrs	0	12.127	0	0.535	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-424	2.885	285.514	Below Link Crown	4.886	0 - 12:33 hrs	0	121.188	0	10.138	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-425	2.979	285.318	Below Link Crown	8.182	0 - 12:33 hrs	0	119.944	0	10.137	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-426	4.822	283.906	Below Maximum Depth	3.094	0 - 13:57 hrs	0	90.461	0	10.091	0.003	4.689	0.296	3.094	0	0	0	0 - 00:00 hrs
0203-427	4.865	283.794	Below Maximum Depth	3.106	0 - 13:56 hrs	0	91.433	0	10.088	0.003	4.801	0.332	3.106	0	0	0	0 - 00:00 hrs
0203-428	5.755	270.401	Below Link Crown	8.088	0 - 13:45 hrs	0	248.263	0	38.34	0.024	0	0	0	0	0	0	0 - 00:00 hrs
0203-429	5.295	269.762	Below Link Crown	6.853	0 - 13:41 hrs	0	262.971	0	41.162	0.026	0	0	0	0	0	0	0 - 00:00 hrs
0203-430	6.609	276.505	Surcharged	-0.055	0 - 12:37 hrs	0	35.242	0	2.877	0.011	3.146	3.609	0	0.016	0.496	9.931	0 - 12:40 hrs
0203-431	4.305	335.085	Surcharged	-0.145	0 - 12:22 hrs	41.504	41.504	1.78	1.781	0	2.228	2.305	0	0.11	1.096	21.789	0 - 12:15 hrs
0203-432	4.028	275.268	Below Link Crown	2.412	0 - 12:18 hrs	0	15.942	0	0.557	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-433	4.304	275.234	Below Link Crown	3.636	0 - 12:18 hrs	0	16.759	0	0.586	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-434	4.456	275.226	Below Link Crown	3.834	0 - 12:18 hrs	47.14	68.086	1.987	3.184	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-435	2.607	273.637	Below Link Crown	5.883	0 - 12:30 hrs	0	68.019	0	3.182	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-436	0	269.45	Below Link Invert	3.53	0 - 00:00 hrs	0	0	0	0	0	48	0	3.53	0	0	0	0 - 00:00 hrs
0203-437	1.663	271.803	Below Link Crown	4.297	0 - 12:37 hrs	0	52.197	0	3.129	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-438	1.666	266.616	Below Link Crown	7.584	0 - 12:37 hrs	0	52.102	0	3.132	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-439	4.793	330.238	Surcharged	-0.32	0 - 12:40 hrs	175.606	175.606	5.824	5.827	0	3.808	1.655	0	0.867	1.902	115.246	0 - 12:15 hrs
0203-440	4.486	324.622	Surcharged	-0.464	0 - 13:55 hrs	0	60.757	0	5.851	-0.002	10.277	1.189	0	1.589	5.134	31.574	0 - 12:25 hrs
0203-441	4.76	323.56	Surcharged	-0.1	0 - 14:07 hrs	0	30.74	0	5.82	0.003	10.37	1.76	0	0.009	2.042	0.542	0 - 13:51 hrs
0203-442	3.384	322.029	Below Maximum Depth	0.371	0 - 14:07 hrs	0	30.278	0	5.82	0.002	10.27	0.384	0.371	0	0	0	0 - 00:00 hrs
0203-443	2.967	320.92	Below Link Crown	0.88	0 - 14:06 hrs	0	30.278	0	5.82	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-444	1.638	319.029	Below Link Crown	2.671	0 - 13:12 hrs	0	30.278	0	5.821	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-445	1.4	312.73	Below Link Crown	3.136	0 - 13:49 hrs	0	30.381	0	5.822	-0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-446	3.421	310.961	Below Maximum Depth	0.719	0 - 13:48 hrs	0	30.297	0	5.822	0.001	10.262	0.384	0.719	0	0	0	0 - 00:00 hrs
0203-447	1.848	309.17	Below Link Crown	3.071	0 - 13:21 hrs	0	30.3	0	5.82	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-448	4.331	308.142	Below Maximum Depth	3.608	0 - 13:21 hrs	0	72.752	0	9.716	0.001	2.94	0.331	3.608	0	0	0	0 - 00:00 hrs
0203-449	5.39	318.108	Surcharged	-0.308	0 - 12:30 hrs	136.973	136.973	3.908	3.909	0	2.685	2.39	0	0.517	1.311	84.387	0 - 12:15 hrs
0203-450	7.132	318	Below Maximum Depth	0	0 - 12:02 hrs	0	58.449	0	3.922	0	2.627	4.12	0	0	0	5.988	0 - 12:02 hrs
0203-451	5.355	309.286	Surcharged	-0.386	0 - 13:21 hrs	0	52.712	0	3.915	0.001	3.796	1.855	0	0.319	1.781	9.365	0 - 12:33 hrs
0203-452	4.186	306.456	Below Maximum Depth	4.796	0 - 13:21 hrs	0	72.753	0	9.713	0.002	0.585	0.043	4.796	0	0	0	0 - 00:00 hrs
0203-453	4.702	304.412	Below Maximum Depth	0.988	0 - 13:22 hrs	0	75.04	0	9.709	-0.001	3.518	0.632	0.988	0	0	0	0 - 00:00 hrs
0203-454	6.978	302.173	Surcharged	-0.573	0 - 13:33 hrs	0	72.671	0	9.729	0.002	4.249	2.478	0	0.09	1.965	17.472	0 - 12:00 hrs
0203-455	7.477	301.047	Surcharged	-0.337	0 - 13:37 hrs	0	93.062	0	11.26	0.001	4.299	2.878	0	0.264	2.085	11.469	0 - 12:25 hrs
0203-456	3.505	302.638	Surcharged	-0.37	0 - 12:37 hrs	61.561	61.561	1.549	1.549	0	4.559	1.505	0	0.338	2.278	46.86	0 - 12:15 hrs
0203-457	7.829	299.474	Surcharged	-0.343	0 - 12:33 hrs	180.74	255.995	5.803	17.056	0.003	4.258	2.329	0	0.745	1.886	111.952	0 - 12:15 hrs
0203-458	10.033	296.542	Surcharged	-0.564	0 - 13:04 hrs	0	144.82	0	17.053	0.013	4.812	4.533	0	0.584	2.226	25.065	0 - 12:18 hrs
0203-459	7.066	298.796	Surcharged	-0.276	0 - 12:26 hrs	122.803	122.803	3.529	3.531	0	2.187	3.566	0	0.367	1.054	68.303	0 - 12:15 hrs
0203-460	7.963	298.097	Below Maximum Depth	0	0 - 13:06 hrs	0	54.682	0	3.56	0.003	3.277	3.536	0	0	0	3.68	0 - 13:06 hrs
0203-461	9.034	292.21	Surcharged	-0.26	0 - 13:04 hrs	0	175.792	0	20.584	0.005	11.6	3.297	0	0.079	1.768	3.61	0 - 12:33 hrs
0203-462	5.783	288.355	Below Maximum Depth	1.315	0 - 14:18 hrs	0	97.961	0	20.578	0.007	1.776	0.046	1.315	0	0	0	0 - 00:00 hrs
0203-463	4.886	297.113	Below Maximum Depth	2.387	0 - 13:10 hrs	0	61.748	0	9.659	0.001	7.703	1.386	2.387	0	0	0	0 - 00:00 hrs
0203-464	7.797	303.325	Surcharged	-0.361	0 - 13:11 hrs	241.576	241.576	9.674	9.679	0	7.706	4.797	0	2.102	3.768	180.641	0 - 12:15 hrs
0203-465	2.81	294.435	Below Link Crown	4.59	0 - 13:12 hrs	0	61.748	0	9.658	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-466	2.079	288.687	Below Link Crown	4.765	0 - 12:15 hrs	0	61.748	0	9.664	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-467	4.881	280.291	Surcharged	-0.791	0 - 12:36 hrs	0	85.986	0	10.036	0.001	10.12	0.801	0	0.66	5.06	85.986	0 - 12:11 hrs
0203-468	4.665	275.573	Surcharged	-0.373	0 - 12:45 hrs	73.98	73.98	2.431	2.432	0	4.675	1.665	0	0.412	2.335	50.657	0 - 12:15 hrs
0203-469	5.749	276.1	Surcharged	0	0 - 12:00 hrs	0	28.117	0	2.431	0.001	4.674	2.749	0	0	0	4.397	0 - 12:00 hrs
0203-470	5.527	274.296	Below Maximum Depth	3.948	0 - 12:53 hrs	0	25.157	0	2.431	0.001	9.995	2.527	3.949	0	0	0	0 - 00:00 hrs
0203-471	5.534	273.68	Below Maximum Depth	1.42	0 - 13:56 hrs	0	25.156	0	2.426	0	10.395	2.534	1.42	0	0	0	0 - 00:00 hrs
0203-472	4.312	295.273	Surcharged	-0.277	0 - 14:00 hrs	0	94.217	0	9.817	0.002	4.73	0.277	0	0.415	2.365	10.428	0 - 12:56 hrs
0203-473	5.786	273.293	Below Maximum Depth	1.607	0 - 14:21 hrs	0	25.158	0	2.424	0.001	11.211	2.786	1.607	0	0	0	0 - 00:00 hrs
0203-474	9.79	268.766	Surcharged	-0.166	0 - 12:19 hrs	80.23	80.23	2.192	2.193	0	2.82	6.79	0	0.126	0.569	31.75	0 - 12:15 hrs
0203-475	6.806	267.11	Below Maximum Depth	0.19	0 - 12:47 hrs	0	32.958	0	2.426	0	3.98	3.662	0.19	0	0	0	0 - 00:00 hrs
0203-476	6.644	266.606	Below Maximum Depth	0.994	0 - 12:45 hrs	0	32.952	0	2.426	0.001	4.036	3.514	0.994	0	0	0	0 - 00:00 hrs
0203-477	7.026	279.067	Surcharged	-0.367	0 - 12:48 hrs	124.034	124.034	3.92	3.922	0	4.872	4.026	0	0.742	2.434	89.462	0 - 12:15 hrs
0203-478	7.751	277.135	Surcharged	-0.387	0 - 12:41 hrs	0	37.726	0	3.91	-0.002	4.919	4.66	0	0.017	1.949	2.745	0 - 11:59 hrs
0203-479	9.045	274.788	Below Maximum Depth	0.039	0 - 12:29 hrs	0	37.723	0	3.915	0.003	6.203	5.886	0.039	0	0	0	0 - 00:00 hrs
0203-480	7.646	273.381	Below Maximum Depth	0.059	0 - 12:22 hrs	0	37.724	0	3.912	0.002	6.196	4.646	0.059	0	0	0	0 - 00:00 hrs
0203-481	7.904	328.937	Surcharged	-0.429	0 - 13:04 hrs	443.876	443.876	11.447	11.451	0	9.743	4.904	0	3.734	4.87	383.056	0 - 12:15 hrs
0203-482	7.033	322.698	Below Maximum Depth	0	0 - 11:47 hrs	0	61.072	0	11.489	0.009	9.754	4.033	0	0	0.002	8.66	0 - 11:47 hrs
0203-483	2.581	314.354	Below Link Crown	3.798	0 - 11:49 hrs	0	61.072	0	11.47	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-484	2.601	307.72	Below Link Crown	3.72	0 - 13:07 hrs	0	61.288	0	11.458	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-485	5.061	280.241	Surcharged	-0.421	0 - 12:30 hrs	0	70.968	0	10.342	0.001	10.159	1.121	0	0.101	2.567	25.875	0 - 12:15 hrs
0203-486	2.693	298.972	Below Link Crown	6.102	0 - 13:07 hrs	0	61.118	0	11.427	-0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-487	3.79	297.293	Below Link Crown	5.895	0 - 12:15 hrs	0	62.389	0	11.426	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-488	8.57	296.591	Surcharged	0	0 - 12:15 hrs	212.34	265.701	7.816	19.947	0.011	1.935	2.57	0	0	0	0.06	0 - 12:15 hrs
0203-489	4.612	295.191	Surcharged	-0.091	0 - 12:29 hrs	0	69.667	0	0.689	0	1.932	1.112	0	0.4	0.934	69.659	0 - 12:15 hrs
0203-490	3.662	295.325	Below Maximum Depth	1.735	0 - 12:15 hrs	17.656	17.656	0.403	0.404	0	1.367	0.162	1.735	0	0	0	0 - 00:00 hrs
0203-491	5.853	292.93	Below Link Crown	0.17	0 - 12:15 hrs	0	213.607	0	19.656	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-492	4.882	290.88	Below Maximum Depth	1.062	0 - 12:15 hrs	49.051	49.051	1.393	1.394	0	0.459	1.382	1.062	0	0	0	0 - 00:00 hrs
0203-493	1.463	302.381	Below Link Crown	14.219	0 - 12:15 hrs	12.672	12.672	0.424	0.424	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-494	10.064	276.137	Surcharged	-0.127	0 - 12:22 hrs	135.132	147.1	5.142	8.095	0.025	2.778	6.064	0	0.137	0.562	39.354	0 - 12:15 hrs
0203-495	5.393	272.331	Below Maximum Depth	3.801	0 - 12:15 hrs	26.384	26.384	0.918	0.919	0	1.108	2.893	3.801	0	0	0	0 - 00:00 hrs
0203-496	1.739	306.986	Below Link Crown	2.464	0 - 12:15 hrs	12.746	12.746	0.396	0.396	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-497	2.256	306.67	Below Link Crown	1.63	0 - 12:15 hrs	0	12.641	0	0.396	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-498	1.976	306.348	Below Link Crown	5.552	0 - 12:15 hrs	0	12.531	0	0.396	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-499	1.617	305.786	Below Link Crown	4.814	0 - 12:15 hrs	0	12.487	0	0.396	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-500	0.605	303.796	Below Link Crown	6.305	0 - 12:15 hrs	0	12.448	0	0.396	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-501	0.421	303.772	Below Link Crown	3.528	0 - 12:15 hrs	0	12.095	0	0.535	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-502	3.438	315.797	Below Link Crown	2.403	0 - 12:15 hrs	46.673	46.673	2.034	2.034	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-503	2.423	313.708	Below Link Crown	6.207	0 - 12:15 hrs	0	46.505	0	2.035	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-504	1.799	309.595	Below Link Crown	2.248	0 - 12:15 hrs	0	51.036	0	2.196	0.001	0	0	0	0	0	0	0 - 00:00 hrs

Table B-2a. Existing System Analysis - Nodes
5-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-505	1.057	309.659	Below Link Crown	6.363	0 - 12:15 hrs	4.948	4.948	0.162	0.162	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-506	5.891	277.155	Surcharged	-0.338	0 - 12:44 hrs	84.972	84.972	2.909	2.911	0	4.391	3.391	0	0.695	2.122	72.959	0 - 12:15 hrs
0203-507	5.617	270.117	Below Link Crown	6.498	0 - 13:41 hrs	74.332	262.972	2.864	41.179	0.013	0	0	0	0	0	0	0 - 00:00 hrs
0203-508	6.046	278.286	Below Link Crown	1.294	0 - 12:15 hrs	86.752	86.752	2.238	2.239	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-509	6.941	278.241	Below Link Crown	0.999	0 - 12:17 hrs	0	85.432	0	2.239	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-510	4.806	275.599	Surcharged	-0.34	0 - 13:10 hrs	171.447	171.447	7.617	7.621	0	6.634	1.806	0	1.443	3.312	119.329	0 - 12:15 hrs
0203-511	2.957	328.311	Below Maximum Depth	0.989	0 - 12:02 hrs	0	20.25	0	1.774	0	2.183	0.457	0.989	0	0	0	0 - 00:00 hrs
0203-512	1.525	325.684	Below Link Crown	4.567	0 - 12:03 hrs	0	19.927	0	1.778	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-513	3.63	332.71	Surcharged	0	0 - 12:02 hrs	0	20.338	0	1.774	0	2.198	1.63	0	0	0.001	0.443	0 - 12:02 hrs
0203-514	2.198	321.815	Below Link Crown	0.885	0 - 12:25 hrs	0	19.826	0	1.784	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-515	1.563	320.214	Below Link Crown	3.378	0 - 12:25 hrs	0	19.74	0	1.781	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-516	1.795	313.863	Below Link Crown	5.117	0 - 12:26 hrs	0	19.74	0	1.778	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-517	7.567	278.177	Below Link Crown	1.353	0 - 12:33 hrs	0	83.615	0	2.237	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-518	3.691	320.002	Surcharged	-0.202	0 - 12:18 hrs	61.062	61.062	2.117	2.118	0	1.48	1.291	0	0.11	0.703	24.725	0 - 12:15 hrs
0203-519	3.204	318.615	Below Link Crown	1.985	0 - 12:03 hrs	0	36.681	0	2.123	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-520	3.421	263.371	Below Link Crown	10.489	0 - 12:19 hrs	0	184.031	0	27.505	0.011	0	0	0	0	0	0	0 - 00:00 hrs
0203-521	4.357	322.157	Below Maximum Depth	1.987	0 - 12:30 hrs	0	35.851	0	3.103	0	3.189	0.857	1.987	0	0	0	0 - 00:00 hrs
0203-522	5.006	323.006	Below Maximum Depth	1.667	0 - 12:37 hrs	0	35.87	0	3.104	0.001	3.235	1.506	1.667	0	0	0	0 - 00:00 hrs
0203-523	5.937	324.437	Surcharged	-0.237	0 - 12:30 hrs	95.142	95.142	3.099	3.1	0	3.31	2.437	0	0.36	1.585	59.915	0 - 12:15 hrs
0203-524	5.498	323.748	Below Maximum Depth	0.152	0 - 12:37 hrs	0	35.887	0	3.105	0	3.28	1.998	0.152	0	0	0	0 - 00:00 hrs
0203-525	2.801	267.111	Below Link Crown	14.189	0 - 12:18 hrs	0	146.714	0	25.868	0.016	0	0	0	0	0	0	0 - 00:00 hrs
0203-526	3.938	321.484	Below Maximum Depth	1.516	0 - 12:30 hrs	0	35.842	0	3.101	0	3.174	0.438	1.516	0	0	0	0 - 00:00 hrs
0203-527	3.265	320.756	Below Link Crown	2.015	0 - 12:30 hrs	0	35.971	0	3.1	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-528	3.435	320.021	Below Link Crown	2.276	0 - 12:30 hrs	0	35.421	0	3.099	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-529	3.591	319.091	Below Link Crown	1.597	0 - 12:30 hrs	0	35.421	0	3.096	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-530	8.971	275.831	Below Link Crown	1.029	0 - 12:59 hrs	0	137.635	0	24.276	0.138	0	0	0	0	0	0	0 - 00:00 hrs
0203-531	11.877	324.611	Surcharged	0	0 - 12:04 hrs	47.322	47.322	1.468	1.468	0	0.515	9.377	0	0	0.001	3.741	0 - 12:04 hrs
0203-532	2.584	295.414	Below Link Crown	7.436	0 - 12:33 hrs	0	109.333	0	40.705	0.036	0	0	0	0	0	0	0 - 00:00 hrs
0203-533	1.985	302.575	Below Link Crown	2.865	0 - 13:22 hrs	0	90.722	0	17.163	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-534	3.239	306.71	Below Maximum Depth	2.497	0 - 12:34 hrs	0	21.976	0	4.653	0.001	2.253	0.239	2.497	0	0	0	0 - 00:00 hrs
0203-535	3.019	306.317	Below Maximum Depth	2.651	0 - 12:33 hrs	0	22.959	0	4.653	0	0.56	0.019	2.651	0	0	0	0 - 00:00 hrs
0203-536	8.355	305.526	Surcharged	-0.294	0 - 12:33 hrs	142.813	162.703	4.759	9.409	0.002	3.795	4.855	0	0.527	1.299	83.214	0 - 12:15 hrs
0203-537	4.817	301.988	Below Maximum Depth	3.835	0 - 12:03 hrs	0	83.739	0	9.408	0.002	2.599	0.817	3.835	0	0	0	0 - 00:00 hrs
0203-538	1.414	301.254	Below Link Crown	5.026	0 - 13:03 hrs	0	90.721	0	17.169	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-539	4.939	299.599	Below Maximum Depth	1.001	0 - 12:03 hrs	0	83.298	0	9.4	0.001	2.572	0.939	1.001	0	0	0	0 - 00:00 hrs
0203-540	5.354	296.344	Below Maximum Depth	1.206	0 - 12:03 hrs	0	80.119	0	9.406	0.001	2.735	1.314	1.206	0	0	0	0 - 00:00 hrs
0203-541	2.805	292.945	Below Link Crown	3.495	0 - 12:38 hrs	0	80.12	0	9.41	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-542	4.937	305.819	Below Maximum Depth	1.687	0 - 12:33 hrs	0	30.757	0	4.653	0.001	2.622	1.437	1.687	0	0	0	0 - 00:00 hrs
0203-543	5.553	290.013	Below Maximum Depth	1.127	0 - 13:21 hrs	0	80.108	0	9.401	0.001	2.697	1.553	1.127	0	0	0	0 - 00:00 hrs
0203-544	4.722	287.822	Below Maximum Depth	6.028	0 - 13:21 hrs	0	80.108	0	9.399	0.001	2.69	0.682	6.028	0	0	0	0 - 00:00 hrs
0203-545	4.386	284.364	Surcharged	-0.464	0 - 14:22 hrs	0	76.477	0	9.389	0.007	16.969	0.476	0	2.046	8.484	53.124	0 - 12:26 hrs
0203-546	4.208	284.158	Below Link Crown	2.912	0 - 14:15 hrs	0	35.333	0	9.379	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-547	4.212	298.922	Below Link Crown	3.878	0 - 12:15 hrs	0	93.659	0	17.11	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-548	4.135	284.055	Below Maximum Depth	3.225	0 - 14:08 hrs	0	34.334	0	9.377	0.002	13.681	0.245	3.225	0	0	0	0 - 00:00 hrs
0203-549	2.859	281.699	Below Link Crown	3.891	0 - 12:26 hrs	0	39.286	0	10.018	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-550	9.725	276.64	Below Link Crown	0.56	0 - 12:56 hrs	0	930.075	0	157.6	0.146	0	0	0	0	0	0	0 - 00:00 hrs
0203-551	2.16	277.61	Below Link Crown	4.89	0 - 12:18 hrs	0	55.333	0	1.687	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-552	5.686	278.746	Below Maximum Depth	2.104	0 - 12:55 hrs	0	25.923	0	4.046	0.002	7.703	2.676	2.104	0	0	0	0 - 00:00 hrs
0203-553	4	275.02	Below Link Crown	5.68	0 - 12:56 hrs	0	25.923	0	4.06	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-554	1.739	273.559	Below Link Crown	2.481	0 - 12:15 hrs	28.064	28.064	0.817	0.818	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-555	4.576	272.646	Below Link Crown	2.864	0 - 12:15 hrs	0	27.771	0	0.815	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-556	1.415	268.265	Below Link Crown	7.935	0 - 12:15 hrs	0	53.901	0	4.22	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-557	9.305	298.325	Below Link Crown	4.775	0 - 12:15 hrs	0	448.891	0	67.506	0.017	0	0	0	0	0	0	0 - 00:00 hrs
0203-558	5.743	267.145	Below Link Crown	13.985	0 - 12:57 hrs	49.842	1,024.76	1.216	170.095	0.067	0	0	0	0	0	0	0 - 00:00 hrs
0203-559	4.289	298.999	Below Link Crown	3.801	0 - 12:15 hrs	0	92.107	0	17.114	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-560	5.526	350.746	Surcharged	-0.096	0 - 12:21 hrs	487.55	487.55	18.067	18.076	0	0.868	0.946	0	0.35	0.417	124.811	0 - 12:15 hrs
0203-561	6.86	342.52	Below Maximum Depth	0	0 - 12:04 hrs	0	240.445	0	18.03	0.012	2.293	1.86	0	0.002	0.021	7.555	0 - 12:08 hrs
0203-562	6.567	332.567	Surcharged	-0.867	0 - 15:25 hrs	0	75.261	0	10.404	0.004	11.722	0.897	0	2.079	5.861	30.491	0 - 12:21 hrs
0203-563	6.415	334.484	Surcharged	-0.405	0 - 12:48 hrs	345.79	345.79	10.369	10.374	0	7.132	0.745	0	2.372	3.549	271.509	0 - 12:15 hrs
0203-564	4.938	346.038	Surcharged	-0.338	0 - 12:33 hrs	0	363.56	0	17.983	0.013	2.213	0.358	0	1.49	1.106	128.463	0 - 12:08 hrs
0203-565	1.863	335.243	Below Link Crown	4.267	0 - 12:34 hrs	0	239.873	0	18.028	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-566	4.653	334.013	Below Link Crown	3.127	0 - 12:10 hrs	0	239.58	0	18.028	0.047	0	0	0	0	0	0	0 - 00:00 hrs
0203-567	4.769	329.179	Below Link Crown	3.011	0 - 12:40 hrs	0	239.573	0	17.994	0.012	0	0	0	0	0	0	0 - 00:00 hrs
0203-568	5.578	327.248	Below Link Crown	2.692	0 - 12:15 hrs	0	239.539	0	17.987	0.019	0	0	0	0	0	0	0 - 00:00 hrs
0203-569	4.092	324.372	Below Link Crown	2.628	0 - 13:15 hrs	0	247.937	0	17.961	0.016	0	0	0	0	0	0	0 - 00:00 hrs
0203-570	6.2	324.16	Surcharged	-0.16	0 - 13:18 hrs	0	256.529	0	18.02	0.028	2.57	1.1	0	0.631	1.133	39.944	0 - 12:29 hrs
0203-571	7.743	320.403	Surcharged	-0.203	0 - 12:34 hrs	0	215.617	0	17.911	0.179	2.129	0.213	0	0.109	1.063	18.744	0 - 12:22 hrs
0203-572	9.494	320.104	Below Link Crown	0.596	0 - 12:30 hrs	0	220.948	0	17.851	0.154	0	0	0	0	0	0	0 - 00:00 hrs
0203-573	9.403	320.013	Below Link Crown	0.687	0 - 12:30 hrs	515.112	657.63	35.303	53.041	0.108	0	0	0	0	0	0	0 - 00:00 hrs
0203-574	8.642	319.252	Surcharged	-0.252	0 - 13:07 hrs	0	657.524	0	52.919	0.151	3.71	0.292	0	2.247	1.853	168.484	0 - 12:15 hrs
0203-575	6.937	317.547	Surcharged	-0.447	0 - 15:45 hrs	0	499.957	0	52.617	0.258	24.109	0.497	0	22.444	12.053	392.977	0 - 12:45 hrs
0203-576	1.642	310.132	Below Link Crown	11.568	0 - 15:47 hrs	0	109.333	0	41.447	0.108	0	0	0	0	0	0	0 - 00:00 hrs
0203-577	3.396	298.455	Below Link Crown	9.748	0 - 15:49 hrs	0	109.333	0	41.342	0.065	0	0	0	0	0	0	0 - 00:00 hrs
0203-578	2.52	297.65	Below Link Crown	10.623	0 - 15:55 hrs	0	109.333	0	41.278	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-579	4.371	297.219	Below Link Crown	12.501	0 - 15:56 hrs	0	109.332	0	41.172	0.223	0	0	0	0	0	0	0 - 00:00 hrs
0203-580	4.118	294.928	Below Link Crown	7.392	0 - 12:33 hrs	0	109.334	0	40.669	0.081	0	0	0	0	0	0	0 - 00:00 hrs
0203-581	6.779	299.429	Surcharged	-0.109	0 - 12:18 hrs	84.436	84.436	2.321	2.322	0	0.767	3.779	0	0.052	0.3	20.415	0 - 12:15 hrs
0203-582	3.272	294.532	Below Link Crown	6.668	0 - 12:30 hrs	0	109.338	0	40.588	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-583	6.365	294.485	Below Link Crown	5.415	0 - 12:30 hrs	0	111.267	0	40.558	0.054	0	0	0	0	0	0	0 - 00:00 hrs
0203-584	8.3	294.48	Below Link Crown	5.72	0 - 12:30 hrs	0	529.887	0	108.004	0.11	0	0	0	0	0	0	0 - 00:00 hrs
0203-585	8.194	294.334	Below Link Crown	5.166	0 - 12:30 hrs	0	524.238	0	107.895	0.054	0	0	0	0	0	0	0 - 00:00 hrs
0203-586	8.14	294.09	Below Link Crown	6.11	0 - 12:32 hrs	0	522.494	0	107.842	0.078	0	0	0	0	0	0	0 - 00:00 hrs
0203-587	8.858	293.478	Below Link Crown	5.322	0 - 12:33 hrs	0	521.439	0	107.764	0.121	0	0	0	0	0	0	0 - 00:00 hrs
0203-588	10.491	293.321	Below Link Crown	4.749	0 - 12:33 hrs	0	520.797	0	107.642	0.178	0	0	0	0	0	0	0 - 00:00 hrs

Table B-2a. Existing System Analysis - Nodes
5-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-589	7.757	292.817	Below Link Crown	8.583	0 - 12:37 hrs	0	520.241	0	107.462	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-590	1.774	327.704	Below Link Crown	2.696	0 - 15:26 hrs	0	49.706	0	10.363	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-591	2.658	323.708	Surcharged	-0.038	0 - 15:37 hrs	0	49.686	0	10.378	0.008	2.513	0.038	0	0.007	1.254	0.501	0 - 15:26 hrs
0203-592	3.827	294.357	Below Link Crown	2.473	0 - 12:25 hrs	0	65.709	0	2.338	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-593	1.17	317.35	Below Link Crown	2.45	0 - 15:37 hrs	0	49.247	0	10.367	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-594	3.816	312.746	Surcharged	-0.146	0 - 17:28 hrs	0	49.247	0	10.357	0.026	12.121	0.216	0	0.584	6.044	6.036	0 - 15:33 hrs
0203-595	2.86	310.85	Below Link Crown	0.25	0 - 17:29 hrs	0	43.553	0	10.329	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-596	1.877	308.237	Below Link Crown	1.263	0 - 17:30 hrs	0	43.553	0	10.321	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-597	2.875	300.405	Below Link Crown	4.295	0 - 17:31 hrs	0	43.553	0	10.313	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-598	2.455	299.365	Below Link Crown	4.635	0 - 12:15 hrs	0	43.553	0	10.307	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-599	5.142	299.172	Below Link Crown	4.118	0 - 12:15 hrs	0	43.553	0	10.307	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-600	7.173	298.873	Below Link Crown	1.987	0 - 12:14 hrs	371.717	480.034	12.327	67.537	0.018	0	0	0	0	0	0	0 - 00:00 hrs
0203-601	7.364	298.384	Below Link Crown	2.966	0 - 12:15 hrs	0	457.019	0	67.508	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-602	2.469	295.559	Below Link Crown	9.941	0 - 12:34 hrs	0	109.331	0	40.797	0.091	0	0	0	0	0	0	0 - 00:00 hrs
0203-603	4.978	309.718	Surcharged	-0.418	0 - 13:18 hrs	442.893	442.893	17.158	17.167	0	10.063	0.429	0	4.518	5.031	358.66	0 - 12:15 hrs
0203-604	4.471	308.516	Below Link Crown	0.083	0 - 13:18 hrs	0	90.723	0	17.13	-0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-605	3.874	307.904	Below Link Crown	0.696	0 - 13:18 hrs	0	90.722	0	17.137	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-606	2.579	304.579	Below Link Crown	2.021	0 - 13:19 hrs	0	90.722	0	17.144	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-607	1.929	303.679	Below Link Crown	1.521	0 - 13:19 hrs	0	90.722	0	17.153	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-608	1.566	299.706	Below Link Crown	4.664	0 - 12:15 hrs	0	90.733	0	17.163	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-609	4.105	299.135	Below Link Crown	4.095	0 - 12:15 hrs	0	90.695	0	17.148	0.016	0	0	0	0	0	0	0 - 00:00 hrs
0203-610	4.356	299.066	Below Link Crown	3.934	0 - 12:15 hrs	0	91.014	0	17.126	0.009	0	0	0	0	0	0	0 - 00:00 hrs
0203-611	9.759	292.109	Below Link Crown	5.391	0 - 12:42 hrs	0	669.466	0	116.552	0.103	0	0	0	0	0	0	0 - 00:00 hrs
0203-612	7.586	292.256	Below Link Crown	8.744	0 - 12:41 hrs	141.159	621.554	7.031	114.343	0.109	0	0	0	0	0	0	0 - 00:00 hrs
0203-613	9.294	291.034	Below Link Crown	4.566	0 - 12:53 hrs	0	662.833	0	116.408	0.133	0	0	0	0	0	0	0 - 00:00 hrs
0203-614	10.648	290.788	Below Link Crown	3.442	0 - 12:56 hrs	0	652.716	0	116.273	0.217	0	0	0	0	0	0	0 - 00:00 hrs
0203-615	10.369	290.509	Below Link Crown	6.291	0 - 12:59 hrs	0	639.064	0	116.056	0.277	0	0	0	0	0	0	0 - 00:00 hrs
0203-616	10.419	290.379	Below Link Crown	6.321	0 - 12:59 hrs	0	620.628	0	115.783	0.401	0	0	0	0	0	0	0 - 00:00 hrs
0203-617	10.033	290.163	Below Link Crown	2.037	0 - 13:00 hrs	0	649.238	0	122.088	0.489	0	0	0	0	0	0	0 - 00:00 hrs
0203-618	10.487	290.037	Below Link Crown	0.463	0 - 13:00 hrs	0	634.387	0	121.602	0.197	0	0	0	0	0	0	0 - 00:00 hrs
0203-619	10.864	289.864	Below Link Crown	0.936	0 - 13:00 hrs	0	631.67	0	121.408	0.243	0	0	0	0	0	0	0 - 00:00 hrs
0203-620	9.906	289.336	Below Link Crown	4.494	0 - 13:00 hrs	0	629.675	0	121.18	0.135	0	0	0	0	0	0	0 - 00:00 hrs
0203-621	8.986	291.486	Below Link Crown	6.134	0 - 12:49 hrs	0	665.398	0	116.447	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-622	9.535	289.255	Below Link Crown	4.575	0 - 13:00 hrs	52.803	644.592	2.074	123.122	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-623	5.125	284.675	Below Link Crown	2.225	0 - 12:59 hrs	0	753.469	0	131.405	0.076	0	0	0	0	0	0	0 - 00:00 hrs
0203-624	4.224	284.914	Below Maximum Depth	5.106	0 - 12:57 hrs	0	109.612	0	8.385	0.005	1.652	0.214	5.106	0	0	0	0 - 00:00 hrs
0203-625	6.642	290.302	Below Link Crown	4.598	0 - 12:48 hrs	0	137.697	0	8.356	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-626	6.04	293.71	Below Link Crown	0.49	0 - 12:15 hrs	79.879	166.97	2.384	8.406	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-627	3.184	296.514	Below Link Crown	3.266	0 - 13:07 hrs	0	52.83	0	3.759	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-628	3.899	282.619	Below Link Crown	3.481	0 - 12:59 hrs	0	767.658	0	133.301	0.054	0	0	0	0	0	0	0 - 00:00 hrs
0203-629	4.54	281.555	Below Link Crown	3.875	0 - 12:59 hrs	65.573	844.134	1.682	141.761	0.063	0	0	0	0	0	0	0 - 00:00 hrs
0203-630	8.063	281.139	Below Link Crown	4.361	0 - 13:00 hrs	0	842.321	0	141.704	0.3	0	0	0	0	0	0	0 - 00:00 hrs
0203-631	7.647	279.722	Below Link Crown	4.778	0 - 13:00 hrs	20.699	885.316	0.62	146.497	0.319	0	0	0	0	0	0	0 - 00:00 hrs
0203-632	6.498	278.388	Below Link Crown	5.612	0 - 12:59 hrs	0	885.248	0	146.178	0.173	0	0	0	0	0	0	0 - 00:00 hrs
0203-633	2.55	281.46	Below Link Crown	2.04	0 - 12:26 hrs	0	39.284	0	10.016	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-634	2.153	280.513	Below Link Crown	2.407	0 - 12:26 hrs	0	39.276	0	10.013	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-635	1.737	277.257	Below Link Crown	5.323	0 - 12:56 hrs	0	39.257	0	10.005	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-636	5.298	277.128	Below Link Crown	5.992	0 - 12:56 hrs	0	39.251	0	10.002	0.033	0	0	0	0	0	0	0 - 00:00 hrs
0203-637	4.346	277.116	Below Link Crown	6.984	0 - 12:56 hrs	0	919.759	0	155.969	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-638	10.696	276.416	Below Link Crown	6.584	0 - 12:55 hrs	0	930.384	0	157.507	0.174	0	0	0	0	0	0	0 - 00:00 hrs
0203-639	7.739	275.699	Below Link Crown	9.501	0 - 12:53 hrs	229.695	977.294	7.083	164.417	0.139	0	0	0	0	0	0	0 - 00:00 hrs
0203-640	6.275	274.355	Below Link Crown	7.125	0 - 12:55 hrs	0	977.105	0	164.234	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-641	7.02	272.92	Below Link Crown	6.38	0 - 12:56 hrs	0	976.863	0	164.1	0.206	0	0	0	0	0	0	0 - 00:00 hrs
0203-642	6.99	271.65	Below Link Crown	10.22	0 - 12:56 hrs	46.5	983.968	1.241	165.134	0.287	0	0	0	0	0	0	0 - 00:00 hrs
0203-643	4.591	269.301	Below Link Crown	12.699	0 - 12:56 hrs	0	983.822	0	164.844	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-644	6.413	266.133	Below Link Crown	15.617	0 - 12:59 hrs	0	1,024.64	0	170.026	0.134	0	0	0	0	0	0	0 - 00:00 hrs
0203-645	8.646	264.286	Below Link Crown	14.514	0 - 13:00 hrs	0	1,024.50	0	169.889	0.265	0	0	0	0	0	0	0 - 00:00 hrs
0203-646	7.111	263.321	Below Link Crown	15.979	0 - 13:00 hrs	0	1,024.34	0	169.627	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-647	2.914	279.928	Below Link Crown	2.056	0 - 12:15 hrs	0	58.296	0	1.692	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-648	2.722	280.292	Below Link Crown	2.308	0 - 12:15 hrs	37.078	37.078	1.071	1.072	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-649	2.059	280.209	Below Link Crown	3.941	0 - 12:15 hrs	22.573	22.573	0.619	0.62	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-650	4.577	286.997	Surcharged	-0.107	0 - 13:22 hrs	0	80.108	0	9.396	0.004	2.656	0.537	0	0.023	0.854	1.312	0 - 13:10 hrs
0203-651	4.16	283.96	Below Link Crown	2.18	0 - 14:03 hrs	0	33.446	0	9.376	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-652	6.853	315.081	Surcharged	-0.327	0 - 12:41 hrs	193.138	193.138	6.732	6.735	0	3.658	3.853	0	0.951	1.824	124.711	0 - 12:15 hrs
0203-653	6.29	308.94	Surcharged	0	0 - 12:00 hrs	0	72.757	0	6.76	0.002	3.641	2.79	0	0	0.001	8.385	0 - 12:00 hrs
0203-654	2.244	300.964	Below Link Crown	1.836	0 - 12:02 hrs	0	68.73	0	6.745	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-655	7.383	301.873	Surcharged	-0.593	0 - 16:01 hrs	0	150.382	0	28.721	0.016	10.383	1.383	0	0.324	4.894	13.431	0 - 12:22 hrs
0203-656	3.252	297.072	Below Link Crown	3.008	0 - 12:57 hrs	0	69.352	0	6.734	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-657	6.395	291.995	Surcharged	-0.294	0 - 12:41 hrs	0	164.9	0	8.486	0.015	2.342	2.535	0	0.277	1.071	58.174	0 - 13:14 hrs
0203-658	7.163	290.223	Below Link Crown	5.327	0 - 12:48 hrs	0	109.882	0	8.389	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-659	3.845	286.075	Below Link Crown	8.015	0 - 12:56 hrs	0	109.698	0	8.385	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-660	6.125	279.405	Surcharged	-0.405	0 - 12:55 hrs	135.028	135.028	4.065	4.067	0	7.712	3.125	0	1.017	3.806	109.527	0 - 12:15 hrs
0203-661	7.237	301.677	Surcharged	-0.327	0 - 16:05 hrs	0	146.79	0	28.727	0.015	10.376	1.237	0	0.165	4.45	5.52	0 - 12:37 hrs
0203-662	5.148	302.338	Surcharged	-0.258	0 - 12:33 hrs	0	89.561	0	3.781	0.003	2.075	1.648	0	0.278	1.032	37.656	0 - 12:11 hrs
0203-663	5.051	300.821	Below Maximum Depth	0.839	0 - 12:04 hrs	0	57.412	0	3.76	0	2.064	1.551	0.839	0	0	0	0 - 00:00 hrs
0203-664	4.504	298.804	Below Maximum Depth	2.166	0 - 12:04 hrs	0	52.83	0	3.76	0	2.089	1.004	2.166	0	0	0	0 - 00:00 hrs
0203-665	6.397	298.857	Below Maximum Depth	0.013	0 - 12:36 hrs	0	146.304	0	28.66	0.012	1.474	0.397	0.013	0	0	0	0 - 00:00 hrs
0203-666	7.583	304.213	Surcharged	-0.053	0 - 12:19 hrs	55.832	55.832	2.268	2.269	0	1.538	4.583	0	0.021	0.312	10.017	0 - 12:15 hrs
0203-667	6.602	301.842	Below Maximum Depth	1.108	0 - 12:29 hrs	0	45.945	0	2.257	0	1.538	3.332	1.108	0	0	0	0 - 00:00 hrs
0203-668	5.58	299.02	Surcharged	-0.29	0 - 12:29 hrs	0	45.945	0	2.251	0	1.614	2.4	0	0.095	0.763	11.031	0 - 12:11 hrs
0203-669	5.49	298.17	Surcharged	0	0 - 12:52 hrs	0	35.991	0	2.264	0.001	1.715	2.49	0	0	0	1.775	0 - 12:52 hrs
0203-670	3.557	296.047	Surcharged	-0.047	0 - 12:30 hrs	0	35.992	0	2.264	0.001	0.94	0.057	0	0	0.426	0.075	0 - 12:22 hrs
0203-671	6.104	288.704	Below Maximum Depth	6.846	0 - 12:49 hrs	0	109.699	0	8.388	0.001	2.466	1.604	6.846	0	0	0	0 - 00:00 hrs
0203-672	5.192	287.542	Below Maximum Depth	6.548	0 - 12:52 hrs	0	109.699	0	8.387	0.001	2.26	0.692	6.548	0	0	0	0 - 00:00 hrs

Table B-2a. Existing System Analysis - Nodes
5-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-673	6.31	298.71	Below Maximum Depth	0	0 - 12:10 hrs	0	184.859	0	28.734	0.012	1.3	0.31	0	0.799	0.432	184.856	0 - 12:15 hrs
0203-674	5.375	287.975	Below Maximum Depth	1.265	0 - 12:15 hrs	61.701	61.701	2.097	2.098	0	0.408	1.375	1.265	0	0	0	0 - 00:00 hrs
0203-675	4.327	286.807	Below Maximum Depth	1.963	0 - 12:15 hrs	0	61.703	0	2.098	0.008	0.099	0.327	1.963	0	0	0	0 - 00:00 hrs
0203-676	4.757	283.937	Below Link Crown	3.593	0 - 12:59 hrs	0	767.714	0	133.421	0.117	0	0	0	0	0	0	0 - 00:00 hrs
0203-677	6.85	298.78	Below Maximum Depth	0.2	0 - 12:15 hrs	0	146.37	0	28.002	0.03	1.76	0.85	0.2	0	0	0	0 - 00:00 hrs
0203-678	5.972	300.292	Surcharged	-0.262	0 - 12:36 hrs	143.298	143.298	5.315	5.317	0	2.597	2.472	0	0.505	1.297	77.355	0 - 12:15 hrs
0203-679	7.068	298.868	Below Link Crown	1.152	0 - 12:14 hrs	0	190.801	0	38.203	0.024	0	0	0	0	0	0	0 - 00:00 hrs
0203-680	5.145	291.028	Surcharged	-0.294	0 - 12:44 hrs	107.56	107.56	3.619	3.621	0	4.279	2.145	0	0.573	2.085	73.216	0 - 12:15 hrs
0203-681	4.572	289.382	Below Maximum Depth	3.068	0 - 12:47 hrs	0	39.504	0	3.618	-0.003	4.176	1.242	3.068	0	0	0	0 - 00:00 hrs
0203-682	4.806	287.806	Below Maximum Depth	0.514	0 - 12:47 hrs	0	39.052	0	3.615	0	3.924	0.806	0.514	0	0	0	0 - 00:00 hrs
0203-683	4.569	287.459	Below Maximum Depth	0.791	0 - 12:48 hrs	0	38.49	0	3.615	0	3.819	0.569	0.791	0	0	0	0 - 00:00 hrs
0203-684	5.221	287.061	Below Maximum Depth	0.909	0 - 12:48 hrs	0	37.646	0	3.615	0.001	4.038	1.221	0.909	0	0	0	0 - 00:00 hrs
0203-685	6.109	286.549	Below Maximum Depth	0.962	0 - 12:53 hrs	0	35.489	0	3.618	0.002	4.19	1.609	0.962	0	0	0	0 - 00:00 hrs
0203-686	6.165	286.329	Below Maximum Depth	0.766	0 - 12:52 hrs	0	35.451	0	3.616	0.001	4.231	1.665	0.766	0	0	0	0 - 00:00 hrs
0203-687	5.931	286.095	Below Link Crown	1.39	0 - 12:51 hrs	0	35.436	0	3.615	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-688	4.058	285.129	Below Maximum Depth	0.539	0 - 12:15 hrs	36.771	36.771	1.147	1.148	0	0.43	1.058	0.539	0	0	0	0 - 00:00 hrs
0203-689	2.128	283.161	Below Link Crown	2.502	0 - 12:15 hrs	0	36.784	0	1.148	0.014	0	0	0	0	0	0	0 - 00:00 hrs

Table B-2b. Existing System Analysis - Pipes/Channels
5-year, 24-hour Events

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-001-022	3.883	345.652	0.807	127.567	Free Surface	0 - 12:52 hrs	7.357	7.36	0.369	0.787	218.085	24.752	6.648	0	0	9.002	0	0	0
0203-002-001	3	68.703	1.061	32.282	Backwater	0 - 12:15 hrs	4.567	4.567	0.47	1	36.421	0.753	3	6.46	6.46	19.536	0	0	1
0203-003-051	7.47	1,836.26	1.173	149.576	Free Surface	0 - 12:12 hrs	1.22	4.01	0.081	0.965	1,686.68	24.296	31.035	0	0	1.576	0	0	0
0203-004-003	3.5	70.599	0.717	152.367	Exceeds Capacity	0 - 12:12 hrs	7.26	7.438	2.158	1	-81.768	24.296	6	5.066	5.536	5.066	5.497	5.066	0
0203-005-041	4	336.322	0.564	164.967	Backwater	0 - 12:17 hrs	6.443	6.443	0.491	1	171.355	18.002	7.413	4.543	4.938	4.543	0	4.543	0
0203-006-005	4.17	340.431	0.535	71.097	Backwater	0 - 16:45 hrs	2.808	2.985	0.209	1	269.334	9.787	7.017	4.068	4.068	4.856	0	0	0
0203-007-040	3.06	227.444	0.761	86.591	Free Surface	0 - 14:03 hrs	5.628	5.841	0.381	0.911	140.852	9.802	6.335	0	1.848	0	0	0	0
0203-008-007	3.75	289.554	0.703	86.589	Free Surface	0 - 14:03 hrs	4.412	4.412	0.299	0.927	202.964	9.799	6.172	0	0.602	0	0	0	0
0203-009-467	4.08	204.974	0.478	65.186	Backwater	0 - 17:01 hrs	3.494	3.524	0.318	1	139.788	9.821	5.474	5.06	5.139	5.06	0	4.348	0
0203-010-008	3.5	155.722	0.302	86.589	Backwater	0 - 14:03 hrs	3.806	3.806	0.556	1	69.132	9.796	6.5	2.536	2.6	2.536	0	2.536	0
0203-011-039	3.82	361.971	0.957	86.595	Free Surface	0 - 14:02 hrs	5.474	5.67	0.239	0.711	275.376	9.797	6.19	0	0	0	0	0	0
0203-012-011	3.4	179.651	0.437	86.596	Free Surface	0 - 14:02 hrs	4.276	4.276	0.482	0.916	93.055	9.802	6.5	0	0.83	0	0	0	0
0203-013-012	3	215.243	0.901	86.596	Backwater	0 - 14:00 hrs	4.441	4.441	0.402	1	128.647	9.805	6.5	2.578	2.587	2.579	0	2.575	0
0203-014-017	5.5	200.833	0.358	101.973	Backwater	0 - 12:26 hrs	4.306	4.307	0.508	1	98.861	9.824	5.48	1.033	1.963	1.033	0	1.033	0
0203-015-014	5.5	584.361	3.028	101.975	Free Surface	0 - 12:26 hrs	4.344	4.416	0.175	0.976	482.386	9.83	5.498	0	0	1.963	0	0	0
0203-016-025	3.5	86.614	0.741	62.114	Backwater	0 - 12:17 hrs	6.456	6.456	0.717	1	24.5	4.887	3.499	1.577	1.577	1.603	0	1.536	0
0203-017-018	4.035	221.445	0.332	101.928	Backwater	0 - 12:26 hrs	4.475	4.475	0.46	1	119.516	9.792	6.73	2.407	2.425	2.485	0	2.025	0
0203-018-472	4.035	202.107	0.276	94.217	Backwater	0 - 13:11 hrs	4.136	4.136	0.466	1	107.889	9.817	6.73	2.263	2.485	2.365	0	2.185	0
0203-019-020	3	95.745	2.061	40.832	Backwater	0 - 13:18 hrs	5.777	5.777	0.426	1	54.912	2.233	2.999	1.488	1.488	1.496	0	0.171	0
0203-020-021	3	3.682	0.003	40.486	Exceeds Capacity	0 - 13:18 hrs	5.728	5.728	10.995	1	-36.804	2.221	2.999	1.488	1.496	1.488	4.314	1.487	0
0203-021-023	3	55.487	0.692	39.908	Backwater	0 - 13:18 hrs	5.646	5.646	0.719	1	15.579	2.211	2.988	1.488	1.49	1.516	0	0.188	0
0203-022-525	10.92	4,890.27	0.824	146.714	Free Surface	0 - 12:15 hrs	3.581	3.617	0.03	0.23	4,743.55	25.868	24.534	0	0	0	0	0	0
0203-023-024	3	58.562	0.771	53.215	Backwater	0 - 12:47 hrs	7.528	7.528	0.909	1	5.347	2.203	2.991	1.339	1.526	1.339	0	0.794	0
0203-024-016	3	80.465	1.455	62.114	Backwater	0 - 12:17 hrs	8.787	8.787	0.772	1	18.351	4.892	2.993	1.523	1.523	1.546	0	1.372	0
0203-025-026	3.5	111.064	1.219	62.906	Backwater	0 - 12:03 hrs	6.806	7.329	0.566	1	48.159	4.879	3.499	1.233	1.603	1.233	0	1.233	0
0203-026-027	3.5	99.78	0.984	59.203	Backwater	0 - 12:47 hrs	6.153	6.752	0.593	1	40.577	4.889	3.498	1.234	1.234	1.538	0	0	0
0203-027-028	4	133.8	0.868	59.203	Backwater	0 - 12:47 hrs	4.711	5.325	0.442	1	74.597	4.886	3.99	1.317	1.347	1.317	0	1.317	0
0203-028-029	4.5	158.864	0.653	62.377	Backwater	0 - 13:22 hrs	4.06	4.376	0.393	1	96.487	4.894	4.5	1.259	1.259	1.53	0	0	0
0203-029-030	4.5	85.729	0.19	79.093	Backwater	0 - 13:10 hrs	4.973	4.973	0.923	1	6.636	4.856	4.394	1.395	1.53	1.395	0	1.142	0
0203-030-037	7.66	386.522	0.309	79.212	Free Surface	0 - 13:10 hrs	2.813	2.864	0.205	0.952	307.309	4.851	5.317	0	0	0.182	0	0	0
0203-031-022	4.5	22.455	0.013	38.955	Free Surface	0 - 12:15 hrs	3.889	3.889	1.735	0.603	-16.501	1.133	4.5	0	0	0	0.292	0	0
0203-032-033	2.5	83.636	4.158	38.751	Free Surface	0 - 12:18 hrs	9.962	9.962	0.463	0.739	44.886	1.662	2.5	0	0.637	0	0	0	0
0203-033-520	8.14	2,355.24	0.771	184.031	Free Surface	0 - 12:18 hrs	3.507	3.512	0.078	0.389	2,171.21	27.505	28.414	0	0	0	0	0	0
0203-034-009	4.08	269.154	0.824	64.613	Backwater	0 - 17:05 hrs	3.395	3.395	0.24	1	204.54	9.828	5.474	5.114	5.114	5.139	0	0	0
0203-035-010	5.391	1,184.67	3.322	86.591	Free Surface	0 - 14:03 hrs	4.697	5.318	0.073	0.585	1,098.07	9.792	6.423	0	0	0	0	0	0
0203-036-035	5.33	290.679	2.466	86.596	Free Surface	0 - 14:03 hrs	5.703	5.939	0.298	0.506	204.083	9.796	6.131	0	0	0	0	0	0
0203-037-038	3.923	268.973	0.973	153.563	Backwater	0 - 12:15 hrs	8.58	8.58	0.571	1	115.41	9.798	5.364	1.968	1.968	1.991	0	1.416	0
0203-038-015	5	322.127	1.53	101.999	Backwater	0 - 12:26 hrs	5.203	5.86	0.317	1	220.128	9.837	4.988	1.061	1.902	1.061	0	1.061	0
0203-039-036	3.883	682.362	3.144	86.595	Free Surface	0 - 14:02 hrs	4.962	4.962	0.127	0.78	595.767	9.797	6.433	0	0	0	0	0	0
0203-040-034	3.98	279.318	0.963	86.557	Free Surface	0 - 14:04 hrs	6.175	6.19	0.31	0.816	192.761	9.808	5.697	0	0	5.121	0	0	0
0203-041-042	4.06	499.996	0.664	114.719	Backwater	0 - 12:03 hrs	3.663	4.432	0.229	1	385.278	18.009	10.421	4.466	4.503	4.623	0	0.081	0
0203-042-043	4.16	563.61	1.528	112.844	Backwater	0 - 12:03 hrs	4.465	4.738	0.2	1	450.766	17.986	6.861	4.594	4.594	5.221	0	0	0
0203-043-044	8.63	2,960.15	2.046	109.54	Free Surface	0 - 12:03 hrs	1.413	1.812	0.037	0.76	2,850.61	17.98	33.924	0	0	0	0	0	0
0203-044-045	8.63	367.618	0.032	103.688	Free Surface	0 - 12:04 hrs	1.296	1.747	0.282	0.779	263.93	17.972	34.654	0	0	0	0	0	0
0203-045-046	10.92	3,308.14	0.377	100.663	Free Surface	0 - 15:15 hrs	0.59	0.963	0.03	0.647	3,207.47	17.961	47.087	0	0	0	0	0	0
0203-046-047	16.9	4,107.02	0.223	101.482	Free Surface	0 - 15:14 hrs	0.991	1.476	0.025	0.418	4,005.54	17.923	30.078	0	0	0	0	0	0
0203-047-048	8.14	1,396.26	0.271	102.357	Free Surface	0 - 15:10 hrs	0.635	1.107	0.073	0.856	1,293.90	17.909	48.654	0	0	0	0	0	0
0203-048-049	7.17	1,567.97	0.556	106.491	Backwater	0 - 14:41 hrs	0.553	0.706	0.068	1	1,461.48	20.133	40.93	0.684	0.684	2.378	0	0	0
0203-049-050	8.06	304.652	0.023	106.865	Free Surface	0 - 14:40 hrs	0.659	0.788	0.351	0.965	197.787	20.119	37.64	0	0	0	0	0	0
0203-050-004	8.06	279.054	0.019	107.333	Free Surface	0 - 14:40 hrs	0.662	0.785	0.385	0.967	171.721	20.101	37.676	0	0	0	0	0	0
0203-051-530	9.53	1,383.85	0.423	137.635	Free Surface	0 - 12:17 hrs	1.034	1.342	0.099	0.874	1,246.22	24.276	26.445	0	0	0	0	0	0
0203-052-053	3	63.59	0.909	20.981	Backwater	0 - 12:15 hrs	2.968	3.194	0.33	1	42.608	0.605	2.913	0.468	0.468	0.47	0	0.001	0
0203-053-054	3	48.022	0.518	20.986	Backwater	0 - 12:15 hrs	2.969	3.619	0.437	1	27.036	0.605	2.89	0.47	0.474	0.47	0	0.25	1
0203-054-055	3	84.505	1.605	20.995	Backwater	0 - 12:15 hrs	2.97	3.152	0.248	1	63.51	0.593	2.879	0.47	0.47	0.534	0	0.001	0
0203-055-056	3.5	168.299	2.798	43.992	Backwater	0 - 12:11 hrs	4.572	5.265	0.261	1	124.306	2.037	3.484	0.517	0.517	0.543	0	0	0
0203-056-057	3.5	83.517	0.689	43.991	Backwater	0 - 12:11 hrs	4.572	4.572	0.527	1	39.526	2.042	3.498	0.543	0.551	0.568	0	0.473	0
0203-057-058	3	74.237	1.239	43.761	Backwater	0 - 12:36 hrs	6.191	6.191	0.589	1	30.476	2.188	3	0.613	0.618	0.624	0	0.588	0
0203-058-238	3.5	90.882	0.816	50.357	Backwater	0 - 12:06 hrs	5.234	5.234	0.554	1	40.525	2.465	3.491	0.573	0.573	0.754	0	0.03	0
0203-059-058	3	54.649	0.671	9.074	Backwater	0 - 12:03 hrs	1.284	3.082	0.166	1	45.575	0.271	3	0.529	0.529	0.573	0	0.001	1
0203-060-061	3.5	142.302	2.001	35.387	Free Surface	0 - 12:41 hrs	6.889	6.889	0.249	0.756	106.914	3.095	3.499	0	0	0	0	0	0
0203-061-238	3.5	172.123	2.927	37.287	Free Surface	0 - 12:36 hrs	5.129	6.169	0.217	0.925	134.836	3.094	3.499	0	0	0.754	0	0	0
0203-062-063	5	162.88	0.391	100.521	Backwater	0 - 12:07 hrs	5.128	5.14	0.617	1	62.359	6.437	4.998	0.46	0.49	0.46	0	0.46	0
0203-063-064	5	130.257	0.25	99.033	Backwater	0 - 12:08 hrs	5.098	5.488	0.76	1	31.225	6.427	5	0.253	0.491	0.253	0	0.253	0
0203-064-065	5	183.236	0.495	98.101	Backwater	0 - 12:15 hrs	4.996	4.996	0.535	1	85.135	6.43	5	0.34	0.34	0.592	0	0	0
0203-065-066	5	159.984	0.377	98.099	Backwater	0 - 12:15 hrs	4.996	4.996	0.613	1	61.884	6.428	4.999	0.21	0.592	0.21	0	0.21	0
0203-066-067	5	161.359	0.384	98.102	Free Surface	0 - 12:15 hrs	5.124	5.132	0.608	0.94	63.258	6.427	4.996	0	0.21	0	0	0	0
0203-067-239	5	206.753	0.63	97.813	Free Surface	0 - 12:15 hrs	5.467	5.614	0.473	0.863	108.94	6.427	4.99	0	0	0	0	0	0
0203-068-215	3.066	1,149.61	20.197	16.222	Free Surface	0 - 12:15 hrs	5.847	5.849	0.014	0.234	1,133.39	0.461	7.682	0	0	0	0	0	0
0203-069-068	2	25.455	1.266	16.22	Free Surface	0 - 12:15 hrs	4.732	4.732	0.319	0.536	9.236	0.461	1.995	0	0	0	0	0	0
0203-070-325	12.854	4,967.02	0.992	197.398	Free Surface	0 - 12:21 hrs	2.427	2.469	0.04	0.334	4,769.62	18.42	24.073	0	0	0	0	0	0
0203-071-060	3.5	187.895	3.488	35.465	Free Surface	0 - 12:37 hrs	5.331	5.617	0.189	0.675	152.43	3.095	3.5	0	0	0	0	0	0
0203-072-228	4.5	186.529	0.9	9.793	Free Surface	0 - 12:10 hrs	1.001	2.826	0.053	0.658	176.737	0.354	4.492	0	0	0	0	0	0
0203-073-074	4.5	4.183	0	17.684	Free Surface	0 - 12:10 hrs	1.198	2.046	4.228	0.898	-13.501	0.368	4.445	0	0	0	0.477	0	0
0203-074-075	4.5	221.385	1.267	24.841	Free Surface	0 - 12:52 hrs	1.79	3.664	0.112	0.927	196.544	0.368	4.455	0	0	0	0	0	0
0203-075-076	4.5	325.803	2.745	29.702	Backwater	0 - 12:52 hrs	1.869	3.486	0.091	1	296.101	0.368	4.314	0.739	0.74	0.797	0	0.002	0
0203-076-078	3.5	68.953	0.47	45.686	Backwater	0 - 12:23 hrs	4.749	4.749	0.663	1	23.266	3.832	3.5	0.943	0.981	0.943	0	0.943	2
0203-077-073	4.5	160.442	0.666	14.488	Free Surface	0 - 12:10 hrs	1.064	2.429	0.09	0.845	145.954	0.368	4.498	0	0	0	0	0	0
0203-078-079	3.5	93.392	0.862	45.686	Backwater	0 - 12:23 hrs	4.749	4.749	0.489	1	47.706	3.834	3.499	0.943	0.943	1.002	0	0	2
0203-079-080	3.5	54.172	0.29	45.686	Backwater	0 - 12:23 hrs	4.749	4.749	0.843	1	8.486	3.836	3.5	0.953	1.002	0.953	0	0.953	3
0203-080-081	3.5	87.521	0.757	45.686	Backwater	0 - 12:23 hrs	4.749	4.749	0.522	1	41.835	3.838	3.5	0.953	0.953	1.041	0	0.002	1
0203-081-082	3.5	69.53	0.478	45.686	Backwater	0 - 12:23 hrs	4.749	4.749	0.657	1	23.844	3.838	3.5	0.971	1.043	0.971	0	0.971	3
0203-082-083	3.5	6.926	0.005	45.686	Exceeds Capacity	0 - 12:23 hrs	4.749	4.749	6.596	1	-38.76	3.838	3.5	0.772	0.976	0.772	5.504	0.772	3
0203-083-084	4	131.346	0.836	45.689	Free Surface	0 - 12:23 hrs	3.656	4.027	0.348	0.98	85.657	3.838	3.999	0	0	0.772	0	0	0
0203-084-256	4	101.062	0.495	45.69	Backwater	0 - 12:23 hrs	3.636	3.636	0.452	1	55.373	3.838	4	0.806	0.808	0.81	0	0.796	0
0203-085-086	4	70.749	0.243	45.706	Free Surface	0 - 12:22 hrs	4.368	4.406	0.646	0.795	25.043	3.835	4	0	0	0	0	0	0
0203-086-087	4	154.972	1.164	45.961	Free Surface	0 - 12:19 hrs	4.501	4.723	0.297	0.795	109.011	3.833	4	0	0	0	0	0	0
0203-087-092	4.5	84.096	0.183	47.372	Free Surface	0 - 12:15 hrs	3.842	3.896	0.563	0.724	36.723	3.986	4.5	0	0	0	0	0	0

Table B-2b. Existing System Analysis - Pipes/Channels
5-year, 24-hour Events

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-088-089	3	82.098	1.515	28.214	Free Surface	0 - 12:15 hrs	6.045	6.286	0.344	0.627	53.884	1	2.998	0	0	0	0	0	0
0203-089-090	3	60.036	0.81	28.017	Free Surface	0 - 12:15 hrs	4.968	4.97	0.467	0.744	32.019	0.999	3	0	0	0	0	0	0
0203-090-091	3	65.069	0.952	27.841	Free Surface	0 - 12:15 hrs	5.511	5.793	0.428	0.672	37.228	0.999	2.993	0	0	0	0	0	0
0203-091-087	3	88.207	1.749	7.089	Free Surface	0 - 12:52 hrs	1.398	2.881	0.08	0.841	81.118	0.155	3	0	0	0.066	0	0	0
0203-091-093	3	49.976	0.561	25.706	Free Surface	0 - 12:15 hrs	4.862	5.096	0.514	0.701	24.271	0.842	2.998	0	0	0	0	0	0
0203-092-094	5	130.84	0.252	47.303	Free Surface	0 - 12:15 hrs	4.834	4.921	0.362	0.499	83.537	3.978	5	0	0	0	0	0	0
0203-093-094	3	32.421	0.236	25.563	Free Surface	0 - 12:15 hrs	3.932	3.934	0.788	0.867	6.859	0.843	2.999	0	0	0	0	0	0
0203-094-338	2.97	136.306	0.132	71.263	Free Surface	0 - 12:17 hrs	1.649	1.762	0.523	0.759	65.042	4.824	27.698	0	0	0	0	0	0
0203-095-096	3.5	90.975	0.818	53.789	Backwater	0 - 12:00 hrs	5.596	5.596	0.591	1	37.185	7.602	3.486	3.314	3.318	3.315	0	3.313	5
0203-096-097	3.5	101.427	1.016	53.708	Backwater	0 - 12:00 hrs	5.582	5.582	0.53	1	47.719	7.622	3.475	3.317	3.317	3.345	0	3.313	5
0203-097-098	4	103.324	0.517	53.235	Backwater	0 - 12:00 hrs	4.267	4.269	0.515	1	50.089	7.622	3.98	3.281	3.308	3.281	0	3.281	0
0203-098-099	4	97.211	0.458	52.668	Free Surface	0 - 13:10 hrs	4.21	4.357	0.542	0.981	44.543	7.62	4	0	3.294	0	0	0	0
0203-099-100	4	100.312	0.488	52.668	Free Surface	0 - 13:10 hrs	4.216	4.271	0.525	0.977	47.645	7.619	3.997	0	0	0	0	0	0
0203-100-101	4	83.923	0.341	52.668	Free Surface	0 - 13:11 hrs	4.333	4.333	0.628	0.927	31.255	7.617	3.998	0	0	0	0	0	0
0203-101-102	5	90.752	1.15	52.668	Free Surface	0 - 13:11 hrs	4.042	4.081	0.58	0.63	38.085	7.614	4.99	0	0	0	0	0	0
0203-102-103	5	185.211	0.506	52.667	Free Surface	0 - 13:11 hrs	4.339	4.463	0.284	0.593	132.543	7.612	4.996	0	0	0	0	0	0
0203-103-104	5	159.475	0.375	52.667	Free Surface	0 - 13:12 hrs	4.411	4.495	0.33	0.586	106.808	7.61	4.984	0	0	0	0	0	0
0203-104-341	5.5	207.433	0.382	52.663	Free Surface	0 - 13:12 hrs	4.217	4.321	0.254	0.527	154.77	7.605	5.499	0	0	0	0	0	0
0203-105-106	2	30.06	1.766	17.494	Backwater	0 - 13:26 hrs	5.569	5.589	0.582	1	12.566	1.663	1.983	1.48	2.199	1.48	0	1.48	0
0203-106-336	2	28.691	1.609	17.496	Backwater	0 - 13:26 hrs	5.571	5.67	0.61	1	11.195	1.661	1.953	1.278	1.48	1.285	0	0.129	1
0203-107-108	2	28.341	1.57	17.529	Backwater	0 - 13:19 hrs	5.624	6.327	0.618	1	10.813	1.658	2	1.174	2.079	1.174	0	0.222	2
0203-108-353	2.5	51.358	1.568	17.594	Backwater	0 - 13:21 hrs	3.858	4.16	0.343	1	33.764	1.665	2.499	0.995	0.995	4.939	0	0	0
0203-109-001	13.779	15,450.54	0.802	333.543	Free Surface	0 - 12:47 hrs	3.509	3.509	0.022	0.141	15,116.99	34.864	59.698	0	0	0	0	0	0
0203-110-109	16.67	43,091.18	5.225	333.553	Free Surface	0 - 12:47 hrs	5.97	5.97	0.008	0.152	42,757.63	34.87	37.911	0	0	0	0	0	0
0203-111-110	16.67	32,295.05	2.935	333.563	Free Surface	0 - 12:47 hrs	5.302	5.302	0.01	0.163	31,961.49	34.871	38.891	0	0	0	0	0	0
0203-112-218	7.321	243.809	0.423	239.347	Free Surface	0 - 13:27 hrs	5.299	5.416	0.982	0.898	4.462	28.007	8.101	0	1.707	0	0	0	0
0203-113-357	8.464	406.283	0.082	300.615	Backwater	0 - 12:22 hrs	4.841	4.841	0.74	1	105.668	25.637	8.717	0.989	1.038	0.989	0	0.989	0
0203-114-355	6.954	1,349.50	0.794	259.169	Free Surface	0 - 12:22 hrs	5.378	5.675	0.192	0.761	1,090.33	22.618	10.034	0	0	0	0	0	0
0203-115-353	7.03	1,566.16	1.225	244.214	Free Surface	0 - 12:19 hrs	4.379	4.379	0.156	0.914	1,321.94	20.969	9.585	0	0	0.354	0	0	0
0203-116-115	9.15	3,747.00	0.711	246.475	Free Surface	0 - 12:18 hrs	3.175	3.621	0.066	0.67	3,500.53	20.987	18.834	0	0	0	0	0	0
0203-117-116	6.945	921.659	0.399	252.358	Free Surface	0 - 12:17 hrs	5.694	5.978	0.274	0.725	669.301	20.999	9.604	0	0	0	0	0	0
0203-118-372	8.563	803.823	0.95	198.604	Free Surface	0 - 14:23 hrs	2.651	4.545	0.247	0.885	605.219	39.637	17.485	0	0	0	0	0	0
0203-119-366	7.336	447.07	0.386	115.807	Free Surface	0 - 13:47 hrs	1.892	3.664	0.259	0.872	331.263	20.58	21.976	0	0	1.621	0	0	0
0203-120-003	22.5	12,809.94	0.912	235.53	Free Surface	0 - 12:30 hrs	5.481	5.481	0.018	0.234	12,574.41	10.185	16.315	0	0	0	0	0	0
0203-121-120	17.772	22,770.23	2.632	235.607	Free Surface	0 - 12:29 hrs	2.618	2.663	0.01	0.268	22,534.62	10.188	31.829	0	0	0	0	0	0
0203-122-392	17.772	3,239.21	0.053	235.842	Free Surface	0 - 12:27 hrs	2.967	2.969	0.073	0.249	3,003.37	10.193	30.406	0	0	0	0	0	0
0203-123-122	20	2,602.91	0.05	235.921	Free Surface	0 - 12:27 hrs	2.717	2.718	0.091	0.241	2,366.99	10.207	18	0	0	0	0	0	0
0203-124-391	6.887	1,318.52	1.785	236.1	Free Surface	0 - 12:26 hrs	3.139	3.167	0.179	0.796	1,082.42	10.22	25.32	0	0	0	0	0	0
0203-125-124	6.724	2,774.56	11.136	69.995	Free Surface	0 - 12:27 hrs	2.378	2.378	0.025	0.528	2,704.57	1.738	16.546	0	0	0	0	0	0
0203-126-125	6.174	1,373.44	3.659	69.999	Free Surface	0 - 12:27 hrs	5.415	5.416	0.051	0.368	1,303.44	1.739	11.337	0	0	0	0	0	0
0203-127-126	4.532	720.569	2.378	70.041	Free Surface	0 - 12:26 hrs	3.386	3.388	0.097	0.522	650.528	1.74	17.409	0	0	0	0	0	0
0203-128-127	2.699	140.425	0.406	70.238	Free Surface	0 - 12:26 hrs	2.531	2.532	0.5	0.757	70.186	1.744	27.314	0	0	0	0	0	0
0203-128-129	4.861	7.073	0	48.319	Free Surface	0 - 12:11 hrs	1.074	1.225	6.831	0.89	-41.246	1.789	23.06	0	0	2.025	0	0	0
0203-129-342	4.861	498.481	0.673	30.469	Free Surface	0 - 14:45 hrs	0.8	1.854	0.061	0.947	468.012	3.066	24.715	0	0	2.126	0	0	0
0203-130-124	7.936	627.086	0.675	168.843	Free Surface	0 - 12:22 hrs	3.676	4.049	0.269	0.67	458.243	8.484	15.217	0	0	0	0	0	0
0203-131-130	7.259	399.334	0.298	169.77	Free Surface	0 - 12:21 hrs	3.298	3.365	0.425	0.753	229.565	8.487	18.966	0	0	0	0	0	0
0203-132-131	8.018	540.547	0.563	170.966	Free Surface	0 - 12:18 hrs	3.865	3.888	0.316	0.68	369.582	8.494	14.815	0	0	0	0	0	0
0203-133-132	6.815	448.438	0.712	171.389	Free Surface	0 - 12:17 hrs	4.178	4.2	0.382	0.764	277.049	8.498	15.739	0	0	0	0	0	0
0203-134-328	4.533	193.541	0.93	118.702	Backwater	0 - 12:40 hrs	3.5	3.5	0.613	1	74.839	5.264	13.642	0.469	0.469	0.552	0	0	0
0203-135-005	9.15	3,341.27	2.172	92.166	Free Surface	0 - 13:00 hrs	13.666	13.666	0.028	0.205	3,249.10	3.188	10.974	0	0	0	0	0	2
0203-136-437	5.947	17.321	0	52.197	Free Surface	0 - 12:36 hrs	2.239	2.249	3.013	0.392	-34.876	3.129	17.439	0	0	0	1.596	0	0
0203-137-136	6.797	23.695	0	52.673	Free Surface	0 - 12:33 hrs	1.104	1.11	2.223	0.462	-28.979	3.145	27.333	0	0	0	1.172	0	0
0203-138-137	6.268	600.479	0.087	59.805	Free Surface	0 - 12:22 hrs	0.995	1.085	0.1	0.493	540.674	3.178	39.538	0	0	0	0	0	0
0203-139-432	4.941	1,402.11	2.904	15.942	Free Surface	0 - 12:25 hrs	0.264	1.225	0.011	0.733	1,386.17	0.555	26.728	0	0	0	0	0	0
0203-140-139	9.026	1,769.19	0.482	14.861	Free Surface	0 - 12:25 hrs	0.419	1.801	0.008	0.351	1,754.33	0.555	23.828	0	0	0	0	0	0
0203-141-140	8.612	1,878.86	0.563	14.066	Free Surface	0 - 12:17 hrs	0.436	1.158	0.007	0.318	1,864.79	0.557	22.551	0	0	0	0	0	0
0203-142-141	6.92	832.122	0.288	19.573	Free Surface	0 - 12:15 hrs	1.191	1.563	0.024	0.263	812.549	0.56	15.958	0	0	0	0	0	0
0203-143-004	17.323	21,642.13	0.992	262.896	Free Surface	0 - 13:53 hrs	3.355	3.355	0.012	0.081	21,379.23	40.849	63.811	0	0	0	0	0	0
0203-144-143	19	992.533	0	262.897	Free Surface	0 - 13:52 hrs	2.333	2.333	0.265	0.091	729.636	40.88	65	0	0	0	0	0	0
0203-145-144	18.74	4,051.12	0.094	262.9	Free Surface	0 - 13:52 hrs	4.741	4.741	0.065	0.226	3,788.22	40.912	26.16	0	0	0	0	0	0
0203-146-145	10.21	90.41	0.001	262.899	Free Surface	0 - 13:51 hrs	1.963	1.963	2.908	0.656	-172.489	40.946	37.559	0	0	0	5.186	0	0
0203-147-146	9.691	2,334.74	0.658	262.9	Free Surface	0 - 13:51 hrs	1.919	1.919	0.113	0.702	2,071.84	40.964	33.127	0	0	0	0	0	0
0203-148-147	15.381	252.174	0.002	262.9	Free Surface	0 - 13:51 hrs	2.796	2.796	1.043	0.455	-10.726	40.972	25	0	0	0	2.412	0	0
0203-149-148	14.554	2,720.41	0.165	262.901	Free Surface	0 - 13:49 hrs	1.93	1.93	0.097	0.498	2,457.51	40.981	33.621	0	0	0	0	0	0
0203-150-149	7.733	78.841	0.002	262.902	Free Surface	0 - 13:49 hrs	1.577	1.577	3.335	0.951	-184.061	40.989	44.916	0	0	0	5.573	0	0
0203-151-150	8.225	2,435.01	1.458	262.904	Free Surface	0 - 13:49 hrs	1.652	1.652	0.108	0.863	2,172.11	40.998	43.985	0	0	0	0	0	0
0203-152-151	16.837	2,557.95	0.144	262.909	Free Surface	0 - 13:48 hrs	2.71	2.71	0.103	0.41	2,295.04	41.011	27.725	0	0	0	0	0	0
0203-153-152	8.005	344.331	0.082	262.915	Free Surface	0 - 13:48 hrs	2.399	2.399	0.764	0.898	81.417	41.023	30.481	0	0	0	0	0	0
0203-154-153	7.008	33.026	0.001	262.918	Exceeds Capacity	0 - 13:48 hrs	2.048	2.048	7.961	1	-229.893	41.032	35.833	2.973	3.158	2.973	10.514	2.973	0
0203-155-154	10.079	70.597	0.001	262.925	Free Surface	0 - 13:47 hrs	1.791	1.827	3.724	0.764	-192.328	41.045	38.126	0	0	0	5.918	0	0
0203-156-155	9.089	2,711.45	2.503	262.932	Free Surface	0 - 13:45 hrs	2.279	2.288	0.097	0.828	2,448.52	41.057	23.965	0	0	0	0	0	0
0203-157-156	11.338	119.826	0.002	262.935	Free Surface	0 - 13:45 hrs	2.536	2.615	2.194	0.655	-143.109	41.061	23.606	0	0	0	4.403	0	0
0203-158-157	19.416	423.315	0.002	262.937	Free Surface	0 - 13:45 hrs	2.124	2.15	0.621	0.398	160.378	41.065	26.475	0	0	0	0	0	0
0203-159-158	9.951	100.399	0.001	262.945	Free Surface	0 - 13:45 hrs	1.206	1.297	2.619	0.793	-162.546	41.076	52.412	0	0	0	4.859	0	0
0203-160-159	7.221	2,619.35	2.339	262.958	Free Surface	0 - 13:44 hrs	1.443	1.511	0.1	0.98	2,356.39	41.09	48.174	0	0	3.203	0	0	0
0203-161-160	7.818	3,015.45	4.818	262.967	Free Surface	0 - 13:42 hrs	3.235	3.55	0.087	0.63	2,752.48	41.098	18.98	0	0	0	0	0	0
0203-162-161	7.818	1,242.62	0.818	262.987	Free Surface	0 - 13:40 hrs	5.23	5.446	0.212	0.416	979.632	41.108	18.113	0	0	0	0	0	0
0203-163-428	7.946	723.967	0.687	248.263	Free Surface	0 - 14:00 hrs	4.161	4.168	0.343	0.649	475.704	38.336	13.437	0	0	0	0	0	0
0203-164-163	8.07	714.158	0.628	248.253	Free Surface	0 - 13:59 hrs	4.711	4.711	0.348	0.574	465.906	38.357	13.356	0	0	0	0	0	0
0203-165-364	8.07	2,155.64	5.723	248.254	Free Surface	0 - 13:57 hrs	4.266	4.266	0.115	0.625	1,907.39	38.374	13.509	0	0	0	0	0	0
0203-166-362	7.943	1,142.03	1.468	248.255	Free Surface	0 - 13:56 hrs	3.601	3.601	0.217	0.683	893.771	38.42	14.184	0	0	0	0	0	0
0203-167-166	8.144	114.204	0.071	248.256	Free Surface	0 - 13:56 hrs	4.378	4.378	2.174	0.949	-134.052	38.451	7.865	0	2.951	0	4.23	0	0
0203-168-167	8.144	444.795	1.081	248.271	Backwater	0 - 13:53 hrs	4.141	4.141	0.558	1	196.523	38.48	7.867	2.044	2.044	2.951	0	0	0
0203-169-168	4.473	1,222.99	4.319	248.374	Backwater	0 - 13:47 hrs	3.225	3.225	0.203	1	974.617	38.492	18.555	2.851	2.851	4.574	0	0	0
0203-170-169	4.473	203.446	0.12	189.02	Backwater	0 - 13:27 hrs	2.454	3.463	0.929	1	14.426	28.406	18.555	2.851	2.946	2.851	0	2.851	0
0203-171-410	6.907	1,099.60	0.666	189.154	Free Surface	0 - 13:27 hrs	1.572	1.772	0.172	0.873	910.45	28.416	21.07	0	0	0	0	0	0
0203-172-171	6.907	848.777	0.397	189.252	Free Surface	0 - 13:26 hrs	1.663	1.944	0.223	0.828	659.525	28.42	21.01	0	0	0	0	0	0

Table B-2b. Existing System Analysis - Pipes/Channels
5-year, 24-hour Events

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-173-403	4.414	349.406	0.283	202.918	Backwater	0 - 12:10 hrs	2.563	2.567	0.581	1	146.489	28.497	21.335	2.897	2.927	2.916	0	2.685	0
0203-174-169	4.533	21.186	0.003	92.879	Exceeds Capacity	0 - 15:33 hrs	2.173	2.683	4.384	1	-71.693	10.085	14.018	2.789	2.854	2.789	4.949	2.789	1
0203-175-426	4.526	264.171	0.399	90.461	Free Surface	0 - 15:36 hrs	1.954	2.055	0.342	0.976	173.71	10.091	13.596	0	0	2.345	0	0	0
0203-176-175	4.505	162.954	0.141	89.983	Free Surface	0 - 15:36 hrs	1.937	2.02	0.552	0.955	72.971	10.092	14.275	0	0	0	0	0	0
0203-177-176	4.26	265.263	0.478	89.508	Backwater	0 - 15:37 hrs	1.795	1.805	0.337	1	175.755	10.093	14.066	0.874	0.874	3.594	0	0	0
0203-178-177	4.484	537.161	2.016	116.061	Free Surface	0 - 12:33 hrs	2.528	2.531	0.216	0.916	421.1	10.126	13.3	0	0	3.563	0	0	0
0203-179-178	4.423	225.92	0.285	117.143	Free Surface	0 - 12:33 hrs	2.67	2.68	0.519	0.758	108.777	10.121	13.873	0	0	0	0	0	0
0203-180-179	11.458	179.059	0.002	117.626	Free Surface	0 - 12:33 hrs	2.082	2.115	0.657	0.297	61.434	10.128	21.166	0	0	0	0	0	0
0203-181-424	7.728	54.713	0.001	121.188	Free Surface	0 - 12:29 hrs	2.366	2.557	2.215	0.401	-66.475	10.138	21.497	0	0	0	2.191	0	0
0203-182-181	8.53	826.671	0.097	122.534	Free Surface	0 - 12:27 hrs	2.145	2.267	0.148	0.404	704.137	10.144	27.404	0	0	0	0	0	0
0203-183-182	8.571	1,197.10	0.206	123.715	Free Surface	0 - 12:26 hrs	1.728	1.759	0.103	0.442	1,073.39	10.15	26.874	0	0	0	0	0	0
0203-184-183	7.568	1,253.86	3.236	124.401	Free Surface	0 - 12:26 hrs	4.35	4.405	0.099	0.532	1,129.46	10.156	11.223	0	0	0	0	0	0
0203-185-184	7.408	864.065	1.475	16.79	Free Surface	0 - 12:33 hrs	0.582	1.154	0.019	0.534	847.275	0.955	12.268	0	0	0	0	0	0
0203-186-185	6.59	1,544.80	3.044	16.273	Free Surface	0 - 12:33 hrs	0.556	0.983	0.011	0.427	1,528.53	0.955	14.677	0	0	0	0	0	0
0203-187-246	7.439	443.039	0.112	112.161	Free Surface	0 - 12:22 hrs	2.666	2.988	0.253	0.527	330.877	9.209	21.75	0	0	0	0	0	0
0203-188-380	9.535	234.929	0.033	116.438	Free Surface	0 - 12:18 hrs	2.266	2.3	0.496	0.603	118.491	9.227	18.006	0	0	0	0	0	0
0203-189-188	10.121	1,440.98	1.382	119.432	Free Surface	0 - 12:17 hrs	2.573	2.625	0.083	0.599	1,321.54	9.235	15.542	0	0	0	0	0	0
0203-190-189	9.496	1,159.96	1.946	23.807	Free Surface	0 - 12:21 hrs	0.829	2.629	0.021	0.544	1,136.16	1.012	11.221	0	0	0	0	0	0
0203-191-190	11.035	1,486.19	4.607	23.409	Free Surface	0 - 12:18 hrs	2.397	3.571	0.016	0.285	1,462.78	1.013	6.245	0	0	0	0	0	0
0203-192-419	6.08	388.922	0.56	22.827	Free Surface	0 - 12:15 hrs	1.434	1.827	0.059	0.431	366.096	0.957	9.929	0	0	0	0	0	0
0203-193-192	4.437	919.169	2.701	11.697	Free Surface	0 - 12:17 hrs	2.801	3.195	0.013	0.166	907.472	0.533	11.704	0	0	0	0	0	0
0203-194-193	3.615	209.313	0.967	11.829	Free Surface	0 - 12:15 hrs	2.446	2.446	0.057	0.191	197.484	0.534	7.953	0	0	0	0	0	0
0203-195-402	4.497	425.77	0.454	344.074	Backwater	0 - 12:23 hrs	4.228	4.228	0.808	1	81.696	28.517	18.833	0.356	0.356	3.027	0	0.167	0
0203-196-401	3.568	232.948	0.404	108.613	Free Surface	0 - 12:17 hrs	3.16	3.229	0.466	0.708	124.335	4.485	17.764	0	0	0	0	0	0
0203-197-196	3.568	505.968	1.907	75.875	Free Surface	0 - 12:18 hrs	3.197	3.356	0.15	0.535	430.093	3.538	15.947	0	0	0	0	0	0
0203-198-330	2.169	48.278	0.68	46.609	Backwater	0 - 12:15 hrs	3.3	3.3	0.965	1	1.669	2.196	10.228	0.112	0.201	0.112	0	0.112	0
0203-199-197	5.362	628.759	0.855	75.974	Free Surface	0 - 12:17 hrs	4.178	4.178	0.121	0.341	552.785	3.538	14.942	0	0	0	0	0	0
0203-200-199	6.864	525.155	0.561	12.295	Free Surface	0 - 12:15 hrs	0.663	0.663	0.023	0.355	512.86	0.394	10.033	0	0	0	0	0	0
0203-201-202	14.057	1,337.49	0.537	19.812	Free Surface	0 - 12:15 hrs	2.327	2.813	0.015	0.274	1,317.68	1.775	4.639	0	0	0	0	0	0
0203-202-204	4.551	38.21	0.033	21.393	Free Surface	0 - 12:19 hrs	0.925	1.37	0.56	0.853	16.817	1.775	10.244	0	0	0	0	0	0
0203-203-204	4.685	59.632	0.106	38.765	Free Surface	0 - 12:19 hrs	2.576	2.877	0.65	0.7	20.867	2.119	9.144	0	0	0	0	0	0
0203-204-205	4.769	902.174	3.745	113.272	Free Surface	0 - 12:15 hrs	2.338	2.533	0.126	0.826	788.902	6.304	21.223	0	0	0	0	0	2
0203-205-394	4.769	274.159	0.346	112.543	Free Surface	0 - 12:15 hrs	2.354	2.667	0.411	0.818	161.616	6.3	22.671	0	0	0	0	0	5
0203-206-207	5.829	866.55	1.228	112.01	Free Surface	0 - 12:15 hrs	1.974	2.807	0.129	0.749	754.54	6.326	31.763	0	0	8.757	0	0	0
0203-207-209	8.65	1,034.29	0.319	113.581	Free Surface	0 - 12:12 hrs	0.886	1.046	0.11	0.904	920.704	6.281	36.659	0	0	0	0	0	0
0203-208-212	1.777	31.788	0.523	23.388	Backwater	0 - 15:00 hrs	2.021	2.021	0.736	1	8.4	6.75	14.184	0.248	0.248	1.404	0	0	0
0203-209-208	1.163	9.217	1.556	23.388	Exceeds Capacity	0 - 14:59 hrs	8.052	8.052	2.537	1	-14.171	6.751	4.297	9.839	10.904	9.839	10.181	9.839	0
0203-210-209	5.187	692.46	5.419	87.311	Backwater	0 - 12:12 hrs	2.025	2.632	0.126	1	605.149	0.454	14.214	8.771	8.771	9.187	0	0	0
0203-211-210	3.936	59.684	0.584	18.203	Backwater	0 - 12:15 hrs	1.219	2.141	0.305	1	41.481	0.469	6.01	9.082	9.082	9.12	0	0	1
0203-212-213	1.777	27.411	0.389	23.388	Backwater	0 - 15:00 hrs	1.875	1.894	0.853	1	4.022	6.747	14.184	1.404	1.404	1.661	0	0	0
0203-213-217	5.579	277.504	0.202	34.532	Free Surface	0 - 12:18 hrs	1.376	2.082	0.124	0.464	242.972	7.205	13.736	0	0	0	0	0	0
0203-214-213	6.004	529.609	0.526	15.453	Free Surface	0 - 12:15 hrs	0.755	0.964	0.029	0.406	514.155	0.461	13.435	0	0	0	0	0	0
0203-215-214	6.004	1,441.56	3.896	16.185	Free Surface	0 - 12:15 hrs	1.485	1.567	0.011	0.262	1,425.37	0.462	10.478	0	0	0	0	0	0
0203-216-069	3.066	755.983	8.734	16.535	Free Surface	0 - 12:15 hrs	2.479	3.083	0.022	0.364	739.448	0.461	11.971	0	0	0	0	0	0
0203-217-397	4	240.254	2.091	34.28	Free Surface	0 - 12:18 hrs	1.262	1.844	0.143	0.754	205.973	7.204	9	0	0	0	0	0	0
0203-218-360	8	616.736	0.931	333.576	Free Surface	0 - 12:45 hrs	6.87	6.87	0.541	0.506	283.16	34.878	12	0	0	0	0	0	0
0203-219-218	15.742	3,098.77	0.197	99.398	Free Surface	0 - 12:40 hrs	1.461	1.694	0.032	0.371	2,999.38	6.871	23.608	0	0	0	0	0	0
0203-220-219	7.957	1,410.25	0.559	99.603	Free Surface	0 - 12:38 hrs	1.339	1.916	0.071	0.578	1,310.65	6.893	26.651	0	0	0	0	0	0
0203-221-352	6	472.126	0.361	258.542	Free Surface	0 - 12:15 hrs	5.516	5.517	0.548	0.981	213.584	21.025	8	0	0.177	0	0	0	0
0203-222-107	2	27.207	1.446	17.523	Backwater	0 - 13:19 hrs	5.605	5.674	0.644	1	9.684	1.656	1.975	1.165	1.165	2.079	0	0	3
0203-223-358	6	781.339	0.561	253.971	Backwater	0 - 12:37 hrs	4.233	4.233	0.325	1	527.367	25.614	10	1.205	1.25	1.205	0	1.205	0
0203-224-475	3	31.878	0.228	32.958	Exceeds Capacity	0 - 12:00 hrs	4.663	4.663	1.034	1	-1.08	2.426	3	1.982	1.984	1.99	0.029	1.982	2
0203-225-422	2.5	28.674	0.489	12.228	Free Surface	0 - 12:15 hrs	3.506	3.506	0.426	0.669	16.445	0.535	2.499	0	0	0	0	0	0
0203-226-227	3.5	48.818	0.235	74.837	Exceeds Capacity	0 - 12:11 hrs	7.778	7.778	1.533	1	-26.019	3.469	3.5	1.002	1.01	1.003	0.265	0.799	2
0203-227-076	3.5	40.108	0.159	72.438	Exceeds Capacity	0 - 12:15 hrs	7.529	7.529	1.806	1	-32.329	3.465	3.5	0.981	1.003	0.981	0.35	0.978	2
0203-228-077	4.5	123.55	0.395	12.197	Free Surface	0 - 12:10 hrs	1.067	3.01	0.099	0.742	111.353	0.36	4.404	0	0	0	0	0	0
0203-229-511	2.25	27.334	0.779	20.25	Backwater	0 - 12:02 hrs	5.093	5.119	0.741	1	7.083	1.774	2.25	1.101	1.105	1.102	0	1.096	3
0203-230-512	2.5	22.565	0.303	19.927	Free Surface	0 - 12:03 hrs	4.83	4.83	0.883	0.805	2.637	1.778	2.5	0	1.1	0	0	0	0
0203-231-514	3	56.333	0.713	19.826	Free Surface	0 - 12:04 hrs	4.514	4.643	0.352	0.621	36.507	1.784	2.973	0	0	0	0	0	0
0203-232-233	3.5	113.931	1.282	19.74	Free Surface	0 - 12:26 hrs	6.133	6.133	0.173	0.368	94.191	1.78	3.376	0	0	0	0	0	0
0203-233-516	3.5	100.268	0.993	19.74	Free Surface	0 - 12:26 hrs	5.036	5.27	0.197	0.427	80.527	1.778	3.462	0	0	0	0	0	0
0203-234-529	4	56.772	0.156	35.421	Free Surface	0 - 12:30 hrs	2.912	2.933	0.624	0.928	21.351	3.096	3.999	0	0	0	0	0	0
0203-235-236	3.5	54.672	0.295	35.42	Free Surface	0 - 12:30 hrs	5.081	5.081	0.648	0.68	19.252	3.095	3.499	0	0	0	0	0	0
0203-236-237	3.5	140.904	1.961	35.421	Free Surface	0 - 12:30 hrs	6.686	6.728	0.251	0.54	105.483	3.094	3.494	0	0	0	0	0	0
0203-237-071	3.5	113.012	1.262	35.419	Free Surface	0 - 12:32 hrs	5.328	5.418	0.313	0.653	77.593	3.095	3.497	0	0	0	0	0	0
0203-238-062	5	380.356	2.133	101.329	Backwater	0 - 12:07 hrs	5.162	5.224	0.266	1	279.027	6.447	4.988	0.42	0.499	0.42	0	0.42	0
0203-239-245	5	163.665	0.393	130.08	Free Surface	0 - 12:18 hrs	3.176	3.176	0.795	0.819	33.586	13.627	10	0	0	0	0	0	0
0203-240-494	4	124.539	0.752	51.58	Backwater	0 - 12:38 hrs	4.105	4.105	0.414	1	72.959	2.95	3.973	0.8	0.86	1.388	0	0.025	1
0203-241-254	3	38.818	0.339	26.395	Backwater	0 - 12:15 hrs	3.734	3.734	0.68	1	12.423	0.924	3	0.571	0.571	1.894	0	0.029	0
0203-242-243	4.333	114.727	0.416	99.923	Backwater	0 - 12:03 hrs	6.775	6.775	0.871	1	14.804	6.923	4.333	1.352	1.391	1.353	0	1.351	2
0203-243-361	4.333	74.203	0.174	99.93	Free Surface	0 - 12:03 hrs	7.057	7.061	1.347	0.949	-25.726	6.921	4.332	0	1.353	0	1.339	0	1
0203-244-462	5.737	112.706	0.521	97.961	Backwater	0 - 14:22 hrs	3.559	3.573	0.869	1	14.745	20.578	6.184	0.887	5.89	0.887	0	0.887	0
0203-245-070	5	39.928	0.023	130.05	Free Surface	0 - 12:18 hrs	4.244	4.254	3.257	0.613	-90.121	13.623	10	0	0	0	3.311	0	0
0203-246-417	7.439	3,676.70	7.719	110.47	Free Surface	0 - 12:23 hrs	2.406	4.378	0.03	0.549	3,566.23	9.207	22.616	0	0	0	0	0	0
0203-247-602	12.356	1,517.96	0.118	109.331	Free Surface	0 - 15:55 hrs	2.712	2.712	0.072	0.235	1,408.63	40.797	18.914	0	0	0	0	0	0
0203-248-318	3	67.56	1.026	32.761	Backwater	0 - 15:22 hrs	4.635	4.635	0.485	1	34.799	9.369	3	8.604	8.678	8.604	0	8.604	0
0203-249-196	2.151	129.724	3.804	32.638	Free Surface	0 - 12:15 hrs	3.188	3.279	0.252	0.759	97.086	0.946	8.978	0	0	0.222	0	0	0
0203-250-545	3.91	89.055	0.375	76.477	Backwater	0 - 12:44 hrs	2.972	2.972	0.859	1	12.577	9.389	7.382	1.574	1.574	8.485	0	1.417	0
0203-251-546	5.09	136.033	0.361	35.333	Free Surface	0 - 11:59 hrs	1.395	1.408	0.26	0.83	100.7	9.379	7.707	0	0	0	0	0	0
0203-252-626	6.45	1,853.34	4.54	88.771	Free Surface	0 - 12:32 hrs	2.424	4.418	0.048	0.606	1,764.57	6.02	18.861	0	0	0	0	0	0
0203-253-434	5.141	97.055	0.011	29.861	Free Surface	0 - 12:22 hrs	0.31	0.319	0.308	0.867	67.193	1.195	41.921	0	0	0	0	0	0
0203-254-335	10.591	74.207	0	133.573	Free Surface	0 - 12:15 hrs	3.225	3.225	1.8	0.36	-59.367	8.9	22.405	0	0	0	1.035	0	0
0203-255-635	4.56	164.413	1.087	39.257	Free Surface	0 - 12:26 hrs	3.975	3.975	0.239	0.456	125.156	10.005	6.026	0	0	0	0	0	0
0203-256-085	4	33.719	0.055	45.69	Free Surface	0 - 12:23 hrs	3.728	3.728	1.355	0.943	-11.971	3.837	4	0	0	0.81	0.99	0	0
0203-257-321	4.392	206.69	0.099	29.092	Free Surface	0 - 13:18 hrs	1.004	1.16	0.141	0.531	177.599	3.417	24.825	0	0	0	0	0	0
0203-258-257	3	2.934	0.002	29.092	Free Surface	0 - 13:17 hrs	4.336	4.429	9.917	0.902	-26.158	3.418	3	0	2.29	0	9.674	0	0
0203-259-258	3	44.007	0.435	29.092	Backwater	0 - 13:17 hrs	4.116	4.116	0.661	1	14.915	3.421	3	2.226	2.226	2.29	0	2.211	0

Table B-2b. Existing System Analysis - Pipes/Channels
5-year, 24-hour Events

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-260-259	3	40.111	0.214	29.666	Backwater	0 - 12:07 hrs	4.197	4.356	0.74	1	10.445	3.425	2.999	2.218	2.223	2.226	0	2.212	1
0203-261-260	3	38.498	0.333	31.851	Backwater	0 - 12:04 hrs	4.683	4.693	0.827	1	6.647	3.439	2.999	2.22	2.257	2.223	0	2.217	3
0203-262-261	2.5	26.97	0.432	33.251	Exceeds Capacity	0 - 12:03 hrs	6.774	6.774	1.233	1	-6.281	3.439	2.5	2.291	2.311	2.292	2.271	2.277	1
0203-263-262	3	37.42	0.315	37.112	Backwater	0 - 12:03 hrs	5.25	5.25	0.992	1	0.307	3.417	2.99	2.258	2.263	2.272	0	2.253	0
0203-264-265	2	19.5	0.743	17.428	Backwater	0 - 12:07 hrs	5.623	5.835	0.894	1	2.073	0.647	2	0.296	0.296	0.323	0	0.295	0
0203-265-266	3	22.859	0.117	17.516	Backwater	0 - 12:08 hrs	2.483	2.483	0.766	1	5.343	0.651	3	0.279	0.303	0.279	0	0.279	0
0203-266-267	3	53.494	0.643	17.341	Free Surface	0 - 12:18 hrs	2.459	2.459	0.324	0.992	36.152	0.651	2.999	0	0.297	0	0	0	0
0203-267-318	3	49.041	0.541	17.327	Free Surface	0 - 12:18 hrs	2.457	2.457	0.353	0.992	31.714	0.652	3	0	0	8.604	0	0	0
0203-268-631	12.401	4,258.40	0.223	874.504	Free Surface	0 - 13:00 hrs	2.947	2.948	0.205	0.608	3,383.90	144.742	61.127	0	0	0	0	0	0
0203-269-268	3.496	26.348	0.192	33.298	Free Surface	0 - 12:52 hrs	3.593	3.593	1.264	0.709	-6.95	3.604	4.257	0	2.226	0	2.133	0	0
0203-270-658	12.11	5,684.14	1.865	109.882	Free Surface	0 - 12:30 hrs	0.793	1.472	0.019	0.615	5,574.26	8.389	31.828	0	0	0	0	0	0
0203-271-662	2.89	97.449	1.376	89.561	Backwater	0 - 12:11 hrs	5.586	5.586	0.919	1	7.888	3.781	6.37	0.298	0.298	1.083	0	0.214	0
0203-272-273	4	127.985	0.794	71.275	Free Surface	0 - 12:19 hrs	8.639	8.679	0.557	0.741	56.71	6.73	3.999	0	0	0	0	0	0
0203-273-617	10.9	5,582.39	1.231	71.345	Free Surface	0 - 13:33 hrs	0.422	1.251	0.013	0.612	5,511.04	6.698	38.307	0	0	0	0	0	0
0203-274-275	3.92	107.358	0.572	72.979	Free Surface	0 - 12:45 hrs	7.273	7.622	0.68	0.88	34.38	6.859	3.177	0	1.97	0	0	0	2
0203-275-276	4	208.467	0.182	72.956	Free Surface	0 - 12:45 hrs	3.329	3.438	0.35	0.783	135.51	6.85	7	0	0	0	0	0	0
0203-276-277	4.1	200.517	0.198	72.939	Free Surface	0 - 12:45 hrs	4.929	4.929	0.364	0.612	127.578	6.839	6.739	0	0	0	0	0	0
0203-277-629	4.23	291.179	3.455	72.936	Free Surface	0 - 12:45 hrs	3.968	5.284	0.25	0.705	218.242	6.837	6.919	0	0	1.021	0	0	0
0203-278-274	4	56.829	0.054	28.819	Backwater	0 - 12:21 hrs	1.441	1.441	0.507	1	28.01	1.544	5	1.728	1.728	1.952	0	0.516	3
0203-279-278	3.5	88.814	0.779	28.772	Backwater	0 - 12:19 hrs	2.991	2.991	0.324	1	60.042	1.544	3.493	0.698	0.698	2.001	0	0	2
0203-280-279	3.5	56.3	0.313	28.766	Backwater	0 - 12:21 hrs	2.99	3.819	0.511	1	27.534	1.543	3.497	0.688	0.688	0.698	0	0.002	0
0203-281-280	3	43.759	0.43	30.407	Backwater	0 - 12:04 hrs	4.302	4.302	0.695	1	13.352	1.56	3	0.694	0.697	0.703	0	0.688	0
0203-282-281	3	33.701	0.255	31.491	Backwater	0 - 12:03 hrs	4.458	4.458	0.934	1	2.21	1.561	2.999	0.689	0.712	0.69	0	0.688	0
0203-283-274	3.5	66.952	0.443	56.175	Backwater	0 - 13:22 hrs	5.839	5.839	0.839	1	10.777	5.317	3.489	1.974	1.974	2.016	0	1.564	1
0203-284-297	3.5	2.371	0.001	94.968	Exceeds Capacity	0 - 12:11 hrs	9.871	9.871	40.049	1	-92.597	4.67	3.499	2.124	2.153	2.124	15.347	2.123	0
0203-285-534	3	77.681	1.356	21.976	Free Surface	0 - 13:21 hrs	3.488	3.59	0.283	0.941	55.706	4.653	2.999	0	0	1.126	0	0	0
0203-286-285	3	90.715	1.85	20.5	Free Surface	0 - 13:22 hrs	4.464	4.929	0.226	0.721	70.215	4.653	2.992	0	0	0	0	0	0
0203-287-286	3	68.923	1.068	20.369	Free Surface	0 - 14:14 hrs	5.312	5.333	0.296	0.546	48.553	4.654	2.998	0	0	0	0	0	0
0203-288-287	3	52.782	0.626	20.369	Free Surface	0 - 14:14 hrs	4.244	4.294	0.386	0.643	32.412	4.654	2.984	0	0	0	0	0	0
0203-289-288	3	35.822	0.288	20.369	Free Surface	0 - 14:14 hrs	3.472	3.496	0.569	0.773	15.453	4.656	2.999	0	0	0	0	0	0
0203-290-304	2.5	33.019	0.648	20.37	Free Surface	0 - 14:12 hrs	4.933	4.933	0.617	0.784	12.649	4.659	2.499	0	6.129	0	0	0	0
0203-291-305	2.5	38.403	0.877	20.37	Backwater	0 - 14:11 hrs	4.15	4.15	0.53	1	18.033	4.664	2.5	6.175	6.175	6.206	0	6.125	4
0203-292-291	2	28.481	1.585	20.37	Backwater	0 - 14:11 hrs	6.484	6.484	0.715	1	8.111	4.664	2	6.141	6.141	6.226	0	0	2
0203-293-292	2	27.328	1.459	21.815	Backwater	0 - 11:55 hrs	6.974	6.974	0.798	1	5.512	4.658	2	6.141	6.218	6.141	0	6.141	3
0203-294-306	3.5	111.399	1.226	42.978	Free Surface	0 - 12:47 hrs	4.778	4.792	0.386	0.901	68.422	4.671	3.468	0	0	6.131	0	0	0
0203-295-294	3.5	77.262	0.59	43.004	Free Surface	0 - 12:45 hrs	4.849	5.111	0.557	0.878	34.258	4.663	3.498	0	0	0	0	0	0
0203-296-295	3.5	26.661	0.07	43.006	Free Surface	0 - 12:45 hrs	4.487	4.487	1.613	0.985	-16.345	4.658	3.499	0	2.15	0	2.23	0	0
0203-297-296	3.5	149.798	2.217	43.006	Backwater	0 - 12:45 hrs	4.47	4.47	0.287	1	106.792	4.658	3.497	2.124	2.124	2.15	0	0	0
0203-298-314	4.5	229.799	0.808	99.834	Backwater	0 - 12:48 hrs	6.277	7.126	0.434	1	129.965	12.618	4.498	2.265	2.265	3.441	0	0	5
0203-299-298	3	50.348	0.57	46.129	Backwater	0 - 12:22 hrs	6.526	6.526	0.916	1	4.219	3.637	2.985	1.494	1.494	2.274	0	1.489	0
0203-300-307	3	70.727	1.124	52.263	Backwater	0 - 12:30 hrs	7.394	7.405	0.739	1	18.464	6.726	2.999	2.596	2.986	2.596	0	2.596	0
0203-301-317	5	253.25	0.946	123.436	Backwater	0 - 14:32 hrs	6.287	6.287	0.487	1	129.815	19.274	4.999	4.824	4.824	4.883	0	3.473	0
0203-302-333	5.08	39.693	0.032	168.479	Exceeds Capacity	0 - 11:55 hrs	4.678	4.678	4.245	1	-128.786	28.75	7.536	5.243	5.405	5.243	6.135	4.967	0
0203-303-334	3	67.685	1.03	35.264	Backwater	0 - 11:53 hrs	4.989	4.989	0.521	1	32.421	3.302	2.996	4.85	4.854	4.857	0	2.385	0
0203-304-289	2.5	50.953	1.543	20.37	Free Surface	0 - 14:12 hrs	5.041	5.206	0.4	0.767	30.583	4.659	2.499	0	0	0	0	0	0
0203-305-290	2.5	28.637	0.487	20.37	Backwater	0 - 14:11 hrs	4.15	4.15	0.711	1	8.267	4.662	2.5	6.129	6.206	6.129	0	6.129	1
0203-306-293	2.5	45.114	1.21	21.755	Backwater	0 - 11:55 hrs	4.432	4.432	0.482	1	23.359	4.658	2.5	6.166	6.192	6.166	0	6.166	4
0203-307-308	3.5	108.726	1.168	52.26	Backwater	0 - 12:30 hrs	5.432	5.533	0.481	1	56.466	6.723	3.451	2.231	2.323	2.422	0	1.371	0
0203-308-309	3.5	95.984	0.91	52.256	Backwater	0 - 12:29 hrs	5.448	5.494	0.544	1	43.728	6.713	3.471	1.652	2.422	1.652	0	1.651	0
0203-309-310	3.5	106.384	1.118	52.329	Free Surface	0 - 11:57 hrs	6.253	6.286	0.492	0.995	54.055	6.707	3.452	0	2.334	0	0	0	0
0203-310-311	3.5	121.546	1.459	53.719	Backwater	0 - 11:56 hrs	6.981	8.073	0.442	1	67.827	6.69	3.499	1.259	1.259	2.853	0	0	0
0203-311-301	4	119.146	0.688	52.211	Backwater	0 - 12:32 hrs	4.155	4.593	0.438	1	66.935	6.738	4	2.845	2.845	4.861	0	0	0
0203-312-301	5	184.133	0.5	85.391	Backwater	0 - 11:56 hrs	4.349	4.65	0.464	1	98.742	12.584	4.99	3.858	3.86	4.824	0	0.003	0
0203-313-312	5	227.511	0.763	99.836	Backwater	0 - 12:48 hrs	5.085	6.108	0.439	1	127.675	12.698	4.999	3.79	3.791	3.86	0	0.002	6
0203-314-313	5	209.24	0.645	99.871	Backwater	0 - 12:47 hrs	5.086	5.729	0.477	1	109.37	12.611	4.998	3.166	3.166	3.791	0	1.542	8
0203-315-340	3.5	106.06	1.111	69.209	Backwater	0 - 11:56 hrs	7.193	7.193	0.653	1	36.851	8.9	3.5	3.111	3.111	3.155	0	0.787	0
0203-316-315	3.5	69.433	0.476	71.182	Exceeds Capacity	0 - 11:56 hrs	7.399	7.43	1.025	1	-1.749	8.913	3.5	3.107	3.203	3.108	0.01	3.107	0
0203-317-302	5.08	262.51	1.382	120.701	Backwater	0 - 11:57 hrs	3.351	3.351	0.46	1	141.808	19.255	7.536	4.869	4.869	5.405	0	0.001	0
0203-318-549	3	67.552	1.026	39.286	Free Surface	0 - 12:26 hrs	5.593	5.593	0.582	0.976	28.265	10.018	3	0	8.604	0	0	0	0
0203-319-556	4	56.408	0.154	53.901	Free Surface	0 - 12:15 hrs	5.958	5.959	0.956	0.677	2.508	4.22	4	0	0.111	0	0	0	0
0203-320-319	3	48.238	4.952	29.09	Free Surface	0 - 13:23 hrs	4.917	4.943	0.603	0.78	19.147	3.406	2.999	0	0	1.67	0	0	0
0203-321-320	4.392	162.289	0.061	29.091	Free Surface	0 - 13:19 hrs	1.411	1.495	0.179	0.448	133.198	3.41	20.945	0	0	0	0	0	0
0203-322-323	4	194.09	1.826	25.923	Backwater	0 - 12:55 hrs	2.063	2.888	0.134	1	168.167	4.055	3.996	3.901	3.901	19.449	0	0	0
0203-323-324	6	498.726	0.855	25.923	Free Surface	0 - 12:56 hrs	1.252	1.252	0.052	0.575	472.804	4.012	6	0	0	0	0	0	2
0203-324-008	11.346	4,998.01	0.94	25.923	Free Surface	0 - 12:56 hrs	3.532	3.572	0.005	0.09	4,972.09	4.006	12.233	0	0	0	0	0	24
0203-325-329	9.647	578.421	0.106	187.653	Free Surface	0 - 12:26 hrs	2.458	2.558	0.324	0.652	390.768	18.337	24.537	0	0	0	0	0	0
0203-326-327	6.218	1,235.41	1.437	111.87	Free Surface	0 - 12:15 hrs	3.835	3.837	0.091	0.41	1,123.54	3.253	17.693	0	0	0	0	0	0
0203-327-328	10	2,249.26	1.211	109.772	Free Surface	0 - 12:15 hrs	2.633	2.921	0.049	0.438	2,139.49	3.251	17.798	0	0	0	0	0	0
0203-328-133	4.533	193.213	0.927	171.554	Backwater	0 - 12:15 hrs	5.058	5.058	0.888	1	21.658	8.504	13.642	0.552	0.552	0.641	0	0.394	0
0203-329-195	9.647	621.526	0.122	184.894	Free Surface	0 - 12:30 hrs	3.13	3.318	0.297	0.574	436.632	18.281	21.556	0	0	0	0	0	0
0203-330-199	2.169	73.922	1.595	64.346	Backwater	0 - 12:18 hrs	4.556	4.556	0.87	1	9.575	3.148	10.228	0.112	0.112	0.224	0	0	0
0203-331-332	5.08	73.265	0.108	146.254	Exceeds Capacity	0 - 16:01 hrs	4.378	4.384	1.996	1	-72.989	28.674	7.536	0.818	5.29	0.818	5.492	0.818	0
0203-332-665	6	917.899	0.494	146.304	Free Surface	0 - 16:00 hrs	2.563	2.626	0.159	0.96	771.595	28.66	12	0	0	0.737	0	0	0
0203-333-655	6	240.786	0.322	150.382	Backwater	0 - 11:55 hrs	2.148	2.152	0.625	1	90.404	28.721	12	5.181	5.181	5.191	0	0.002	0
0203-334-302	3.5	153.045	2.314	34.465	Backwater	0 - 11:53 hrs	3.582	3.582	0.225	1	118.58	3.292	3.5	4.859	4.859	6.359	0	0	0
0203-335-009	10.591	5,438.11	2.093	133.234	Free Surface	0 - 12:15 hrs	5.936	5.936	0.025	0.268	5,304.88	8.901	16.349	0	0	0	0	0	0
0203-336-222	2	26.059	1.327	17.502	Backwater	0 - 13:25 hrs	5.634	5.886	0.672	1	8.558	1.658	1.981	1.164	1.285	1.165	0	0.171	3
0203-337-486	4.5	213.147	1.175	61.118	Free Surface	0 - 12:47 hrs	7.364	8.044	0.287	0.518	152.03	11.427	4.499	0	0	0	0	0	0
0203-338-070	4.647	318.699	0.132	68.621	Free Surface	0 - 12:19 hrs	1.72	1.722	0.215	0.477	250.078	4.816	23.974	0	0	0	0	0	0
0203-339-189	4.819	2,243.90	2.013	112.157	Free Surface	0 - 12:15 hrs	1.176	1.176	0.05	0.611	2,131.74	8.272	54.082	0	0	0.968	0	0	0
0203-340-298	4	132.209	0.847	77.579	Backwater	0 - 13:32 hrs	6.174	6.174	0.587	1	54.63	8.924	3.978	2.303	3.147	2.303	0	2.302	4
0203-341-345	8	1,383.33	0.495	250.107	Free Surface	0 - 14:59 hrs	7.291	7.389	0.181	0.358	1,133.22	49.575	12	0	0	0	0	0	0
0203-342-350	3	84.516	1.606	50.206	Backwater	0 - 12:17 hrs	7.103	7.103	0.594	1	34.31	6.973	2.998	2.97	2.97	3.185	0	0.301	0
0203-343-344	6	212.05	0.251	151.163	Backwater	0 - 12:12 hrs	5.346	5.346	0.713	1	60.887	4.66	5.982	3.945	3.945	4.098	0	0.055	0
0203-344-382	2	14.788	0.427	28.647	Free Surface	0 - 14:00 hrs	9.494	9.527	1.937	0.923	-13.859	4.603	2	0	4.911	0	4.58	0	0
0203-345-002	10.792	35,212.01	40.439	294.194	Free Surface	0 - 14:30 hrs	8.991	8.991	0.008	0.177	34,917.81	56.496	27.396	0	0	0	0	0	0
0203-346-345	7.846	738.424	0.86	46.641	Free Surface	0 - 12:37 hrs	2.217	2.217	0.063	0.24	691.784	6.95	11.857	0	0	0	0	0	0

Table B-2b. Existing System Analysis - Pipes/Channels
5-year, 24-hour Events

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-347-346	3	53.584	0.645	46.642	Free Surface	0 - 12:36 hrs	8.673	8.673	0.87	0.711	6.942	6.954	3	0	3.264	0	0	0	0
0203-348-347	7.265	454.602	0.802	46.793	Free Surface	0 - 12:27 hrs	1.009	1.792	0.103	0.708	407.809	6.958	9.481	0	0	0	0	0	0
0203-349-348	3	31.929	0.229	47.647	Exceeds Capacity	0 - 12:23 hrs	6.741	6.741	1.492	1	-15.718	6.961	3	2.893	3.325	2.893	3.222	2.893	0
0203-350-349	7.191	473.764	1.015	48.821	Free Surface	0 - 12:17 hrs	0.885	1.285	0.103	0.928	424.943	6.97	9.565	0	0	0.351	0	0	0
0203-351-551	7.04	318.643	0.203	55.333	Free Surface	0 - 12:17 hrs	3.542	4.471	0.174	0.366	263.311	1.687	9.547	0	0	0	0	0	0
0203-352-363	6.945	878.302	0.362	255.05	Free Surface	0 - 12:15 hrs	4.697	4.71	0.29	0.87	623.253	21.008	9.611	0	0	0	0	0	0
0203-353-354	7.03	983.531	0.483	259.945	Free Surface	0 - 12:19 hrs	7.034	7.035	0.264	0.634	723.586	22.636	9.492	0	0	0	0	0	0
0203-354-114	7.03	1,353.80	0.915	260.345	Free Surface	0 - 12:21 hrs	7.864	8.054	0.192	0.576	1,093.45	22.632	9.474	0	0	0	0	0	0
0203-355-356	6	934.066	0.802	259.006	Free Surface	0 - 12:22 hrs	4.886	5.347	0.277	0.884	675.06	22.613	10	0	0	0	0	0	0
0203-356-113	8.464	2,294.28	2.604	302.75	Free Surface	0 - 12:21 hrs	6.414	6.555	0.132	0.799	1,991.53	24.782	8.684	0	0	1.038	0	0	0
0203-357-223	6	829.961	0.633	254.054	Backwater	0 - 12:37 hrs	4.234	4.234	0.306	1	575.907	25.627	10	1.25	1.285	1.25	0	1.25	0
0203-358-359	7.321	274.216	0.535	253.79	Free Surface	0 - 12:41 hrs	5.202	5.203	0.926	0.921	20.426	25.599	8.118	0	1	0	0	0	0
0203-359-112	7.321	466.386	1.548	276.215	Free Surface	0 - 12:41 hrs	5.661	5.662	0.592	0.921	190.171	28.059	8.112	0	0	1.707	0	0	0
0203-360-111	16.67	50,175.86	7.084	333.571	Free Surface	0 - 12:45 hrs	6.543	6.543	0.007	0.144	49,842.29	34.87	37.217	0	0	0	0	0	0
0203-361-220	7.957	146.481	0.006	99.829	Free Surface	0 - 12:37 hrs	2.027	2.669	0.682	0.447	46.652	6.907	21.991	0	0	0	0	0	0
0203-362-165	7.943	1,483.04	2.475	248.254	Free Surface	0 - 13:57 hrs	3.666	3.666	0.167	0.673	1,234.78	38.413	14.174	0	0	0	0	0	0
0203-363-117	6.945	873.512	0.358	253.04	Free Surface	0 - 12:15 hrs	4.769	4.783	0.29	0.85	620.473	21.002	9.61	0	0	0	0	0	0
0203-364-164	8.07	2,005.71	4.955	248.254	Free Surface	0 - 13:57 hrs	5.916	5.916	0.124	0.473	1,757.46	38.368	13.053	0	0	0	0	0	0
0203-365-461	5.5	515.198	2.354	175.792	Backwater	0 - 12:48 hrs	7.399	7.399	0.341	1	339.406	20.584	5.499	2.362	2.362	5.954	0	0	0
0203-366-367	6	500.191	1.395	143.708	Backwater	0 - 13:45 hrs	5.083	5.083	0.287	1	356.484	20.574	5.954	6.184	6.184	8.614	0	1.11	0
0203-367-368	3.377	255.263	2.077	275.405	Exceeds Capacity	0 - 12:15 hrs	8.057	8.057	1.079	1	-20.142	39.665	19.528	3.825	3.825	5.091	0.703	1.932	0
0203-368-370	6	157.161	0.804	203.549	Backwater	0 - 12:00 hrs	5.654	5.654	1.295	1	-46.388	39.722	6	6.612	6.612	7.295	5.041	0	0
0203-369-427	4	474.879	0.305	91.433	Backwater	0 - 15:34 hrs	1.761	1.866	0.193	1	383.446	10.088	14	3.008	3.024	3.016	0	0.117	0
0203-370-118	4.513	345.587	0.998	198.25	Backwater	0 - 14:33 hrs	3.682	4.227	0.574	1	147.338	39.682	21.428	0.693	0.693	5.67	0	0	0
0203-372-373	8.563	802.787	0.948	215.25	Free Surface	0 - 13:52 hrs	2.305	4.362	0.268	0.998	587.537	42.02	19.12	0	0	5.524	0	0	0
0203-373-377	7	177.398	0.45	215.02	Exceeds Capacity	0 - 13:52 hrs	4.388	4.388	1.212	1	-37.622	42.107	7	6.895	6.916	6.895	4.929	6.888	0
0203-374-375	3.862	144.305	0.401	198.238	Exceeds Capacity	0 - 15:22 hrs	5.144	5.144	1.374	1	-53.933	42.011	17.32	6.048	6.048	6.592	5.735	5.838	0
0203-375-376	7.377	166.742	0.058	198.245	Free Surface	0 - 15:21 hrs	3.473	3.473	1.189	0.794	-31.503	41.99	14.689	0	0	0	5.605	0	0
0203-376-341	11.182	2,080.21	1.59	198.252	Free Surface	0 - 15:19 hrs	6.994	7.682	0.095	0.389	1,881.95	41.982	11.627	0	0	0	0	0	0
0203-377-374	7	43.345	0.027	212.777	Exceeds Capacity	0 - 13:56 hrs	4.342	4.342	4.909	1	-169.432	42.019	7	6.795	6.895	6.795	7.898	6.795	0
0203-378-379	3	78.635	1.39	68.415	Backwater	0 - 12:45 hrs	9.679	9.679	0.87	1	10.219	4.729	2.999	1.387	1.387	1.459	0	1.349	2
0203-379-242	4	89.876	0.391	68.13	Backwater	0 - 12:45 hrs	5.422	5.422	0.758	1	21.747	4.726	3.998	1.376	1.376	1.429	0	1.332	2
0203-380-187	9.535	663.228	0.26	114.146	Free Surface	0 - 12:21 hrs	3.289	3.303	0.172	0.494	549.082	9.216	14.923	0	0	0	0	0	0
0203-381-134	4.101	493.715	1.219	142.361	Free Surface	0 - 12:15 hrs	2.85	2.85	0.288	0.815	351.354	5.272	31.898	0	0	0.516	0	0	0
0203-382-339	9	320.398	0.393	28.636	Free Surface	0 - 14:00 hrs	6.201	6.273	0.089	0.145	291.762	4.6	4	0	0	0	0	0	0
0203-383-384	4.91	116.495	0.091	116.912	Exceeds Capacity	0 - 12:00 hrs	2.169	2.169	1.004	1	-0.418	42.197	12.036	11.996	12.031	11.996	0.01	0.015	0
0203-384-576	4.91	75.684	0.038	109.333	Free Surface	0 - 15:45 hrs	3.16	3.16	1.445	0.667	-33.648	41.447	11.694	0	11.996	0	12.306	0	0
0203-385-057	1.5	12.834	1.493	4.877	Backwater	0 - 12:03 hrs	2.76	2.76	0.38	1	7.956	0.116	1.5	0.68	0.68	1.454	0	0.002	0
0203-386-385	1.25	8.204	1.613	4.802	Backwater	0 - 12:04 hrs	1.957	3.071	0.293	1	3.402	0.127	1.248	0.617	0.617	0.742	0	0.001	0
0203-387-059	1.5	11.672	1.235	8.827	Backwater	0 - 12:04 hrs	4.995	4.995	0.756	1	2.845	0.269	1.499	0.592	0.592	0.672	0	0.094	0
0203-388-387	1.25	7.721	1.429	8.839	Backwater	0 - 12:04 hrs	3.601	3.601	0.572	1	-1.117	0.268	1.249	0.547	0.547	0.625	0	0	0
0203-389-113	1.75	11.978	0.571	14.523	Exceeds Capacity	0 - 12:00 hrs	6.038	6.038	1.212	1	-2.545	0.883	1.737	6.36	6.36	19.766	0.133	0.423	0
0203-390-389	1.25	5.902	0.835	14.523	Exceeds Capacity	0 - 12:00 hrs	5.917	5.917	1.23	1	-8.622	0.885	1.25	6.644	6.644	9.512	0.148	1.16	3
0203-391-123	6.887	598.08	0.367	236.034	Free Surface	0 - 12:26 hrs	3.387	3.428	0.395	0.763	362.047	10.218	24.463	0	0	0	0	0	0
0203-392-121	17.772	12,618.16	0.808	235.802	Free Surface	0 - 12:27 hrs	4.019	4.272	0.019	0.209	12,382.36	10.191	27.4	0	0	0	0	0	0
0203-393-201	14.057	3,408.70	3.486	19.74	Free Surface	0 - 12:26 hrs	3.098	3.409	0.006	0.248	3,388.96	1.776	3.993	0	0	0	0	0	0
0203-394-395	4	77.157	0.289	58.92	Free Surface	0 - 12:15 hrs	4.845	4.845	0.764	0.928	18.237	3.243	4	0	0.21	0	0	0	1
0203-395-206	5.829	807.214	1.066	112.447	Free Surface	0 - 12:15 hrs	3.829	3.831	0.139	0.525	694.767	6.305	18.953	0	0	0	0	0	0
0203-396-211	1.807	81.029	6.177	18.207	Backwater	0 - 12:15 hrs	1.921	2.534	0.225	1	62.822	0.461	9.996	6.391	6.391	9.631	0	0	0
0203-397-398	4	5.609	0.001	34.305	Free Surface	0 - 12:18 hrs	1.162	1.727	6.116	0.82	-28.696	7.203	9	0	0	0	11.079	0	0
0203-398-239	4	56.247	0.115	34.368	Free Surface	0 - 12:19 hrs	1.19	2.622	0.611	0.803	21.878	7.202	9	0	0	0	0	0	0
0203-399-400	3	59.881	0.806	21.176	Free Surface	0 - 12:15 hrs	3.974	3.974	0.354	0.705	38.705	0.958	3	0	0	0.103	0	0	0
0203-400-330	3.82	39.41	0.21	20.897	Free Surface	0 - 12:15 hrs	2.366	2.382	0.53	0.705	18.513	0.956	6.504	0	0	0	0	0	0
0203-401-195	4	182.264	1.61	98.237	Free Surface	0 - 12:19 hrs	8.694	8.696	0.539	0.843	84.027	4.474	4	0	0	1.019	0	0	0
0203-402-173	4.497	396.477	0.394	248.224	Backwater	0 - 12:33 hrs	3.05	3.05	0.626	1	148.254	28.533	18.833	2.855	3.027	2.855	0	2.855	0
0203-403-404	4	36.617	0.007	198.536	Exceeds Capacity	0 - 12:10 hrs	2.407	2.408	5.422	1	-161.919	28.481	21	2.991	3.064	2.991	7.882	2.991	1
0203-404-405	6.83	653.514	0.416	195.942	Free Surface	0 - 12:11 hrs	3.445	3.461	0.3	0.695	457.572	28.462	17.342	0	0	0	0	0	0
0203-405-406	4	1,076.74	0.63	191.233	Backwater	0 - 12:11 hrs	2.612	2.67	0.178	1	885.503	28.46	21	2.93	2.937	2.943	0	2.157	0
0203-406-407	6.363	925.76	0.729	189.806	Free Surface	0 - 13:19 hrs	1.934	2.646	0.205	0.827	735.954	28.462	19.34	0	0	0	0	0	0
0203-407-408	4	686.455	0.256	189.7	Backwater	0 - 13:22 hrs	2.258	2.258	0.276	1	496.755	28.453	21	3.22	3.227	3.224	0	3.139	0
0203-408-409	6.078	408.194	0.133	189.649	Free Surface	0 - 13:22 hrs	1.711	2.231	0.465	0.917	218.545	28.447	20.89	0	0	0	0	0	0
0203-409-172	6.078	295.612	0.07	189.474	Free Surface	0 - 13:23 hrs	1.73	2.211	0.641	0.907	106.138	28.43	20.886	0	0	0	0	0	0
0203-410-170	8	246.927	0.244	189.111	Free Surface	0 - 13:27 hrs	4.125	4.985	0.383	0.72	57.816	28.411	4	0	0	0	0	0	0
0203-411-412	3	112.659	2.853	31.897	Free Surface	0 - 12:15 hrs	5.232	5.293	0.283	0.805	80.762	1.462	2.998	0	0	0	0	0	0
0203-412-413	3	98.132	2.165	31.819	Free Surface	0 - 12:15 hrs	5.225	5.225	0.324	0.804	66.313	1.463	2.999	0	0	0	0	0	0
0203-413-414	3	75.537	1.283	31.681	Free Surface	0 - 12:15 hrs	6.793	6.794	0.419	0.627	43.856	1.463	2.998	0	0	0	0	0	0
0203-414-339	3	94.644	2.014	31.272	Free Surface	0 - 12:15 hrs	9.603	9.603	0.33	0.469	63.373	1.46	2.982	0	0	0	0	0	0
0203-415-416	2	17.553	0.602	23.413	Free Surface	0 - 12:17 hrs	8.209	8.209	1.334	0.852	-5.86	1.015	2	0	0.715	0	0.281	0	0
0203-416-191	4.928	659.285	2.587	23.412	Free Surface	0 - 12:17 hrs	3.127	3.152	0.036	0.343	635.873	1.015	8.849	0	0	0	0	0	0
0203-417-418	6	304.449	4.893	110.027	Free Surface	0 - 12:25 hrs	4.883	4.902	0.361	0.745	194.422	9.206	5.999	0	0	0	0	0	0
0203-418-184	6.773	478.547	0.151	109.46	Free Surface	0 - 12:25 hrs	1.579	1.595	0.229	0.627	369.087	9.204	22.557	0	0	0	0	0	0
0203-419-420	2	21.115	8.248	15.935	Free Surface	0 - 12:23 hrs	7.069	7.069	0.755	0.678	5.18	0.956	2	0	0.845	0	0	0	0
0203-420-186	6.59	1,773.95	4.014	15.935	Free Surface	0 - 12:23 hrs	1.629	3.377	0.009	0.188	1,758.01	0.957	11.525	0	0	0	0	0	0
0203-421-192	5.831	443.929	2.958	12.475	Free Surface	0 - 12:15 hrs	3.823	3.829	0.028	0.212	431.454	0.424	3.893	0	0	0	0	0	0
0203-422-423	3	49.047	0.541	12.127	Free Surface	0 - 12:15 hrs	3.214	3.216	0.247	0.527	36.92	0.535	2.997	0	0	0	0	0	0
0203-423-501	3	108.54	2.648	12.095	Free Surface	0 - 12:15 hrs	6.501	6.501	0.111	0.309	96.445	0.535	2.763	0	0	0	0	0	0
0203-424-425	5	849.536	0.219	119.944	Free Surface	0 - 12:30 hrs	2.075	2.207	0.141	0.586	729.592	10.137	20	0	0	0	0	0	0
0203-425-180	11.155	5,446.72	0.483	118.413	Free Surface	0 - 12:32 hrs	1.224	1.393	0.022	0.292	5,328.31	10.132	44.278	0	0	0	0	0	0
0203-426-369	4	471.649	0.301	91.053	Backwater	0 - 15:36 hrs	1.727	1.814	0.193	1	380.596	10.089	14	3.015	3.036	3.024	0	0.156	0
0203-427-174	4.533	224.617	0.327	92.102	Backwater	0 - 15:34 hrs	2.116	2.348	0.41	1	132.515	10.085	14.018	2.4	2.4	2.854	0	0	0
0203-428-507	8	1,551.51	0.228	248.317	Free Surface	0 - 14:02 hrs	2.431	2.435	0.16	0.711	1,303.19	38.311	18	0	0	0	0	0	0
0203-429-162	12.147	1,032.00	0.184	262.97	Free Surface	0 - 13:38 hrs	4.13	4.13	0.255	0.366	769.029	41.136	17.317	0	0	0	0	0	0
0203-430-240	3	42.608	0.408	34.638	Backwater	0 - 13:55 hrs	5.023	5.112	0.813	1	7.97	2.919	2.993	1.411	1.572	1.528	0	0.428	0
0203-431-513	2	29.241	1.671	20.338	Backwater	0 - 12:02 hrs	6.474	6.474	0.696	1	8.903	1.774	2	1.099	1.114	1.099	0	1.098	3
0203-432-433	5	128.573	0.244	16.759	Free Surface	0 - 12:25 hrs	0.991	0.992	0.13	0.833	111.814	0.554	4.999	0	0	0	0	0	0
0203-433-253	4.946	221.964	0.118	18.022	Free Surface	0 - 12:26 hrs	0.265	0.275	0.081	0.886	203.942	0.552	25.587	0	0	0	0	0	0
0203-434-435	5	107.609	0.171	68.019	Free Surface	0 - 12:18 hrs	4.736	4.749	0.632	0.691	39.59	3.182	4.999	0	0	0	0	0	0

Table B-2b. Existing System Analysis - Pipes/Channels
5-year, 24-hour Events

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-435-138	6.268	2,359.30	1.346	67.085	Free Surface	0 - 12:18 hrs	1.431	1.548	0.028	0.44	2,292.22	3.182	35.781	0	0	0	0	0	0
0203-437-438	5.5	449.896	1.795	52.102	Free Surface	0 - 12:37 hrs	8.583	8.583	0.116	0.303	397.794	3.132	5.049	0	0	0	0	0	0
0203-438-135	9.15	6,022.25	7.055	52.11	Free Surface	0 - 12:37 hrs	4.542	4.867	0.009	0.207	5,970.14	3.121	11.567	0	0	0	0	0	2
0203-439-440	3	87.529	1.722	60.757	Backwater	0 - 12:30 hrs	8.595	8.595	0.694	1	26.771	5.851	2.979	1.904	1.904	5.139	0	1.903	0
0203-440-441	3	80.476	1.456	30.74	Backwater	0 - 13:55 hrs	4.349	4.349	0.382	1	49.736	5.82	2.999	5.149	5.149	5.185	0	0	0
0203-441-442	3	14.501	0.047	30.278	Exceeds Capacity	0 - 14:07 hrs	4.283	4.283	2.088	1	-15.777	5.82	2.999	5.135	5.185	5.135	5.376	5.135	0
0203-442-443	3	43.012	0.416	30.278	Free Surface	0 - 14:07 hrs	4.367	4.367	0.704	0.95	12.733	5.82	3	0	5.135	0	0	0	0
0203-443-444	3	81.077	1.478	30.278	Free Surface	0 - 14:07 hrs	5.237	5.24	0.373	0.763	50.799	5.821	2.999	0	0	0	0	0	0
0203-444-445	3	93.201	1.953	30.381	Free Surface	0 - 13:48 hrs	8.982	9.093	0.326	0.484	62.82	5.822	3	0	0	0	0	0	0
0203-445-446	3	81.206	1.482	30.297	Free Surface	0 - 14:08 hrs	5.477	5.514	0.373	0.733	50.909	5.822	2.999	0	0	5.131	0	0	0
0203-446-447	3	51.337	0.592	30.3	Free Surface	0 - 14:08 hrs	5.373	5.562	0.59	0.808	21.037	5.82	3	0	5.136	0	0	0	0
0203-447-448	3	125.519	3.541	33.588	Free Surface	0 - 13:48 hrs	5.949	7.377	0.268	0.808	91.931	5.818	2.999	0	0	1.887	0	0	0
0203-448-452	4	240.383	2.801	72.753	Backwater	0 - 12:02 hrs	6.228	6.249	0.303	1	167.63	9.713	4	0.292	1.47	0.292	0	0.292	0
0203-449-450	3	160.418	5.785	58.449	Backwater	0 - 12:02 hrs	8.269	8.269	0.364	1	101.969	3.922	2.997	1.313	1.342	1.313	0	1.311	0
0203-450-451	3	71.197	1.139	52.712	Backwater	0 - 12:23 hrs	7.457	7.457	0.74	1	18.485	3.915	3	1.314	1.314	1.93	0	0.001	0
0203-451-448	3.5	31.481	0.098	44.061	Exceeds Capacity	0 - 12:00 hrs	4.58	4.58	1.4	1	-12.58	3.898	3.5	1.838	1.898	1.841	1.886	1.838	0
0203-452-453	4	164.465	1.311	75.04	Backwater	0 - 12:00 hrs	7.35	7.655	0.456	1	89.425	9.709	3.995	1.001	1.001	1.759	0	0	0
0203-453-454	4	184.959	1.658	72.671	Backwater	0 - 13:21 hrs	5.783	7.419	0.393	1	112.288	9.729	3.982	1.771	1.771	2.139	0	0	0
0203-454-455	4.5	211.484	1.157	71.87	Backwater	0 - 13:29 hrs	4.519	5.093	0.34	1	139.614	9.706	4.5	2.124	2.125	2.15	0	0.001	0
0203-455-457	4.5	164.682	0.701	111.688	Backwater	0 - 13:53 hrs	7.023	7.023	0.678	1	52.994	11.25	4.49	2.163	2.163	2.258	0	0.452	0
0203-456-455	2	39.779	3.092	25.63	Backwater	0 - 14:17 hrs	8.158	8.158	0.644	1	14.149	1.554	2	2.279	2.279	4.249	0	0	0
0203-457-458	5.5	268.326	0.638	144.82	Backwater	0 - 12:21 hrs	6.096	6.096	0.54	1	123.506	17.053	5.5	2.129	2.129	2.405	0	0	0
0203-458-365	5.5	112.891	0.113	148.377	Exceeds Capacity	0 - 13:04 hrs	6.245	6.245	1.314	1	-35.486	17.022	5.499	2.362	2.405	2.362	2.275	2.361	0
0203-459-460	3.5	120.316	1.43	54.682	Backwater	0 - 12:18 hrs	5.684	5.684	0.454	1	65.634	3.56	3.5	1.091	1.093	1.638	0	1.082	0
0203-460-365	3.5	92.077	0.838	54.682	Backwater	0 - 12:19 hrs	5.684	5.788	0.594	1	37.395	3.571	3.5	2.268	2.268	2.401	0	0.675	0
0203-461-244	5.737	36.296	0.054	172.755	Exceeds Capacity	0 - 13:04 hrs	6.277	6.277	4.76	1	-136.459	20.567	6.184	5.754	5.799	5.89	5.911	5.278	0
0203-462-119	5.737	112.77	0.521	97.971	Free Surface	0 - 14:22 hrs	4.239	4.296	0.869	0.957	14.8	20.567	6.131	0	0.887	0	0	0	0
0203-463-465	3.5	87.513	0.757	61.748	Free Surface	0 - 13:11 hrs	6.802	6.887	0.706	0.895	25.764	9.658	3.5	0	3.851	0	0	0	0
0203-464-463	3	66.062	0.981	61.748	Backwater	0 - 13:11 hrs	8.736	8.736	0.935	1	4.313	9.659	3	3.853	3.853	3.876	0	3.852	0
0203-465-466	4	108.88	0.575	61.748	Free Surface	0 - 13:12 hrs	7.532	7.532	0.567	0.621	47.133	9.664	3.998	0	0	0	0	0	0
0203-466-367	4	154.166	1.152	61.795	Free Surface	0 - 12:55 hrs	6.378	8.312	0.401	0.76	92.371	9.667	3.999	0	0	2.029	0	0	0
0203-467-485	3.94	223.265	0.212	70.968	Backwater	0 - 16:52 hrs	2.622	2.622	0.318	1	152.297	9.805	8.105	5.076	5.08	5.079	0	2.277	0
0203-468-469	3	124.699	3.495	28.117	Backwater	0 - 12:00 hrs	3.978	4.227	0.225	1	96.582	2.431	2.98	2.336	2.337	2.337	0	0.086	4
0203-469-470	3	45.052	0.456	25.157	Backwater	0 - 12:02 hrs	3.559	3.948	0.558	1	19.894	2.431	2.999	2.337	2.337	4.998	0	0	3
0203-470-471	3	35.858	0.289	25.156	Backwater	0 - 12:02 hrs	3.559	3.559	0.702	1	10.702	2.426	2.972	4.998	4.998	5.198	0	1.494	5
0203-471-473	3	98.839	2.196	25.158	Backwater	0 - 12:02 hrs	3.559	3.559	0.255	1	73.68	2.424	2.979	5.198	5.198	5.605	0	0.001	7
0203-472-013	4.033	172.862	0.159	86.599	Free Surface	0 - 14:00 hrs	3.553	3.719	0.501	0.977	86.264	9.81	7.053	0	2.368	0	0	0	0
0203-473-372	3	49.747	0.556	25.158	Backwater	0 - 12:02 hrs	3.559	3.559	0.506	1	24.589	2.423	3	5.605	5.605	5.669	0	0.012	4
0203-474-242	3	65.121	0.953	48.761	Backwater	0 - 12:18 hrs	6.898	6.898	0.749	1	16.36	2.183	2.999	1.41	1.41	1.673	0	0.613	2
0203-475-476	3	58.078	0.758	32.952	Backwater	0 - 12:00 hrs	4.662	4.662	0.567	1	25.126	2.426	3	1.995	2.012	2.018	0	1.981	5
0203-476-359	3	24.18	0.131	32.944	Exceeds Capacity	0 - 12:00 hrs	4.661	4.661	1.362	1	-8.763	2.425	2.999	2.055	2.103	2.218	0.882	1.945	3
0203-477-478	3	55.864	0.702	37.726	Backwater	0 - 12:00 hrs	5.337	6.19	0.675	1	18.138	3.91	2.99	2.436	2.436	2.459	0	0.002	0
0203-478-479	3	52.374	0.617	37.723	Backwater	0 - 12:00 hrs	5.337	5.337	0.72	1	14.651	3.915	2.999	2.466	2.466	3.102	0	0.001	1
0203-479-480	3	4.209	0.004	37.724	Exceeds Capacity	0 - 12:00 hrs	5.337	5.337	8.963	1	-33.515	3.912	3	3.098	3.144	3.098	6.307	3.098	5
0203-480-342	3	3.562	0.003	37.72	Exceeds Capacity	0 - 12:00 hrs	5.336	5.336	10.591	1	-34.158	3.911	2.999	2.97	3.098	2.97	7.541	2.97	3
0203-481-482	3	74.134	1.235	61.072	Backwater	0 - 13:04 hrs	8.64	8.64	0.824	1	13.063	11.489	2.999	4.871	4.871	4.876	0	4.87	0
0203-482-483	3	65.191	0.955	61.072	Free Surface	0 - 13:04 hrs	9.149	9.149	0.937	0.915	4.12	11.47	2.999	0	4.876	0	0	0	0
0203-483-484	3.5	127.295	1.601	61.288	Free Surface	0 - 11:49 hrs	9.532	9.62	0.481	0.641	66.006	11.458	3.499	0	0	0	0	0	0
0203-484-337	4.5	186.418	0.899	61.072	Free Surface	0 - 13:07 hrs	7.965	7.965	0.328	0.486	125.347	11.436	4.498	0	0	0	0	0	0
0203-485-006	3.9	296.101	0.613	70.993	Backwater	0 - 16:52 hrs	3.19	3.218	0.24	1	225.108	9.794	6.636	4.799	5.087	4.8	0	3.227	0
0203-486-487	5	258.438	0.985	62.389	Free Surface	0 - 12:04 hrs	6.933	7.458	0.241	0.576	196.049	11.426	5	0	0	0	0	0	0
0203-487-488	5	256.983	0.974	66.939	Free Surface	0 - 12:18 hrs	3.842	5.871	0.26	0.879	190.043	11.404	4.998	0	0	1.075	0	0	0
0203-488-491	6	195.36	0.213	213.607	Free Surface	0 - 12:15 hrs	7.59	7.59	1.093	0.988	-18.247	19.656	6	0	0.967	0	0.2	0	0
0203-489-488	3.5	167.486	2.771	52.019	Backwater	0 - 12:15 hrs	5.407	5.407	0.311	1	115.467	0.44	3.5	0.966	0.966	0.998	0	0.3	0
0203-490-489	3.5	116.974	1.352	21.458	Backwater	0 - 13:00 hrs	2.73	3.502	0.183	1	95.516	0.407	3.499	0.683	0.683	0.966	0	0	0
0203-491-221	6	442.205	1.09	210.607	Free Surface	0 - 12:15 hrs	7.471	7.774	0.476	0.988	231.598	19.638	5.999	0	0	0.115	0	0	0
0203-492-221	3.5	68.221	0.46	49.013	Backwater	0 - 12:15 hrs	5.094	5.094	0.718	1	19.208	1.393	3.5	0.115	0.23	0.115	0	0.115	0
0203-493-421	3	95.492	2.05	12.62	Free Surface	0 - 12:15 hrs	4.441	4.441	0.132	0.423	82.872	0.424	2.963	0	0	0	0	0	0
0203-494-254	4	74.23	0.267	108.978	Exceeds Capacity	0 - 12:27 hrs	8.672	8.672	1.468	1	-34.748	7.99	4	0.728	1.388	0.757	0.731	0.712	0
0203-495-241	2.5	20.372	0.247	26.373	Exceeds Capacity	0 - 12:15 hrs	5.373	5.373	1.295	1	-6.001	0.92	2.498	0.549	0.554	0.567	0.176	0.488	0
0203-496-497	3	50.948	0.583	12.641	Free Surface	0 - 12:15 hrs	2.532	2.566	0.248	0.665	38.307	0.396	2.999	0	0	0	0	0	0
0203-497-498	3	15.612	0.055	12.531	Free Surface	0 - 12:15 hrs	2.353	2.354	0.803	0.705	3.082	0.396	2.998	0	0	0	0	0	0
0203-498-499	3	24.975	0.14	12.487	Free Surface	0 - 12:15 hrs	2.941	2.942	0.5	0.58	12.488	0.396	2.998	0	0	0	0	0	0
0203-499-500	3	51.689	0.601	12.448	Free Surface	0 - 12:15 hrs	5.225	5.225	0.241	0.37	39.241	0.396	2.892	0	0	0	0	0	0
0203-500-200	6.864	1,240.30	3.132	12.434	Free Surface	0 - 12:15 hrs	1.199	1.199	0.01	0.226	1,227.87	0.396	8.42	0	0	0	0	0	0
0203-501-194	3.615	519.532	5.96	12.089	Free Surface	0 - 12:15 hrs	2.986	2.993	0.023	0.164	507.443	0.535	7.822	0	0	0	0	0	0
0203-502-503	3.5	74.926	0.555	46.505	Free Surface	0 - 12:15 hrs	5.41	5.41	0.621	0.837	28.422	2.035	3.496	0	0	0	0	0	0
0203-503-504	3.5	106.95	1.13	46.232	Free Surface	0 - 12:15 hrs	7.669	7.673	0.432	0.6	60.718	2.035	3.492	0	0	0	0	0	0
0203-504-198	3.075	230.775	0.995	49.901	Free Surface	0 - 12:15 hrs	2.012	2.236	0.216	0.731	180.874	2.197	17.968	0	0	0	0	0	0
0203-505-504	3	58.702	0.775	4.853	Free Surface	0 - 12:15 hrs	1.494	1.905	0.083	0.476	53.849	0.162	2.993	0	0	0	0	0	0
0203-506-430	2.5	30.24	0.544	35.242	Exceeds Capacity	0 - 12:02 hrs	7.179	7.179	1.165	1	-5.002	2.877	2.47	2.125	2.195	2.13	1.38	1.459	0
0203-507-429	8	765.468	0.056	262.971	Free Surface	0 - 13:37 hrs	2.678	2.678	0.344	0.682	502.497	41.162	18	0	0	0	0	0	0
0203-508-509	7.34	1,006.51	1.616	85.432	Free Surface	0 - 12:15 hrs	1.134	2.886	0.085	0.884	921.081	2.239	24.54	0	0	0	0	0	0
0203-509-517	7.66	974.388	1.962	83.615	Free Surface	0 - 12:15 hrs	2.316	2.316	0.086	0.944	890.774	2.237	5.315	0	0	0	0	0	0
0203-510-095	3	255.354	14.657	53.745	Backwater	0 - 12:00 hrs	7.603	7.603	0.21	1	201.609	7.584	2.978	3.317	3.317	3.365	0	0	4
0203-511-230	2.5	96.373	5.521	19.741	Backwater	0 - 12:22 hrs	4.022	4.022	0.205	1	76.633	1.776	2.5	1.091	1.091	1.1	0	0.001	0
0203-512-231	2.5	51.032	1.548	19.833	Free Surface	0 - 12:03 hrs	6.373	6.536	0.389	0.61	31.2	1.78	2.499	0	0	0	0	0	0
0203-513-229	2	34.719	2.355	20.284	Backwater	0 - 12:02 hrs	6.457	6.457	0.584	1	14.435	1.773	2	1.099	1.099	1.105	0	1.098	3
0203-514-515	3	39.502	0.351	19.74	Free Surface	0 - 12:25 hrs	4.381	4.381	0.5	0.609	19.762	1.781	2.986	0	0	0	0	0	0
0203-515-232	3	84.046	1.588	19.74	Free Surface	0 - 12:26 hrs	5.71	5.748	0.235	0.491	64.306	1.781	2.999	0	0	0	0	0	0
0203-516-393	3.5	136.994	1.854	19.74	Free Surface	0 - 12:26 hrs	3.081	3.081	0.144	0.632	117.253	1.777	3.5	0	0	0	0	0	0
0203-517-048	8.92	861.063	0.529	81.964	Free Surface	0 - 12:15 hrs	0.97	1.014	0.095	0.83	779.099	2.233	23.052	0	0	0	0	0	0
0203-518-519	2.4	58.661	0.743	36.681	Backwater	0 - 12:18 hrs	5.018	5.018	0.625	1	21.98	2.123	3.797	0.74	0.74	1.586	0	0.722	0
0203-519-203	5.134	201.594	1.52	36.663	Free Surface	0 - 12:18 hrs	4.254	4.401	0.182	0.629	164.93	2.123	5.608	0	0	0	0	0	0
0203-520-006	7.17	2,505.53	1.421	183.78	Free Surface	0 - 12:19 hrs	3.75	3.75	0.073	0.361	2,321.75	27.49	26.372	0	0	0	0	0	0
0203-521-526	3.5	87.303	0.753	35.842	Backwater	0 - 12:00 hrs	3.725	3.725	0.411	1	51.461	3.101	3.5	1.587	1.595	1.587	0	1.587	2
0203-522-521	3.5	35.258	0.123	35.851	Exceeds Capacity	0 - 12:00 hrs	3.726	3.726	1.017	1	-0.594	3.103	3.5	1.594	1.618	1.595	0.639	1.593	4

Table B-2b. Existing System Analysis - Pipes/Channels
5-year, 24-hour Events

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-523-524	3.5	68.693	0.466	35.887	Backwater	0 - 12:00 hrs	3.73	3.73	0.522	1	32.806	3.105	3.5	1.64	1.655	1.64	0	1.639	5
0203-524-522	3.5	51.644	0.263	35.87	Backwater	0 - 12:00 hrs	3.728	3.728	0.695	1	15.774	3.104	3.5	1.617	1.64	1.618	0	1.616	5
0203-525-033	16.9	11,949.49	1.886	145.344	Free Surface	0 - 12:18 hrs	4.973	5.102	0.012	0.169	11,804.14	25.853	15.468	0	0	0	0	0	0
0203-526-527	3.5	30.056	0.089	35.971	Free Surface	0 - 12:00 hrs	3.94	3.948	1.197	0.966	-5.915	3.1	3.499	0	1.587	0	1.595	0	1
0203-527-528	3.5	101.622	1.02	35.421	Free Surface	0 - 12:30 hrs	3.738	4.141	0.349	0.957	66.201	3.099	3.489	0	0	0	0	0	0
0203-528-234	4	131.535	0.839	35.421	Free Surface	0 - 12:30 hrs	2.954	3.161	0.269	0.909	96.114	3.098	4	0	0	0	0	0	0
0203-529-235	4	77.78	0.293	35.42	Free Surface	0 - 12:30 hrs	3.064	3.064	0.455	0.866	42.36	3.095	3.999	0	0	0	0	0	0
0203-530-001	9.53	528.594	0.062	123.879	Free Surface	0 - 12:49 hrs	0.681	0.736	0.234	0.963	404.715	24.139	27.237	0	0	0	0	0	0
0203-531-055	2.5	55.941	1.86	47.318	Backwater	0 - 12:15 hrs	9.64	9.64	0.846	1	8.623	1.465	2.5	0.257	0.257	0.553	0	0.159	0
0203-532-580	9.45	2,462.51	1.34	109.334	Free Surface	0 - 15:55 hrs	3.048	3.049	0.044	0.355	2,353.18	40.669	20.019	0	0	0	0	0	0
0203-533-538	3	287.313	0.382	90.721	Free Surface	0 - 13:21 hrs	4.452	4.462	0.316	0.566	196.592	17.169	12	0	0	0	0	0	0
0203-534-535	3	63.109	0.895	22.959	Backwater	0 - 13:21 hrs	3.826	4.615	0.364	1	40.15	4.653	2.997	0.279	1.126	0.279	0	0.279	0
0203-535-542	3	89.294	1.792	30.757	Backwater	0 - 13:21 hrs	4.791	6.928	0.344	1	58.536	4.653	2.999	0.279	0.279	1.329	0	0	0
0203-536-537	3.5	3.806	0.001	83.739	Exceeds Capacity	0 - 12:03 hrs	8.704	8.704	22.003	1	-79.933	9.408	3.5	1.328	1.897	1.328	19.02	1.327	0
0203-537-539	4	126.979	0.781	83.298	Backwater	0 - 12:03 hrs	6.863	6.98	0.656	1	43.681	9.4	3.998	1.284	1.299	1.286	0	1.282	0
0203-538-608	4.87	3,433.72	7.246	90.733	Free Surface	0 - 13:21 hrs	5.824	5.92	0.026	0.301	3,342.99	17.163	12.284	0	0	0	0	0	0
0203-539-540	4	145.306	1.023	80.119	Backwater	0 - 12:34 hrs	6.376	6.376	0.551	1	65.187	9.406	4	1.286	1.286	1.368	0	0	0
0203-540-541	4	152.206	1.123	80.12	Free Surface	0 - 12:34 hrs	7.037	7.813	0.526	0.851	72.086	9.41	4	0	1.374	0	0	0	0
0203-541-543	4	189.82	1.746	80.108	Free Surface	0 - 12:37 hrs	7.033	7.27	0.422	0.851	109.712	9.401	3.997	0	0	1.349	0	0	0
0203-542-536	3.5	129.193	1.649	40.281	Backwater	0 - 13:21 hrs	4.294	4.325	0.312	1	88.913	4.648	3.498	1.311	1.311	1.897	0	0	0
0203-543-544	4	159.361	1.231	80.108	Backwater	0 - 12:37 hrs	6.375	6.375	0.503	1	79.253	9.399	4	1.326	1.349	1.351	0	1.321	0
0203-544-650	4.04	121.062	0.856	80.108	Backwater	0 - 12:37 hrs	3.433	3.433	0.662	1	40.954	9.396	7.247	1.327	1.345	1.327	0	1.277	0
0203-545-251	3.91	3.866	0.001	37.236	Exceeds Capacity	0 - 11:57 hrs	1.488	1.488	9.633	1	-33.37	9.381	7.382	7.442	8.485	7.442	18.8	7.442	0
0203-546-548	3.5	28.097	0.056	34.334	Exceeds Capacity	0 - 11:59 hrs	1.226	1.226	1.222	1	-6.237	9.377	8	8.51	8.519	8.51	7.973	8.509	0
0203-547-600	6.67	1,344.78	0.969	99.979	Free Surface	0 - 12:17 hrs	0.94	1.855	0.074	0.816	1,244.80	17.103	34.795	0	0	0.104	0	0	0
0203-548-651	3.89	111.91	0.698	33.446	Backwater	0 - 11:59 hrs	1.52	1.54	0.299	1	78.464	9.376	7.177	6.84	6.84	7.153	0	0	0
0203-549-633	4.49	145.474	0.523	39.284	Free Surface	0 - 12:26 hrs	2.057	2.058	0.27	0.602	106.19	10.016	7.813	0	0	0	0	0	0
0203-550-638	10.26	9,226.24	2.917	930.384	Free Surface	0 - 13:00 hrs	2.195	2.196	0.101	0.974	8,295.86	157.452	69.678	0	0	1.331	0	0	0
0203-551-550	3.5	380.538	14.306	54.71	Free Surface	0 - 12:17 hrs	6.594	6.647	0.144	0.809	325.828	1.687	3.5	0	0	16.993	0	0	0
0203-552-553	3	16.916	0.609	25.923	Exceeds Capacity	0 - 12:55 hrs	3.667	3.667	1.532	1	-9.007	4.06	3	3.816	3.852	3.817	3.863	3.815	0
0203-553-322	4	109.183	0.578	25.923	Free Surface	0 - 12:55 hrs	2.063	2.786	0.237	1	83.26	4.065	3.995	0	0	3.901	0	0	0
0203-554-555	3	91.986	1.902	27.771	Free Surface	0 - 12:15 hrs	4.776	6.614	0.302	0.775	64.215	0.815	3	0	0	0	0	0	0
0203-555-319	4	59.203	0.17	27.155	Backwater	0 - 12:15 hrs	2.161	2.161	0.459	1	32.048	0.816	3.991	0.085	0.085	0.111	0	0	0
0203-556-558	4.5	250.472	1.622	53.699	Free Surface	0 - 12:15 hrs	4.846	4.846	0.214	0.657	196.773	4.217	4.5	0	0	2.32	0	0	0
0203-557-584	14	1,993.65	1.603	445.65	Free Surface	0 - 12:14 hrs	8.63	8.665	0.224	0.618	1,548.00	67.496	6	0	0	0	0	0	0
0203-558-644	17.29	23,504.65	1.58	1,024.64	Free Surface	0 - 12:56 hrs	4.372	4.481	0.044	0.352	22,480.01	170.026	53.231	0	0	0	0	0	0
0203-559-547	8.04	86.352	0.001	93.659	Free Surface	0 - 12:17 hrs	1.373	3.031	1.085	0.529	-7.307	17.11	29.138	0	0	0	3.043	0	0
0203-560-564	4.58	457.706	1.81	363.56	Backwater	0 - 12:08 hrs	7.061	7.061	0.794	1	94.146	17.983	19.156	0.434	0.434	1.106	0	0.433	0
0203-561-565	5	246.32	1.547	239.873	Free Surface	0 - 12:42 hrs	7.469	7.469	0.974	0.804	6.446	18.028	8	0	1.147	0	0	0	7
0203-562-590	4.43	15.809	0.103	49.706	Free Surface	0 - 15:25 hrs	7.44	7.44	3.144	0.7	-33.897	10.363	5.79	0	6.15	0	6.812	0	0
0203-563-562	5.67	87.661	1.863	75.261	Backwater	0 - 12:27 hrs	4.627	4.627	0.859	1	12.4	10.404	3.577	3.566	3.566	5.861	0	1.96	0
0203-564-561	4.58	331.093	0.947	240.445	Backwater	0 - 12:44 hrs	4.67	4.981	0.726	1	90.648	18.03	19.156	1.106	1.106	1.181	0	0	5
0203-565-566	6.13	3,871.66	1.408	239.58	Free Surface	0 - 12:34 hrs	1.838	1.884	0.062	0.53	3,632.08	18.028	68.942	0	0	0	0	0	2
0203-566-567	4.89	320.067	1.093	239.573	Free Surface	0 - 12:37 hrs	5.346	5.435	0.749	0.959	80.493	17.994	18.076	0	0	0	0	0	0
0203-567-568	7.77	909.854	0.572	239.539	Free Surface	0 - 12:38 hrs	4.056	4.056	0.263	0.663	670.315	17.987	21.748	0	0	0	0	0	0
0203-568-569	6.66	552.088	0.267	247.937	Free Surface	0 - 12:22 hrs	4.101	4.315	0.449	0.686	304.152	17.961	24.019	0	0	0	0	0	0
0203-569-570	5.1	1,171.14	0.51	256.529	Free Surface	0 - 13:34 hrs	1.526	2.186	0.219	0.901	914.613	18.02	83.572	0	0	1.285	0	0	0
0203-570-571	4.54	290.106	1.015	215.617	Backwater	0 - 13:22 hrs	4.783	4.783	0.743	1	74.489	17.911	17.729	1.412	1.412	12.076	0	0	0
0203-571-572	7.53	767.629	0.506	220.948	Backwater	0 - 13:18 hrs	1.984	1.984	0.288	1	546.681	17.839	20.731	1.065	1.065	2.058	0	0	0
0203-572-573	10	155.838	0.002	221.42	Free Surface	0 - 13:18 hrs	1.609	1.609	1.421	0.945	-65.582	17.703	15	0	0	0	1.441	0	0
0203-573-574	8.35	39.275	0	657.524	Exceeds Capacity	0 - 12:15 hrs	3.795	3.795	16.742	1	-618.25	52.919	35.504	1.855	1.905	1.855	11.298	1.855	0
0203-574-575	6.44	19.662	0.001	499.957	Exceeds Capacity	0 - 12:45 hrs	5.331	5.331	25.428	1	-480.296	52.617	18.158	12.055	12.076	12.055	17.937	12.055	0
0203-575-383	4.91	96.731	0.063	133.634	Backwater	0 - 11:56 hrs	2.495	2.497	1.382	1	-36.904	42.802	12.036	12.031	12.031	12.498	12.232	0	0
0203-576-577	13.143	8,486.87	3.432	109.333	Free Surface	0 - 15:47 hrs	4.091	4.115	0.013	0.192	8,377.54	41.342	14.941	0	0	0	0	0	0
0203-577-578	13.143	1,842.63	0.162	109.333	Free Surface	0 - 15:48 hrs	3.257	3.363	0.059	0.225	1,733.30	41.278	16.243	0	0	0	0	0	0
0203-578-579	12.6	3,409.35	0.426	109.332	Free Surface	0 - 15:51 hrs	1.743	1.758	0.032	0.273	3,300.02	41.172	23.219	0	0	0	0	0	0
0203-579-247	16	13,470.77	1.049	109.332	Free Surface	0 - 15:52 hrs	1.127	1.127	0.008	0.243	13,361.44	40.949	25	0	0	0	0	0	0
0203-580-582	9.94	1,281.46	0.17	109.338	Free Surface	0 - 15:52 hrs	2.653	3.03	0.085	0.372	1,172.12	40.588	23.296	0	0	0	0	0	0
0203-581-592	3	67.993	1.039	65.709	Backwater	0 - 12:07 hrs	9.342	9.379	0.966	1	2.284	2.338	3	0.212	0.384	0.223	0	0.211	0
0203-582-583	8.81	4,032.92	2.092	111.267	Free Surface	0 - 17:05 hrs	1.845	4.073	0.028	0.547	3,921.65	40.556	30.975	0	0	0	0	0	0
0203-583-584	11.75	15,533.00	2.768	116.765	Free Surface	0 - 17:14 hrs	0.552	1.037	0.008	0.624	15,416.24	40.505	59.899	0	0	0	0	0	0
0203-584-585	13.35	2,358.24	0.069	524.238	Free Surface	0 - 12:15 hrs	1.777	1.815	0.222	0.618	1,834.01	107.895	52.956	0	0	0	0	0	0
0203-585-586	13.32	3,869.75	0.284	522.494	Free Surface	0 - 12:25 hrs	2.18	2.32	0.135	0.613	3,347.26	107.842	42.742	0	0	0	0	0	0
0203-586-587	14.17	4,356.39	0.461	521.439	Free Surface	0 - 12:30 hrs	2.881	3.299	0.12	0.6	3,834.95	107.764	41.315	0	0	0	0	0	0
0203-587-588	13.84	7,989.37	1.179	520.797	Free Surface	0 - 12:30 hrs	1.806	1.892	0.065	0.699	7,468.57	107.642	46.273	0	0	0	0	0	0
0203-588-589	15.24	7,355.74	0.878	520.241	Free Surface	0 - 12:30 hrs	2.384	2.525	0.071	0.599	6,835.49	107.462	42.274	0	0	0	0	0	0
0203-589-612	16.27	3,369.78	0.088	519.179	Free Surface	0 - 12:30 hrs	2.49	2.963	0.154	0.471	2,850.60	107.308	44.134	0	0	0	0	0	0
0203-590-591	2.03	69.27	1.283	49.686	Free Surface	0 - 15:26 hrs	3.809	3.809	0.717	0.937	19.584	10.378	10.387	0	0	5.902	0	0	0
0203-591-593	2.62	73.4	1.343	49.247	Free Surface	0 - 15:37 hrs	5.526	5.526	0.671	0.723	24.153	10.367	6.243	0	1.254	0	0	0	0
0203-592-611	4	95.093	0.438	65.12	Free Surface	0 - 12:10 hrs	5.724	5.887	0.685	0.978	29.973	2.321	4	0	0	2.036	0	0	0
0203-593-594	3.6	453.849	1.331	49.247	Free Surface	0 - 15:37 hrs	1.494	1.88	0.109	0.662	404.602	10.357	19.548	0	0	6.06	0	0	0
0203-594-595	2.19	35.906	0.524	43.553	Exceeds Capacity	0 - 17:27 hrs	3.318	3.318	1.213	1	-7.647	10.329	11.638	6.638	6.638	6.782	6.419	6.572	0
0203-595-596	3.06	64.797	0.373	43.553	Free Surface	0 - 17:29 hrs	3.024	3.024	0.672	0.774	21.244	10.321	8.136	0	0	0	0	0	0
0203-596-597	2.33	73.112	1.685	43.553	Free Surface	0 - 17:30 hrs	3.794	3.794	0.596	0.903	29.559	10.313	10.101	0	0	6.652	0	0	0
0203-597-598	7.08	393.884	0.474	43.553	Free Surface	0 - 17:31 hrs	3.294	3.294	0.111	0.369	350.331	10.307	8.336	0	0	0	0	0	0
0203-598-599	6.15	520.803	0.782	43.553	Free Surface	0 - 17:32 hrs	2.359	2.405	0.084	0.617	477.25	10.307	14.252	0	0	0	0	0	0
0203-599-679	4.583	13.78	0.012	45.713	Exceeds Capacity	0 - 12:18 hrs	1.596	3.137	3.317	1	-31.933	10.299	6.25	0.231	0.492	0.231	7.768	0.231	0
0203-600-601	6.67	1,189.60	0.758	457.019	Backwater	0 - 12:11 hrs	2.981	5.075	0.384	1	732.581	67.508	38.079	0.397	0.397	0.579	0	0	0
0203-601-557	9.29	10,571.93	4.543	448.891	Free Surface	0 - 12:12 hrs	1.272	4.198	0.042	0.896	10,123.04	67.506	69.607	0	0	0.025	0	0	0
0203-602-532	9	3,094.64	0.323	109.333	Free Surface	0 - 15:55 hrs	1.904	1.904	0.035	0.281	2,985.31	40.705	24	0	0	0	0	0	0
0203-603-604	4.549	95.959	0.384	90.723	Free Surface	0 - 13:18 hrs	3.449	3.449	0.945	0.991	5.236	17.13	7.32	0	5.032	0	0	0	0
0203-604-605	4.539	43.632	0.049	90.722	Free Surface	0 - 13:18 hrs	3.095	3.095	2.079	0.919	-47.09	17.137	7.819	0	0	0	5.206	0	0
0203-605-606	4.52	148.955	0.689	90.722	Free Surface	0 - 13:18 hrs	4.412	4.412	0.609	0.714	58.233	17.144	7.189	0	0	0	0	0	0
0203-606-607	3.356	295.43	1.499	90.722	Free Surface	0 - 13:19 hrs	3.695	3.695	0.307	0.672	204.708	17.153	12.874	0	0	0	0	0	0
0203-607-533	3.063	600.121	1.062	90.722	Free Surface	0 - 13:19 hrs	4.644	4.661	0.151	0.639	509.399	17.163	11.416	0	0	0	0	0	0
0203-608-609	6.23	920.531	0.657	90.695	Free Surface	0 - 13:22 hrs	5.234	5.349	0.099	0.454	829.837	17.148	8.32	0	0	0	0	0	0
0203-609-610	8.2	2,600.98	0.173	91.014	Free Surface	0 - 13:11 hrs	1.766	1.884	0.035	0.516	2,509.97	17.126	24.988	0	0	0	0	0	0

Table B-2b. Existing System Analysis - Pipes/Channels
5-year, 24-hour Events

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-610-559	8.04	117.505	0.003	92.107	Free Surface	0 - 12:18 hrs	1.298	2.091	0.784	0.538	25.398	17.114	29.51	0	0	0	0	0	0
0203-611-621	15.12	3,023.71	0.281	665.398	Free Surface	0 - 12:25 hrs	3.86	4.052	0.22	0.62	2,358.31	116.447	31.773	0	0	0	0	0	0
0203-612-611	11.76	7,994.65	1.202	620.235	Free Surface	0 - 12:27 hrs	1.842	1.885	0.078	0.737	7,374.41	114.231	56.451	0	0	0	0	0	0
0203-613-614	13.8	4,726.46	0.449	652.716	Free Surface	0 - 12:26 hrs	2.487	2.656	0.138	0.723	4,073.74	116.273	47.216	0	0	0	0	0	0
0203-614-615	14.09	134.302	0	639.064	Free Surface	0 - 12:26 hrs	2.716	2.897	4.758	0.746	-504.762	116.056	41.122	0	0	0	13.232	0	0
0203-615-616	16.66	3,218.90	0.047	620.628	Free Surface	0 - 12:26 hrs	1.728	1.842	0.193	0.624	2,598.27	115.781	63.704	0	0	0	0	0	0
0203-616-617	12.01	1,156.69	0.039	591.314	Free Surface	0 - 12:26 hrs	2.049	2.206	0.511	0.851	565.377	115.387	55.419	0	0	0	0	0	0
0203-617-618	10.93	4,117.66	0.453	634.387	Free Surface	0 - 12:48 hrs	1.597	1.83	0.154	0.939	3,483.28	121.602	53.065	0	0	0	0	0	0
0203-618-619	10.66	2,216.36	0.228	631.67	Free Surface	0 - 12:52 hrs	1.679	1.989	0.285	0.992	1,584.69	121.408	60.711	0	0	0.637	0	0	0
0203-619-620	11.76	1,212.85	0.102	629.675	Free Surface	0 - 12:56 hrs	2.493	3.436	0.519	0.883	583.173	121.174	39.801	0	0	0	0	0	0
0203-620-622	13.9	5,243.80	0.147	629.588	Free Surface	0 - 13:03 hrs	1.183	1.426	0.12	0.699	4,614.21	121.04	63.421	0	0	0	0	0	0
0203-621-613	13.58	3,962.39	0.558	662.833	Free Surface	0 - 12:25 hrs	3.52	3.78	0.167	0.673	3,299.56	116.408	36.007	0	0	0	0	0	0
0203-622-623	1.76	230.845	0.512	644.467	Exceeds Capacity	0 - 13:00 hrs	8.359	8.359	2.792	1	-413.622	123.024	64.23	15.723	15.723	16.366	6.377	13.556	0
0203-623-676	7.33	4,490.61	0.149	753.507	Free Surface	0 - 13:00 hrs	3.695	3.697	0.168	0.674	3,737.11	131.328	57.144	0	0	0	0	0	0
0203-624-623	4.01	549.756	2.467	109.589	Backwater	0 - 12:40 hrs	2.049	2.199	0.199	1	440.167	8.38	20.41	0.826	0.826	3.13	0	0	0
0203-625-270	11.2	3,720.17	1.794	119.583	Free Surface	0 - 12:10 hrs	1.496	1.827	0.032	0.642	3,600.58	8.384	25.628	0	0	0	0	0	0
0203-626-657	3.86	270.391	1.937	164.9	Backwater	0 - 12:15 hrs	5.004	5.004	0.61	1	105.491	8.486	13.226	1.104	1.105	1.171	0	0.001	0
0203-627-252	6.45	380.355	0.191	52.825	Free Surface	0 - 12:33 hrs	2.699	2.767	0.139	0.381	327.531	3.758	13.482	0	0	0	0	0	0
0203-628-629	6.99	10,583.69	1.162	767.629	Free Surface	0 - 12:59 hrs	5.015	6.004	0.073	0.604	9,816.06	133.241	49.765	0	0	0	0	0	0
0203-629-630	8.41	10,075.58	0.756	842.321	Free Surface	0 - 12:48 hrs	3.829	4.46	0.084	0.749	9,233.26	141.704	50.329	0	0	0	0	0	0
0203-630-268	12.401	1,060.03	0.014	841.204	Free Surface	0 - 12:59 hrs	2.717	2.725	0.794	0.625	218.826	141.413	62.323	0	0	0	0	0	0
0203-631-632	12.016	1,549.05	0.035	885.248	Free Surface	0 - 13:00 hrs	3.444	3.444	0.571	0.589	663.802	146.173	58.782	0	0	0	0	0	0
0203-632-637	9.93	7,174.33	1.141	885.379	Free Surface	0 - 13:00 hrs	4.06	4.113	0.123	0.546	6,288.95	145.998	56.165	0	0	0	0	0	0
0203-633-634	4.51	102.646	0.306	39.276	Free Surface	0 - 12:26 hrs	2.629	2.629	0.383	0.521	63.37	10.013	7.077	0	0	0	0	0	0
0203-634-255	4.56	151.447	0.923	39.264	Free Surface	0 - 12:26 hrs	3.374	3.374	0.259	0.518	112.183	10.008	6.239	0	0	0	0	0	0
0203-635-636	6.75	673.062	1.181	39.251	Free Surface	0 - 12:26 hrs	1.457	2.044	0.058	0.521	633.81	10.002	11.769	0	0	0	0	0	0
0203-636-637	11.29	4,138.85	0.961	37.62	Free Surface	0 - 12:27 hrs	0.493	1.033	0.009	0.427	4,101.23	9.966	27.402	0	0	0	0	0	0
0203-637-550	10.26	9,217.28	2.911	920.019	Free Surface	0 - 13:02 hrs	3.838	3.91	0.1	0.686	8,297.26	155.906	54.361	0	0	0	0	0	0
0203-638-639	17.23	13,754.19	1.014	930.709	Free Surface	0 - 13:00 hrs	3.03	3.036	0.068	0.535	12,823.48	157.282	47.775	0	0	0	0	0	0
0203-639-640	11.92	1,425.16	0.041	977.105	Free Surface	0 - 12:52 hrs	4.014	4.015	0.686	0.588	448.057	164.234	46.921	0	0	0	0	0	0
0203-640-641	13.4	6,157.15	0.482	976.863	Free Surface	0 - 12:53 hrs	4.094	4.094	0.159	0.496	5,180.29	164.1	49.655	0	0	0	0	0	0
0203-641-642	7.11	1,605.32	0.414	976.689	Free Surface	0 - 12:55 hrs	4.083	4.083	0.608	0.985	628.626	163.892	49.582	0	0	0	0	0	0
0203-642-643	17.21	1,925.72	0.009	983.822	Free Surface	0 - 12:56 hrs	4.203	4.204	0.511	0.336	941.894	164.844	55.801	0	0	0	0	0	0
0203-643-558	17.29	19,135.11	1.047	983.716	Free Surface	0 - 12:56 hrs	5.248	5.248	0.051	0.299	18,151.40	164.662	49.759	0	0	0	0	0	0
0203-644-645	22.03	20,938.12	0.668	1,024.50	Free Surface	0 - 12:57 hrs	4.505	4.506	0.049	0.342	19,913.62	169.889	47.024	0	0	0	0	0	0
0203-645-646	23.07	16,084.02	0.29	1,024.34	Free Surface	0 - 12:59 hrs	3.639	3.639	0.064	0.341	15,059.68	169.627	51.084	0	0	0	0	0	0
0203-646-007	23.07	17,808.79	0.355	1,024.32	Free Surface	0 - 13:00 hrs	6.695	6.695	0.058	0.221	16,784.47	169.503	41.507	0	0	0	0	0	0
0203-647-351	3.6	105.916	0.448	56.039	Free Surface	0 - 12:15 hrs	2.797	2.801	0.529	0.821	49.878	1.688	11.266	0	0	0	0	0	0
0203-648-647	3.6	105.904	0.448	36.672	Free Surface	0 - 12:15 hrs	1.994	2.04	0.346	0.781	69.231	1.072	10.919	0	0	0	0	0	0
0203-649-647	4.97	241.168	0.392	21.654	Free Surface	0 - 12:15 hrs	1.295	1.428	0.09	0.5	219.514	0.62	11.521	0	0	0	0	0	0
0203-650-250	4.04	90.812	0.482	80.047	Backwater	0 - 12:33 hrs	3.43	3.43	0.881	1	10.765	9.409	7.247	1.327	1.327	1.548	0	1.313	0
0203-651-248	4.17	61.813	0.13	32.76	Free Surface	0 - 15:18 hrs	1.137	1.235	0.53	0.999	29.054	9.373	8.005	0	0	6.393	0	0	0
0203-652-653	3	89.924	1.818	72.757	Backwater	0 - 12:00 hrs	10.293	10.293	0.809	1	17.167	6.76	2.986	1.829	1.829	1.842	0	1.828	0
0203-653-654	3.5	89.147	0.785	68.73	Free Surface	0 - 12:33 hrs	8.287	8.309	0.771	0.821	20.418	6.745	3.476	0	1.821	0	0	0	0
0203-654-656	4	192.782	1.801	69.352	Free Surface	0 - 12:03 hrs	8.024	8.23	0.36	0.666	123.43	6.734	3.996	0	0	0	0	0	0
0203-655-661	6	544.482	0.174	146.79	Backwater	0 - 14:53 hrs	2.039	2.039	0.27	1	397.692	28.727	12	5.188	5.191	5.188	0	5.187	0
0203-656-272	4	136.969	0.538	68.669	Free Surface	0 - 12:37 hrs	6.789	6.934	0.501	0.841	68.3	6.725	3.999	0	0	0	0	0	0
0203-657-625	3.86	140.903	0.526	137.697	Backwater	0 - 12:10 hrs	4.178	4.178	0.977	1	3.205	8.356	13.226	1.171	1.171	1.309	0	0.129	0
0203-658-671	4.5	115.357	1.52	109.699	Backwater	0 - 12:36 hrs	4.876	4.876	0.951	1	5.658	8.388	5	1.233	1.276	1.233	0	1.233	0
0203-659-624	3.98	491.176	1.802	109.612	Free Surface	0 - 12:37 hrs	4.95	5.513	0.223	0.983	381.564	8.385	5.812	0	0	0.869	0	0	0
0203-660-552	3	65.969	0.978	25.923	Backwater	0 - 12:55 hrs	3.667	3.667	0.393	1	40.046	4.046	3	3.85	3.855	3.851	0	3.85	0
0203-661-331	6	229.475	0.292	146.255	Backwater	0 - 16:00 hrs	2.031	2.031	0.637	1	83.22	28.719	12	5.188	5.188	5.2	0	0.002	0
0203-662-663	3.5	64.069	0.406	57.412	Backwater	0 - 12:04 hrs	5.979	5.979	0.896	1	6.657	3.76	3.497	1.031	1.037	1.032	0	1.029	0
0203-663-664	3.5	155.483	2.388	52.83	Backwater	0 - 12:33 hrs	5.491	5.491	0.34	1	102.653	3.76	3.497	1.032	1.032	1.044	0	1.029	0
0203-664-627	3.5	130.884	1.692	52.83	Free Surface	0 - 12:33 hrs	5.873	6.072	0.404	0.892	78.054	3.759	3.5	0	1.044	0	0	0	0
0203-665-673	6	506.09	0.15	146.336	Backwater	0 - 16:00 hrs	2.433	2.515	0.289	1	359.754	28.653	12	0.65	0.737	0.65	0	0.65	0
0203-666-667	3	55.113	0.683	45.945	Backwater	0 - 12:11 hrs	6.5	6.5	0.834	1	9.168	2.257	2.999	0.767	0.769	0.769	0	0.484	0
0203-667-668	3	70.995	1.133	45.945	Backwater	0 - 12:11 hrs	6.5	6.5	0.647	1	25.05	2.251	2.998	0.774	0.776	0.807	0	0.378	0
0203-668-669	3	88.178	1.748	35.991	Backwater	0 - 12:29 hrs	5.092	5.092	0.408	1	52.187	2.264	2.999	0.834	0.834	0.857	0	0.781	0
0203-669-670	3	23.852	0.128	35.992	Exceeds Capacity	0 - 12:29 hrs	5.092	5.092	1.509	1	-12.139	2.264	3	0.782	0.857	0.782	0.823	0.781	0
0203-670-252	3.5	2.598	0.001	35.96	Free Surface	0 - 12:30 hrs	4.608	4.608	13.841	0.756	-33.362	2.263	3.497	0	0.469	0	6.666	0	0
0203-671-672	4.5	224.625	0.609	109.699	Backwater	0 - 12:36 hrs	4.876	4.876	0.488	1	114.927	8.387	5	1.13	1.233	1.13	0	1.13	0
0203-672-659	4.5	193.383	0.451	109.698	Free Surface	0 - 12:34 hrs	5.333	5.429	0.567	0.927	83.684	8.385	5	0	1.13	0	0	0	0
0203-673-677	6	624.338	0.228	146.37	Backwater	0 - 16:00 hrs	2.447	2.572	0.234	1	477.967	27.838	12	0.65	0.65	0.88	0	0	0
0203-674-675	4	103.697	0.521	61.703	Backwater	0 - 12:15 hrs	4.91	4.91	0.595	1	41.994	2.098	4	0.05	0.204	0.05	0	0.05	0
0203-675-676	4	75.888	0.279	61.673	Free Surface	0 - 12:15 hrs	5.752	5.752	0.813	0.796	14.216	2.093	4	0	0.05	0	0	0	0
0203-676-628	7.33	4,266.06	0.134	767.658	Free Surface	0 - 12:57 hrs	4.544	4.588	0.18	0.59	3,498.40	133.301	56.929	0	0	0	0	0	0
0203-677-679	6	286.566	0.048	146.442	Backwater	0 - 15:55 hrs	2.448	2.65	0.511	1	140.124	27.812	12	0.812	0.88	0.813	0	0.435	0
0203-678-283	3.5	73.608	0.535	66.011	Backwater	0 - 12:21 hrs	6.861	6.861	0.897	1	7.598	5.303	3.498	1.299	1.299	1.974	0	1.297	0
0203-679-600	7.55	1,792.78	0.744	194.114	Free Surface	0 - 17:00 hrs	2.179	2.384	0.108	0.943	1,598.67	38.091	47.888	0	0	0	0	0	0
0203-680-681	3	36.722	0.303	39.504	Exceeds Capacity	0 - 12:00 hrs	5.589	5.589	1.076	1	-2.782	3.618	2.993	2.086	2.14	2.087	0.119	2.086	0
0203-681-682	3	60.903	0.834	39.052	Backwater	0 - 12:00 hrs	5.525	5.525	0.641	1	21.851	3.615	2.998	2.096	2.096	2.135	0	0.144	0
0203-682-683	4	80.161	0.311	38.49	Backwater	0 - 12:02 hrs	3.735	3.848	0.48	1	41.671	3.615	3.997	1.909	1.962	1.909	0	1.909	1
0203-683-684	4	120.044	0.698	37.646	Backwater	0 - 12:02 hrs	3.903	4.302	0.314	1	82.398	3.615	3.999	1.909	1.909	2.019	0	0	3
0203-684-685	4	88.644	0.381	35.489	Backwater	0 - 12:07 hrs	2.824	2.924	0.4	1	53.155	3.618	3.991	2.019	2.019	2.178	0	0	4
0203-685-686	4.5	201.454	1.049	35.451	Backwater	0 - 12:07 hrs	2.229	2.229	0.176	1	166.003	3.616	4.5	2.095	2.095	2.115	0	0	5
0203-686-687	4.5	8.888	0.002	35.436	Exceeds Capacity	0 - 12:07 hrs	2.228	2.228	3.987	1	-26.548	3.615	4.499	2.089	2.115	2.089	2.963	2.089	5
0203-687-269	7.321	16.942	0.011	35.091	Free Surface	0 - 12:07 hrs	1.978	2.421	2.071	0.803	-18.149	3.614	4.781	0	0	0	2.361	0	2
0203-688-689	3	20.487	0.094	36.784	Free Surface	0 - 12:15 hrs	5.732	5.732	1.796	0.855	-16.298	1.148	2.999	0	0.215	0	0.333	0	0
0203-689-631	3.333	69.94	0.627	36.005	Free Surface	0 - 12:15 hrs	6.773	6.831	0.515	0.589	33.935	1.135	3.333	0	0	0	0	0	0
CDT-395	3.75	65.819	0.296	53.543	Free Surface	0 - 12:15 hrs	4.923	4.923	0.813	0.957	12.276	3.058	3.75	0	0.308	0	0	0	1

Table B-3a. Existing System Analysis - Nodes
10-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-001	9.606	275.996	Below Maximum Depth	2.184	0 - 12:55 hrs	0	143.101	0	29.12	0.146	1.494	0.076	2.184	0	0	0	0 - 00:00 hrs
0203-002	8.458	276.818	Below Maximum Depth	0.642	0 - 12:15 hrs	37.538	37.538	0.875	0.875	0	15.547	5.458	0.642	0	0	0	0 - 00:00 hrs
0203-003	7.156	276.116	Below Link Crown	2.714	0 - 12:55 hrs	0	150.721	0	28.4	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-004	8.102	278.442	Below Maximum Depth	0.528	0 - 12:34 hrs	144.47	158.128	4.923	28.42	0.017	0.974	0.042	0.528	0	0	0	0 - 00:00 hrs
0203-005	6.596	280.946	Surcharged	-2.346	0 - 12:18 hrs	351.641	351.641	9.549	21.534	0.002	11.54	2.426	0	0.943	5.764	130.845	0 - 12:04 hrs
0203-006	5.692	280.642	Surcharged	-1.522	0 - 12:18 hrs	0	71.933	0	12.456	0.001	10.064	1.522	0	0.038	5.032	6.262	0 - 12:04 hrs
0203-007	3.241	284.821	Below Link Crown	0.509	0 - 14:33 hrs	0	87.93	0	11.481	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-008	3.833	285.913	Below Maximum Depth	2.137	0 - 14:33 hrs	0	87.93	0	11.482	0.001	2.588	0.083	2.137	0	0	0	0 - 00:00 hrs
0203-009	4.959	280.559	Surcharged	-0.619	0 - 15:07 hrs	0	65.564	0	11.464	0.001	12.759	0.879	0	0.019	6.098	2.12	0 - 11:56 hrs
0203-010	4.447	286.647	Below Link Crown	0.953	0 - 14:33 hrs	0	87.932	0	11.483	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-011	2.869	292.579	Below Link Crown	1.051	0 - 14:30 hrs	0	87.937	0	11.504	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-012	3.495	293.635	Below Maximum Depth	2.055	0 - 14:30 hrs	0	87.937	0	11.512	0.001	2.986	0.095	2.055	0	0	0	0 - 00:00 hrs
0203-013	3.926	294.686	Below Link Crown	0.114	0 - 14:30 hrs	0	87.94	0	11.523	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-014	6.314	297.924	Below Maximum Depth	0.886	0 - 13:45 hrs	0	102.59	0	11.491	0.001	5.002	0.814	0.886	0	0	0	0 - 00:00 hrs
0203-015	5.322	298.822	Below Link Crown	2.918	0 - 13:45 hrs	0	102.597	0	11.492	-0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-016	9.511	316.991	Below Maximum Depth	2.809	0 - 13:00 hrs	0	62.36	0	5.749	-0.001	3.992	5.581	2.809	0	0	0	0 - 00:00 hrs
0203-017	5.64	297.05	Surcharged	-0.14	0 - 14:06 hrs	0	102.59	0	11.483	0.001	3.339	0.14	0	0.072	1.669	2.73	0 - 13:17 hrs
0203-018	5.043	296.163	Surcharged	-0.663	0 - 14:25 hrs	0	102.386	0	11.475	0.001	6.164	1.008	0	0.52	2.964	21.43	0 - 11:59 hrs
0203-019	5.887	321.807	Surcharged	-0.487	0 - 12:33 hrs	88.181	88.181	2.577	2.578	0	3.894	2.887	0	0.431	1.946	61.918	0 - 12:15 hrs
0203-020	6.656	321.166	Surcharged	-0.306	0 - 12:56 hrs	0	39.262	0	2.551	0.001	3.92	3.656	0	0.052	1.518	4.582	0 - 12:22 hrs
0203-021	6.204	320.644	Below Maximum Depth	0.016	0 - 11:56 hrs	0	40.061	0	2.568	0.001	3.899	3.134	0.016	0	0	0	0 - 00:00 hrs
0203-022	2.336	271.326	Below Link Crown	8.674	0 - 12:15 hrs	0	164.181	0	30.298	0.017	0	0	0	0	0	0	0 - 00:00 hrs
0203-023	7.403	319.813	Surcharged	-0.613	0 - 12:52 hrs	0	40.015	0	2.591	0	3.959	4.253	0	0.275	1.668	28.399	0 - 12:15 hrs
0203-024	7.682	319.572	Surcharged	-0.402	0 - 12:22 hrs	113.652	113.652	3.176	5.763	0.003	3.535	4.472	0	0.255	0.99	47.357	0 - 12:11 hrs
0203-025	5.542	311.472	Surcharged	-0.602	0 - 13:00 hrs	0	62.36	0	5.759	0.001	4.084	2.042	0	0.074	1.636	4.893	0 - 12:18 hrs
0203-026	4.098	309.578	Below Maximum Depth	1.122	0 - 12:52 hrs	0	61.95	0	5.766	0.001	3.239	0.588	1.122	0	0	0	0 - 00:00 hrs
0203-027	5.851	306.031	Below Maximum Depth	1.679	0 - 12:30 hrs	0	59.43	0	5.758	0.002	3.552	1.851	1.679	0	0	0	0 - 00:00 hrs
0203-028	5.154	304.984	Below Maximum Depth	2.536	0 - 12:26 hrs	0	59.43	0	5.751	0.001	3.293	0.654	2.536	0	0	0	0 - 00:00 hrs
0203-029	7.099	303.989	Surcharged	-0.649	0 - 12:26 hrs	0	81.472	0	5.87	0.003	3.972	2.599	0	0.648	1.719	81.471	0 - 12:07 hrs
0203-030	7.086	303.896	Below Link Crown	0.604	0 - 12:17 hrs	0	79.174	0	5.939	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-031	3.511	272.511	Below Link Crown	4.819	0 - 12:15 hrs	45.666	45.666	1.328	1.329	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-032	6.584	274.714	Surcharged	-0.454	0 - 12:18 hrs	76.979	76.979	1.929	1.93	0	1.718	4.084	0	0.198	0.716	37.934	0 - 12:15 hrs
0203-033	3.037	265.047	Below Link Crown	13.953	0 - 12:18 hrs	0	200.119	0	32.154	0.009	0	0	0	0	0	0	0 - 00:00 hrs
0203-034	4.596	280.966	Surcharged	-0.516	0 - 15:10 hrs	0	87.894	0	11.494	0.001	12.711	0.516	0	3.758	6.354	66.724	0 - 12:32 hrs
0203-035	2.003	287.193	Below Link Crown	3.388	0 - 14:33 hrs	0	87.937	0	11.487	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-036	3.498	289.918	Below Link Crown	1.842	0 - 14:30 hrs	0	87.936	0	11.49	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-037	7.96	303.9	Surcharged	-0.3	0 - 12:15 hrs	220.127	220.127	5.766	11.628	0.001	0.637	0.3	0	0.121	0.319	41.9	0 - 12:15 hrs
0203-038	5.498	300.168	Surcharged	-0.468	0 - 13:27 hrs	0	156.951	0	11.551	0.003	4.85	0.498	0	0.928	2.424	55.177	0 - 12:15 hrs
0203-039	2.637	290.887	Below Link Crown	1.246	0 - 14:30 hrs	0	87.936	0	11.495	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-040	2.624	282.984	Below Link Crown	1.496	0 - 14:37 hrs	0	87.931	0	11.482	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-041	5.188	279.388	Surcharged	-1.128	0 - 13:15 hrs	0	178.288	0	21.026	0.001	10.803	1.128	0	0.988	5.4	79.911	0 - 12:18 hrs
0203-042	5.339	279.019	Surcharged	-1.179	0 - 13:21 hrs	0	143.743	0	21.152	0.001	10.981	1.179	0	1.317	5.49	143.743	0 - 12:17 hrs
0203-043	6.657	278.527	Below Link Crown	1.973	0 - 12:48 hrs	0	111.455	0	21.278	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-044	7.035	278.515	Below Link Crown	1.635	0 - 12:48 hrs	0	108.502	0	21.292	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-045	6.992	278.501	Below Link Crown	3.928	0 - 12:45 hrs	0	103.283	0	21.316	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-046	7.725	278.495	Below Link Crown	9.205	0 - 12:44 hrs	0	101.602	0	21.345	0.039	0	0	0	0	0	0	0 - 00:00 hrs
0203-047	6.984	278.474	Below Link Crown	9.926	0 - 12:37 hrs	0	102.439	0	21.364	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-048	7.539	278.469	Below Link Crown	1.481	0 - 12:37 hrs	0	107.097	0	23.755	0.015	0	0	0	0	0	0	0 - 00:00 hrs
0203-049	8.071	278.461	Surcharged	-0.011	0 - 12:37 hrs	0	107.927	0	23.524	0.017	0.581	0.011	0	0.002	0.29	2.125	0 - 12:30 hrs
0203-050	8.082	278.452	Surcharged	-0.022	0 - 12:37 hrs	0	108.326	0	23.512	0.02	0.759	0.022	0	0.002	0.379	1.308	0 - 12:29 hrs
0203-051	7.906	276.086	Below Link Crown	1.624	0 - 12:55 hrs	0	147.94	0	28.401	0.022	0	0	0	0	0	0	0 - 00:00 hrs
0203-052	6.144	315.937	Below Maximum Depth	1.863	0 - 12:03 hrs	24.97	24.97	0.726	0.727	0	1.457	3.144	1.863	0	0	0	0 - 00:00 hrs
0203-053	6.297	315.31	Below Maximum Depth	1.39	0 - 12:03 hrs	0	24.965	0	0.727	0	1.462	3.167	1.39	0	0	0	0 - 00:00 hrs
0203-054	5.767	314.668	Below Maximum Depth	1.021	0 - 12:03 hrs	0	24.966	0	0.726	0	1.464	2.767	1.022	0	0	0	0 - 00:00 hrs
0203-055	5.798	313.265	Surcharged	-0.265	0 - 12:18 hrs	0	81.068	0	2.509	0	1.554	2.298	0	0.163	0.727	36.754	0 - 12:15 hrs
0203-056	6.35	312.3	Below Maximum Depth	0	0 - 12:03 hrs	0	44.338	0	2.491	0	1.604	2.679	0	0	0	0	0 - 00:00 hrs
0203-057	6.297	310.895	Surcharged	-0.245	0 - 12:25 hrs	0	44.337	0	2.65	0	1.665	2.647	0	0.056	0.768	10.999	0 - 12:15 hrs
0203-058	6.18	309.801	Below Maximum Depth	0.468	0 - 12:15 hrs	0	50.083	0	2.903	0	1.67	2.68	0.468	0	0	0	0 - 00:00 hrs
0203-059	5.407	310.177	Below Maximum Depth	0.423	0 - 12:03 hrs	0	8.851	0	0.294	0	1.574	2.35	0.423	0	0	0	0 - 00:00 hrs
0203-060	2.627	310.537	Below Link Crown	6.944	0 - 12:55 hrs	0	35.78	0	3.775	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-061	3.364	309.732	Below Link Crown	5.069	0 - 12:15 hrs	0	35.731	0	3.774	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-062	6.809	307.699	Below Maximum Depth	7.616	0 - 12:15 hrs	0	102.232	0	7.777	0.002	1.201	1.599	7.616	0	0	0	0 - 00:00 hrs
0203-063	6.744	306.009	Below Maximum Depth	17.005	0 - 12:15 hrs	0	101.651	0	7.775	0.007	1.422	1.426	17.005	0	0	0	0 - 00:00 hrs
0203-064	5.916	304.29	Below Maximum Depth	16.29	0 - 12:15 hrs	0	100.038	0	7.764	-0.001	0.761	0.803	16.29	0	0	0	0 - 00:00 hrs
0203-065	6.361	302.392	Below Maximum Depth	7.908	0 - 12:15 hrs	0	99.709	0	7.76	0.002	1.717	1.361	7.908	0	0	0	0 - 00:00 hrs
0203-066	5.328	301.084	Below Maximum Depth	7.457	0 - 12:15 hrs	0	99.709	0	7.754	0.001	0.631	0.328	7.457	0	0	0	0 - 00:00 hrs
0203-067	4.512	299.556	Below Link Crown	4.344	0 - 12:15 hrs	0	99.716	0	7.754	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-068	0.707	304.45	Below Link Crown	2.45	0 - 12:15 hrs	0	19.8	0	0.561	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-069	1.768	306.257	Below Link Crown	1.344	0 - 12:15 hrs	0	20.26	0	0.562	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-070	2.262	295.239	Below Link Crown	10.661	0 - 12:19 hrs	0	209.295	0	22.725	0.044	0	0	0	0	0	0	0 - 00:00 hrs
0203-071	2.245	311.756	Below Link Crown	2.23	0 - 12:23 hrs	0	35.752	0	3.775	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-072	2.778	311.307	Below Link Crown	4.393	0 - 12:07 hrs	11.184	11.184	0.44	0.441	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-073	4.227	311.122	Below Link Crown	4.344	0 - 12:07 hrs	0	17.283	0	0.452	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-074	4.021	310.916	Below Link Crown	3.096	0 - 12:26 hrs	0	24.472	0	0.474	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-075	5.218	310.91	Below Maximum Depth	2.754	0 - 12:26 hrs	0	26.745	0	0.494	0	0.921	0.071	2.754	0	0	0	0 - 00:00 hrs
0203-076	7.593	310.904	Surcharged	-0.294	0 - 12:27 hrs	0	93.17	0	4.997	0	2.755	1.503	0	0.296	1.304	47.816	0 - 12:07 hrs
0203-077	3.549	311.2	Below Link Crown	3.4	0 - 12:07 hrs	0	13.511	0	0.441	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-078	6.664	309.736	Below Maximum Depth	0.336	0 - 12:27 hrs	0	45.947	0	4.925	0	3.07	3.164	0.336	0	0	0	0 - 00:00 hrs
0203-079	6.877	308.266	Below Maximum Depth	1.595	0 - 12:27 hrs	0	45.947	0	4.927	0.001	3.206	3.377	1.595	0	0	0	0 - 00:00 hrs
0203-080	5.842	307.135	Below Maximum Depth	2.188	0 - 12:27 hrs	0	45.947	0	4.928	0	3.092	2.342	2.188	0	0	0	0 - 00:00 hrs
0203-081	5.935	305.635	Below Maximum Depth	1.619	0 - 12:26 hrs	0	45.947	0	4.931	0.001	3.314	2.429	1.619	0	0	0	0 - 00:00 hrs
0203-082	4.972	304.519	Below Maximum Depth	1.904	0 - 12:26 hrs	0	45.947	0	4.931	0	3.135	1.442	1.904	0	0	0	0 - 00:00 hrs
0203-083	3.866	303.413	Below Link Crown	1.087	0 - 12:26 hrs	0	45.947	0	4.931	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-084	4.417	302.67	Below Maximum Depth	4.074	0 - 12:17 hrs	0	45.948	0	4.93	0	2.703	0.291	4.074	0	0	0	0 - 00:00 hrs
0203-085	3.578	301.215	Below Link Crown	5.635	0 - 12:17 hrs	0	45.948	0	4.93	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-086	3.007	300.085	Below Link Crown	5.15	0 - 12:15 hrs	0	45.95	0	4.929	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-087	3.784	299.267	Below Link Crown	3.333	0 - 12:15 hrs	0	50.362	0	5.184	0	0	0	0	0	0	0	0 - 00:00 hrs

Table B-3a. Existing System Analysis - Nodes
10-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-088	2.081	305.193	Below Link Crown	4.115	0 - 12:15 hrs	33.724	33.724	1.239	1.239	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-089	2.869	303.157	Below Link Crown	4.478	0 - 12:15 hrs	0	33.605	0	1.238	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-090	2.409	301.502	Below Link Crown	4.843	0 - 12:15 hrs	0	33.385	0	1.239	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-091	2.211	299.291	Below Link Crown	5.046	0 - 12:15 hrs	0	33.183	0	1.461	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-092	2.986	298.375	Below Link Crown	4.825	0 - 12:15 hrs	0	50.32	0	4.962	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-093	3.156	297.575	Below Link Crown	2.825	0 - 12:15 hrs	0	28.032	0	1.204	-0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-094	2.368	296.421	Below Link Crown	4.279	0 - 12:18 hrs	0	78.058	0	6.157	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-095	5.183	272.983	Below Maximum Depth	2.317	0 - 13:18 hrs	0	53.201	0	8.851	0.002	8.23	1.683	2.317	0	0	0	0 - 00:00 hrs
0203-096	4.707	271.107	Below Maximum Depth	1.993	0 - 13:18 hrs	0	53.169	0	8.847	0	8.22	1.177	1.993	0	0	0	0 - 00:00 hrs
0203-097	4.569	269.219	Below Maximum Depth	2.081	0 - 13:18 hrs	0	53.069	0	8.857	0.002	8.199	0.569	2.081	0	0	0	0 - 00:00 hrs
0203-098	4.328	268.208	Below Maximum Depth	2.292	0 - 13:18 hrs	0	53.18	0	8.862	0.001	8.146	0.258	2.292	0	0	0	0 - 00:00 hrs
0203-099	3.899	267.219	Below Link Crown	2.381	0 - 13:18 hrs	0	52.953	0	8.866	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-100	3.977	266.077	Below Link Crown	2.823	0 - 13:19 hrs	0	52.953	0	8.868	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-101	3.483	264.913	Below Link Crown	3.587	0 - 13:19 hrs	0	52.953	0	8.868	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-102	2.873	263.533	Below Link Crown	3.767	0 - 13:21 hrs	0	52.953	0	8.866	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-103	3.086	262.476	Below Link Crown	4.294	0 - 13:23 hrs	0	52.953	0	8.865	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-104	2.796	261.243	Below Link Crown	4.597	0 - 14:04 hrs	0	52.952	0	8.862	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-105	3.377	292.397	Surcharged	-0.497	0 - 12:41 hrs	76.303	76.303	1.937	1.938	0	5.385	1.377	0	0.471	2.631	60.397	0 - 12:15 hrs
0203-106	2.575	290.993	Below Maximum Depth	2.287	0 - 12:26 hrs	0	17.569	0	1.948	0	4.063	0.575	2.287	0	0	0	0 - 00:00 hrs
0203-107	3.719	285.109	Below Maximum Depth	0.481	0 - 12:19 hrs	0	17.584	0	1.941	0	5.201	1.719	0.481	0	0	0	0 - 00:00 hrs
0203-108	3.93	283.3	Below Maximum Depth	1.4	0 - 12:19 hrs	0	17.584	0	1.938	0	2.542	1.43	1.4	0	0	0	0 - 00:00 hrs
0203-109	2.186	245.419	Below Link Crown	18.681	0 - 13:00 hrs	0	335.33	0	40.53	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-110	2.898	247.717	Below Link Crown	17.983	0 - 13:00 hrs	0	335.337	0	40.534	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-111	2.553	249.95	Below Link Crown	14.15	0 - 13:00 hrs	0	335.343	0	40.541	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-112	7.598	262.7	Surcharged	-0.2	0 - 13:30 hrs	0	280.829	0	32.606	0.021	4.281	0.277	0	1.411	2.138	46.465	0 - 12:40 hrs
0203-113	10.042	271.808	Surcharged	-1.208	0 - 12:26 hrs	0	334.4	0	29.809	0.014	2.646	1.578	0	0.186	1.308	57.737	0 - 12:12 hrs
0203-114	5.295	275.702	Below Link Crown	1.735	0 - 12:22 hrs	0	269.502	0	26.325	0.012	0	0	0	0	0	0	0 - 00:00 hrs
0203-115	7.821	283.628	Below Link Crown	1.329	0 - 12:19 hrs	0	255.103	0	24.436	0.026	0	0	0	0	0	0	0 - 00:00 hrs
0203-116	4.795	283.925	Below Link Crown	5.165	0 - 12:19 hrs	0	260.205	0	24.439	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-117	5.634	285.7	Below Link Crown	1.311	0 - 12:17 hrs	0	260.893	0	24.444	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-118	6.7	273.363	Below Link Crown	1.903	0 - 14:55 hrs	0	198.285	0	46.417	0.02	0	0	0	0	0	0	0 - 00:00 hrs
0203-119	5.574	285.829	Below Link Crown	1.762	0 - 12:44 hrs	0	99.933	0	24.119	0.022	0	0	0	0	0	0	0 - 00:00 hrs
0203-120	6.548	255.33	Below Link Crown	15.97	0 - 12:27 hrs	0	261.754	0	12.158	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-121	3.518	255.603	Below Link Crown	14.297	0 - 12:27 hrs	0	262.07	0	12.159	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-122	4.918	257.218	Below Link Crown	20.422	0 - 12:26 hrs	0	262.325	0	12.176	0.014	0	0	0	0	0	0	0 - 00:00 hrs
0203-123	5.245	257.645	Below Link Crown	19.995	0 - 12:26 hrs	0	262.524	0	12.188	0.012	0	0	0	0	0	0	0 - 00:00 hrs
0203-124	5.704	258.837	Below Link Crown	2.263	0 - 12:26 hrs	0	263.027	0	12.193	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-125	1.872	265.902	Below Link Crown	4.852	0 - 12:25 hrs	0	91.517	0	2.306	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-126	3.209	268.107	Below Link Crown	2.965	0 - 12:25 hrs	0	91.586	0	2.305	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-127	2.08	269.857	Below Link Crown	2.452	0 - 12:25 hrs	0	91.89	0	2.308	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-128	4.571	272.111	Below Link Crown	0.389	0 - 12:23 hrs	131.091	131.091	4.175	4.384	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-129	4.627	272.165	Below Link Crown	0.835	0 - 12:21 hrs	46.029	88.673	1.527	3.597	0.022	0	0	0	0	0	0	0 - 00:00 hrs
0203-130	5.378	259.864	Below Link Crown	2.558	0 - 12:23 hrs	0	173.558	0	9.89	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-131	5.798	260.734	Below Link Crown	2.366	0 - 12:22 hrs	0	175.028	0	9.898	0.009	0	0	0	0	0	0	0 - 00:00 hrs
0203-132	5.261	263.163	Below Link Crown	2.837	0 - 12:18 hrs	0	175.29	0	9.904	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-133	5.265	265.355	Below Link Crown	1.55	0 - 12:17 hrs	0	175.483	0	9.917	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-134	4.797	269.497	Surcharged	-0.264	0 - 12:27 hrs	0	169.469	0	6.179	0.008	1.445	0.264	0	0.523	0.722	118.149	0 - 12:15 hrs
0203-135	2.253	265.493	Below Link Crown	6.907	0 - 12:37 hrs	0	61.301	0	3.661	-0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-136	3.174	273.314	Below Link Crown	3.686	0 - 12:34 hrs	0	61.96	0	3.677	0.018	0	0	0	0	0	0	0 - 00:00 hrs
0203-137	3.469	273.609	Below Link Crown	3.391	0 - 12:33 hrs	0	69.37	0	3.712	0.035	0	0	0	0	0	0	0 - 00:00 hrs
0203-138	3.101	273.781	Below Link Crown	3.219	0 - 12:32 hrs	0	77.589	0	3.717	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-139	3.594	275.644	Below Link Crown	5.456	0 - 12:18 hrs	0	17.36	0	0.648	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-140	3.49	275.65	Below Link Crown	5.55	0 - 12:18 hrs	0	15.666	0	0.649	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-141	2.722	275.662	Below Link Crown	5.938	0 - 12:19 hrs	0	22.227	0	0.654	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-142	1.556	275.764	Below Link Crown	7.046	0 - 12:18 hrs	23.656	23.656	0.652	0.652	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-143	1.589	252.859	Below Link Crown	24.753	0 - 13:37 hrs	0	271.729	0	50.196	0.047	0	0	0	0	0	0	0 - 00:00 hrs
0203-144	1.952	253.222	Below Link Crown	24.39	0 - 13:37 hrs	0	271.737	0	50.246	0.047	0	0	0	0	0	0	0 - 00:00 hrs
0203-145	6.614	258.224	Below Link Crown	12.126	0 - 13:34 hrs	0	271.734	0	50.309	0.063	0	0	0	0	0	0	0 - 00:00 hrs
0203-146	6.889	258.499	Below Link Crown	3.321	0 - 13:34 hrs	0	271.735	0	50.341	0.032	0	0	0	0	0	0	0 - 00:00 hrs
0203-147	6.832	258.692	Below Link Crown	8.708	0 - 13:34 hrs	0	271.736	0	50.357	0.016	0	0	0	0	0	0	0 - 00:00 hrs
0203-148	7.297	259.157	Below Link Crown	8.243	0 - 13:34 hrs	0	271.738	0	50.374	0.017	0	0	0	0	0	0	0 - 00:00 hrs
0203-149	7.369	259.379	Below Link Crown	7.725	0 - 13:33 hrs	0	271.741	0	50.392	0.018	0	0	0	0	0	0	0 - 00:00 hrs
0203-150	7.506	259.516	Below Link Crown	0.884	0 - 13:33 hrs	0	271.746	0	50.409	0.016	0	0	0	0	0	0	0 - 00:00 hrs
0203-151	6.859	259.649	Below Link Crown	10.251	0 - 13:33 hrs	0	271.765	0	50.44	0.03	0	0	0	0	0	0	0 - 00:00 hrs
0203-152	7.139	260.389	Below Link Crown	9.698	0 - 13:33 hrs	0	271.788	0	50.467	0.028	0	0	0	0	0	0	0 - 00:00 hrs
0203-153	7.431	260.761	Below Link Crown	0.577	0 - 13:33 hrs	0	271.805	0	50.485	0.019	0	0	0	0	0	0	0 - 00:00 hrs
0203-154	7.708	261.038	Below Link Crown	2.462	0 - 13:32 hrs	0	271.84	0	50.511	0.026	0	0	0	0	0	0	0 - 00:00 hrs
0203-155	7.923	261.253	Below Link Crown	2.347	0 - 13:32 hrs	0	271.881	0	50.536	0.025	0	0	0	0	0	0	0 - 00:00 hrs
0203-156	7.367	261.497	Below Link Crown	4.003	0 - 13:30 hrs	0	271.901	0	50.546	0.01	0	0	0	0	0	0	0 - 00:00 hrs
0203-157	7.724	261.854	Below Link Crown	11.746	0 - 13:30 hrs	0	271.918	0	50.554	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-158	7.97	262.1	Below Link Crown	11.5	0 - 13:30 hrs	0	271.979	0	50.579	0.025	0	0	0	0	0	0	0 - 00:00 hrs
0203-159	8.062	262.192	Below Link Crown	1.908	0 - 13:30 hrs	0	272.083	0	50.609	0.031	0	0	0	0	0	0	0 - 00:00 hrs
0203-160	7.064	262.302	Below Link Crown	0.798	0 - 13:30 hrs	0	272.15	0	50.629	0.02	0	0	0	0	0	0	0 - 00:00 hrs
0203-161	3.054	262.652	Below Link Crown	4.848	0 - 13:27 hrs	0	272.286	0	50.65	0.019	0	0	0	0	0	0	0 - 00:00 hrs
0203-162	3.7	267.311	Below Link Crown	8.489	0 - 12:30 hrs	0	272.192	0	50.701	0.052	0	0	0	0	0	0	0 - 00:00 hrs
0203-163	4.636	272.638	Below Link Crown	3.922	0 - 14:51 hrs	0	253.365	0	47.222	0.04	0	0	0	0	0	0	0 - 00:00 hrs
0203-164	4.766	275.268	Below Link Crown	3.304	0 - 15:06 hrs	0	253.366	0	47.238	0.022	0	0	0	0	0	0	0 - 00:00 hrs
0203-165	7.214	278.214	Below Link Crown	4.536	0 - 15:04 hrs	0	253.366	0	47.291	0.049	0	0	0	0	0	0	0 - 00:00 hrs
0203-166	7.395	280.306	Below Link Crown	0.794	0 - 15:03 hrs	0	253.366	0	47.343	0.038	0	0	0	0	0	0	0 - 00:00 hrs
0203-167	8.794	281.794	Surcharged	-0.594	0 - 15:03 hrs	0	253.371	0	47.369	0.026	8.279	0.65	0	0.037	4.117	2.544	0 - 12:30 hrs
0203-168	8.506	283.164	Surcharged	-0.264	0 - 15:02 hrs	0	253.396	0	47.39	0.021	7.125	0.362	0	0.023	3.438	2.032	0 - 13:00 hrs
0203-169	5.343	283.833	Surcharged	-0.111	0 - 15:00 hrs	0	265.879	0	47.41	0.006	7.976	0.807	0	0.452	3.077	14.372	0 - 13:36 hrs
0203-170	5.62	284.269	Below Link Crown	4.731	0 - 14:37 hrs	0	198.614	0	34.982	0.014	0	0	0	0	0	0	0 - 00:00 hrs
0203-171	6.171	285.321	Below Link Crown	0.779	0 - 14:08 hrs	0	198.67	0	35.019	0.02	0	0	0	0	0	0	0 - 00:00 hrs
0203-172	5.724	285.496	Below Link Crown	1.204	0 - 14:07 hrs	0	198.753	0	35.057	0.032	0	0	0	0	0	0	0 - 00:00 hrs
0203-173	5.348	287.722	Surcharged	-0.822	0 - 13:55 hrs	0	269.183	0	35.127	0.012	8.06	0.851	0	1.735	4.018	81.187	0 - 12:33 hrs
0203-174	5.411	283.904	Surcharged	-0.804	0 - 14:57 hrs	0	97.666	0	12.435	0.004	8.107	0.878	0	0.11	4.008	6.746	0 - 12:45 hrs

Table B-3a. Existing System Analysis - Nodes
10-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-175	4.54	284.218	Surcharged	-0.014	0 - 14:27 hrs	0	95.25	0	12.44	0.003	2.546	0.014	0	0.011	1.269	1.072	0 - 13:56 hrs
0203-176	4.524	284.288	Surcharged	-0.019	0 - 14:17 hrs	0	94.699	0	12.452	0	2.994	0.019	0	0.048	1.496	4.79	0 - 13:45 hrs
0203-177	5.538	284.427	Surcharged	-1.027	0 - 13:49 hrs	0	130.707	0	12.468	0.015	9.672	1.054	0	1.327	4.836	71.614	0 - 12:32 hrs
0203-178	4.034	284.56	Below Link Crown	0.45	0 - 13:38 hrs	0	131.998	0	12.481	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-179	3.535	285.211	Below Link Crown	7.989	0 - 12:36 hrs	0	132.541	0	12.488	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-180	3.801	285.477	Below Link Crown	7.723	0 - 12:34 hrs	0	133.345	0	12.492	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-181	3.582	286.211	Below Link Crown	4.989	0 - 12:32 hrs	0	137.261	0	12.503	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-182	3.826	286.598	Below Link Crown	4.745	0 - 12:30 hrs	0	138.494	0	12.51	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-183	4.247	286.81	Below Link Crown	4.324	0 - 12:30 hrs	0	139.205	0	12.516	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-184	4.336	287.879	Below Link Crown	3.232	0 - 12:27 hrs	0	139.557	0	12.52	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-185	4.119	287.892	Below Link Crown	3.289	0 - 12:27 hrs	0	17.967	0	1.209	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-186	2.054	287.902	Below Link Crown	4.598	0 - 12:27 hrs	0	17.424	0	1.208	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-187	4.473	290.316	Below Link Crown	5.084	0 - 12:23 hrs	0	129.12	0	11.325	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-188	6.367	293.534	Below Link Crown	3.766	0 - 12:18 hrs	0	134.65	0	11.346	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-189	6.308	293.874	Below Link Crown	3.826	0 - 12:18 hrs	0	149.057	0	11.395	0.049	0	0	0	0	0	0	0 - 00:00 hrs
0203-190	4.597	293.903	Below Link Crown	6.497	0 - 12:18 hrs	0	23.768	0	1.254	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-191	1.985	300.421	Below Link Crown	9.079	0 - 12:18 hrs	0	23.773	0	1.254	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-192	2.42	294.5	Below Link Crown	3.7	0 - 12:34 hrs	0	29.337	0	1.211	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-193	0.674	298.565	Below Link Crown	3.763	0 - 12:17 hrs	0	14.503	0	0.682	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-194	0.878	302.24	Below Link Crown	2.737	0 - 12:15 hrs	0	14.776	0	0.683	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-195	5.593	290.19	Below Link Crown	4.11	0 - 12:26 hrs	183.156	393.694	7.213	35.236	0.027	0	0	0	0	0	0	0 - 00:00 hrs
0203-196	2.661	297.781	Below Link Crown	2.199	0 - 12:14 hrs	0	117.918	0	5.686	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-197	1.328	298.71	Below Link Crown	4.09	0 - 12:18 hrs	0	81.371	0	4.544	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-198	3.184	309.789	Surcharged	-0.089	0 - 12:18 hrs	0	59.956	0	2.851	0.001	0.313	0.109	0	0.018	0.155	12.732	0 - 12:15 hrs
0203-199	2.452	303.228	Below Link Crown	4.472	0 - 12:17 hrs	0	81.641	0	4.544	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-200	2.576	303.256	Below Link Crown	4.344	0 - 12:17 hrs	0	14.697	0	0.48	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-201	4.355	312.253	Below Link Crown	9.747	0 - 14:00 hrs	0	19.831	0	2.298	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-202	4.176	309.676	Below Link Crown	9.924	0 - 12:15 hrs	0	19.87	0	2.297	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-203	3.634	309.86	Below Link Crown	1.54	0 - 12:15 hrs	0	37.784	0	2.616	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-204	4.16	309.651	Below Link Crown	1.249	0 - 12:15 hrs	71.753	125.621	3.056	7.969	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-205	4.316	309.416	Below Link Crown	1.264	0 - 12:15 hrs	0	124.844	0	7.969	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-206	3.359	307.029	Below Link Crown	2.47	0 - 14:45 hrs	0	123.789	0	7.968	-0.012	0	0	0	0	0	0	0 - 00:00 hrs
0203-207	7.82	307.012	Below Link Crown	0.83	0 - 15:30 hrs	0	123.366	0	7.977	0.121	0	0	0	0	0	0	0 - 00:00 hrs
0203-208	1.978	299.582	Surcharged	-0.082	0 - 12:22 hrs	0	24.055	0	8.344	0.007	1.358	0.201	0	0.002	0.327	1.001	0 - 12:17 hrs
0203-209	8.733	307.011	Surcharged	-0.011	0 - 15:32 hrs	0	117.679	0	11.1	0.073	5.677	0.083	0	0.074	1.793	13.536	0 - 16:36 hrs
0203-210	7.211	307.011	Surcharged	-1.511	0 - 15:37 hrs	0	111.564	0	3.554	0.008	22.873	2.024	0	2.588	11.274	111.564	0 - 12:15 hrs
0203-211	7.06	307.012	Surcharged	-1.112	0 - 15:26 hrs	0	22.333	0	0.862	0.006	23.495	3.124	0	0.555	9.703	17.743	0 - 12:27 hrs
0203-212	2.48	298.93	Below Maximum Depth	5.15	0 - 12:18 hrs	0	24.055	0	8.336	0.014	11.645	0.703	5.15	0	0	0	0 - 00:00 hrs
0203-213	2.617	298.438	Below Link Crown	3.387	0 - 12:18 hrs	0	40.21	0	8.881	0.018	0	0	0	0	0	0	0 - 00:00 hrs
0203-214	2.564	298.464	Below Link Crown	3.483	0 - 12:18 hrs	0	19.765	0	0.562	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-215	0.851	299.448	Below Link Crown	5.252	0 - 12:15 hrs	0	19.805	0	0.561	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-216	0.801	306.501	Below Link Crown	2.266	0 - 12:15 hrs	20.309	20.309	0.562	0.562	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-217	2.853	298.193	Below Link Crown	3.096	0 - 12:18 hrs	0	38.237	0	8.861	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-218	5.853	259.783	Below Link Crown	10.012	0 - 12:59 hrs	0	335.373	0	40.568	0.009	0	0	0	0	0	0	0 - 00:00 hrs
0203-219	5.983	259.913	Below Link Crown	9.759	0 - 12:59 hrs	0	99.902	0	8.031	0.033	0	0	0	0	0	0	0 - 00:00 hrs
0203-220	3.247	260.128	Below Link Crown	4.71	0 - 12:57 hrs	0	100.106	0	8.015	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-221	6.754	289.754	Below Maximum Depth	2.866	0 - 12:15 hrs	0	263.887	0	24.455	0.003	0.444	0.554	2.866	0	0	0	0 - 00:00 hrs
0203-222	3.207	287.127	Below Maximum Depth	3.853	0 - 12:19 hrs	0	17.572	0	1.944	0	2.908	1.207	3.853	0	0	0	0 - 00:00 hrs
0203-223	8.543	269.743	Surcharged	-0.613	0 - 12:44 hrs	0	258.396	0	29.788	0.008	3.044	2.543	0	0.007	1.283	5.229	0 - 13:27 hrs
0203-224	6.914	267.994	Surcharged	-0.534	0 - 12:47 hrs	100.947	100.947	2.845	2.846	0	4.904	3.914	0	0.609	2.329	78.12	0 - 12:15 hrs
0203-225	1.935	308.595	Below Link Crown	6.135	0 - 12:15 hrs	15.078	15.078	0.682	0.682	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-226	14.163	318.183	Surcharged	-0.153	0 - 12:17 hrs	97.341	97.341	4.492	4.494	0	3.22	10.663	0	0.06	0.3	23.437	0 - 12:25 hrs
0203-227	10.904	314.524	Surcharged	-0.274	0 - 12:23 hrs	0	74.923	0	4.452	0.001	3.2	7.404	0	0.012	0.324	10.382	0 - 12:26 hrs
0203-228	3.258	311.258	Below Link Crown	6.012	0 - 12:07 hrs	0	11.133	0	0.44	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-229	3.777	330.367	Below Maximum Depth	6.443	0 - 12:00 hrs	0	20.231	0	2.293	0	3.93	1.527	6.443	0	0	0	0 - 00:00 hrs
0203-230	3.123	327.623	Below Maximum Depth	2.527	0 - 12:02 hrs	0	19.831	0	2.3	0	3.923	0.623	2.527	0	0	0	0 - 00:00 hrs
0203-231	1.546	322.926	Below Link Crown	4.914	0 - 12:03 hrs	0	19.831	0	2.302	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-232	1.39	318.25	Below Link Crown	6.88	0 - 12:34 hrs	0	19.831	0	2.302	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-233	1.198	315.698	Below Link Crown	7.592	0 - 12:07 hrs	0	19.831	0	2.302	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-234	3.863	319.613	Below Link Crown	1.727	0 - 12:38 hrs	0	35.752	0	3.785	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-235	3.357	318.607	Below Link Crown	2.453	0 - 12:38 hrs	0	35.752	0	3.779	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-236	1.435	316.435	Below Link Crown	2.925	0 - 12:33 hrs	0	35.752	0	3.778	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-237	2.369	313.369	Below Link Crown	4.641	0 - 12:41 hrs	0	35.753	0	3.777	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-238	6.965	308.965	Below Maximum Depth	7.455	0 - 12:15 hrs	30.317	102.413	1.101	7.779	0.001	1.508	1.965	7.455	0	0	0	0 - 00:00 hrs
0203-239	4.395	297.895	Below Link Crown	6.795	0 - 12:18 hrs	0	135.593	0	16.595	0.009	0	0	0	0	0	0	0 - 00:00 hrs
0203-240	9.417	276.867	Surcharged	-0.007	0 - 12:51 hrs	0	36.56	0	3.383	0.003	2.327	5.417	0	0	0.002	8.579	0 - 12:51 hrs
0203-241	4.756	270.756	Below Maximum Depth	6.534	0 - 12:15 hrs	0	31.213	0	1.073	0	1.454	1.726	6.534	0	0	0	0 - 00:00 hrs
0203-242	8.352	265.702	Surcharged	-0.092	0 - 12:47 hrs	0	107.172	0	8.037	0.002	3.57	4.018	0	0.123	0.946	7.433	0 - 12:22 hrs
0203-243	6.294	263.264	Below Maximum Depth	3.056	0 - 12:47 hrs	0	100.153	0	8.016	0.001	3.515	1.96	3.056	0	0	0	0 - 00:00 hrs
0203-244	6.36	289.481	Surcharged	-0.623	0 - 14:52 hrs	0	173.5	0	24.077	-0.032	14.175	0.623	0	5.669	7.07	84.342	0 - 12:00 hrs
0203-245	4.047	297.047	Below Link Crown	6.423	0 - 12:18 hrs	0	135.479	0	16.587	0.012	0	0	0	0	0	0	0 - 00:00 hrs
0203-246	4.03	289.683	Below Link Crown	3.417	0 - 12:25 hrs	0	125.984	0	11.317	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-247	3.403	297.159	Below Link Crown	12.597	0 - 16:27 hrs	0	110.244	0	42.547	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-248	4.442	283.904	Below Maximum Depth	1.686	0 - 14:10 hrs	0	33.323	0	10.967	0.006	16.274	0.272	1.686	0	0	0	0 - 00:00 hrs
0203-249	1.21	303.81	Below Link Crown	2.39	0 - 12:15 hrs	39.364	39.364	1.14	1.14	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-250	4.617	285.367	Surcharged	-0.567	0 - 13:45 hrs	0	80.407	0	10.991	0.007	4.016	0.577	0	0.143	2.007	5.874	0 - 12:07 hrs
0203-251	4.347	284.325	Below Link Crown	2.305	0 - 14:32 hrs	0	36.223	0	10.985	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-252	1.805	294.295	Below Link Crown	4.705	0 - 12:42 hrs	0	90.244	0	7.051	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-253	4.832	275.602	Below Link Crown	3.528	0 - 12:18 hrs	27.18	32.55	0.751	1.44	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-254	4.766	269.153	Below Link Crown	6.667	0 - 12:14 hrs	0	139.355	0	10.501	0.016	0	0	0	0	0	0	0 - 00:00 hrs
0203-255	2.573	278.521	Below Link Crown	7.377	0 - 12:19 hrs	0	39.557	0	11.709	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-256	4.316	301.926	Below Maximum Depth	4.834	0 - 12:17 hrs	0	45.948	0	4.931	0.001	2.788	0.316	4.834	0	0	0	0 - 00:00 hrs
0203-257	2.415	280.645	Below Link Crown	2.03	0 - 13:27 hrs	0	29.288	0	3.992	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-258	3.511	281.741	Below Maximum Depth	4.279	0 - 12:04 hrs	0	29.288	0	3.995	0.003	5.812	0.511	4.279	0	0	0	0 - 00:00 hrs
0203-259	5.647	285.127	Below Maximum Depth	0.383	0 - 12:04 hrs	0	29.676	0	4	0.002	5.684	2.647	0.383	0	0	0	0 - 00:00 hrs
0203-260	4.37	284.92	Below Maximum Depth	1.91	0 - 12:04 hrs	0	31.996	0	4.003	0.002	5.678	1.37	1.91	0	0	0	0 - 00:00 hrs
0203-261	4.456	285.956	Below Maximum Depth	1.824	0 - 12:04 hrs	0	32.579	0	4.004	0.002	5.741	1.456	1.824	0	0	0	0 - 00:00 hrs

Table B-3a. Existing System Analysis - Nodes
10-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-262	6.267	289.487	Surcharged	-0.477	0 - 13:26 hrs	0	32.325	0	3.989	0.002	5.77	3.267	0	0.04	2.836	4.425	0 - 12:02 hrs
0203-263	6.636	291.026	Surcharged	-0.406	0 - 13:06 hrs	78.891	78.891	3.999	4.001	0	5.751	3.636	0	0.568	2.867	48.544	0 - 12:15 hrs
0203-264	2.874	289.874	Surcharged	-0.274	0 - 12:18 hrs	27.451	27.451	0.759	0.76	0	0.913	0.874	0	0.036	0.454	10.003	0 - 12:15 hrs
0203-265	3.278	284.498	Below Maximum Depth	1.902	0 - 12:22 hrs	0	17.723	0	0.751	-0.003	0.906	0.278	1.902	0	0	0	0 - 00:00 hrs
0203-266	3.164	284.064	Below Maximum Depth	1.856	0 - 12:23 hrs	0	17.509	0	0.76	0	0.865	0.104	1.856	0	0	0	0 - 00:00 hrs
0203-267	2.99	283.77	Below Link Crown	2.18	0 - 12:27 hrs	0	17.507	0	0.76	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-268	7.63	280.644	Below Link Crown	4.846	0 - 13:00 hrs	0	915.607	0	164.458	0.283	0	0	0	0	0	0	0 - 00:00 hrs
0203-269	5.874	286.038	Below Link Crown	1.462	0 - 12:48 hrs	0	35.074	0	4.229	0.011	0	0	0	0	0	0	0 - 00:00 hrs
0203-270	7.865	290.385	Below Link Crown	4.315	0 - 12:52 hrs	0	120.019	0	9.765	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-271	5.71	308.3	Surcharged	-0.15	0 - 12:21 hrs	121.421	121.421	4.41	4.412	0	0.917	2.82	0	0.091	0.432	31.852	0 - 12:15 hrs
0203-272	3.596	294.726	Below Link Crown	5.294	0 - 12:14 hrs	0	68.944	0	7.87	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-273	3.752	290.622	Below Link Crown	7.178	0 - 12:59 hrs	0	71.416	0	7.879	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-274	5.603	291.463	Below Maximum Depth	0.947	0 - 12:03 hrs	0	73.616	0	8.011	0.004	4.842	1.583	0.947	0	0	0	0 - 00:00 hrs
0203-275	3.001	287.181	Below Link Crown	6.199	0 - 12:56 hrs	0	73.616	0	8.011	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-276	3.3	286.57	Below Link Crown	6.81	0 - 12:56 hrs	0	73.602	0	8.014	0.009	0	0	0	0	0	0	0 - 00:00 hrs
0203-277	1.744	284.664	Below Link Crown	2.536	0 - 12:57 hrs	0	73.59	0	8.006	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-278	5.851	291.851	Below Maximum Depth	0.629	0 - 12:03 hrs	0	29.219	0	1.819	0.002	4.388	1.851	0.629	0	0	0	0 - 00:00 hrs
0203-279	5.18	292.74	Below Maximum Depth	0.14	0 - 12:03 hrs	0	29.212	0	1.81	0	1.833	1.68	0.14	0	0	0	0 - 00:00 hrs
0203-280	4.71	292.85	Surcharged	0	0 - 12:03 hrs	0	29.946	0	1.808	0	1.816	1.21	0	0	0.002	6.782	0 - 12:03 hrs
0203-281	5.103	294.143	Below Maximum Depth	0.547	0 - 12:03 hrs	0	30.874	0	1.806	-0.001	1.82	1.853	0.547	0	0	0	0 - 00:00 hrs
0203-282	4.91	294.56	Surcharged	-0.39	0 - 12:25 hrs	60.979	60.979	1.814	1.815	0	1.849	1.91	0	0.165	0.908	32.105	0 - 12:15 hrs
0203-283	5.552	293.132	Surcharged	-0.682	0 - 13:44 hrs	0	66.364	0	6.21	0.001	4.934	2.052	0	0.713	2.456	23.554	0 - 12:03 hrs
0203-284	9.875	335.585	Surcharged	-0.165	0 - 12:23 hrs	132.759	132.759	5.458	5.461	0	5.391	6.375	0	0.128	0.533	37.678	0 - 12:15 hrs
0203-285	2.783	307.283	Below Link Crown	2.717	0 - 12:38 hrs	0	20.585	0	5.452	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-286	1.774	307.774	Below Link Crown	3.066	0 - 12:40 hrs	0	20.467	0	5.453	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-287	1.667	309.367	Below Link Crown	1.723	0 - 14:42 hrs	0	20.467	0	5.454	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-288	2.242	310.582	Below Link Crown	1.869	0 - 14:42 hrs	0	20.467	0	5.456	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-289	2.416	311.416	Below Link Crown	3.124	0 - 14:42 hrs	0	20.468	0	5.458	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-290	2.687	314.687	Below Maximum Depth	5.843	0 - 14:41 hrs	0	20.468	0	5.46	0.001	14.994	0.187	5.843	0	0	0	0 - 00:00 hrs
0203-291	3.451	316.751	Below Maximum Depth	2.669	0 - 14:41 hrs	0	20.468	0	5.459	0	15.08	0.951	2.669	0	0	0	0 - 00:00 hrs
0203-292	4.031	321.841	Below Maximum Depth	4.039	0 - 11:52 hrs	0	21.929	0	5.451	0.001	15.019	2.031	4.039	0	0	0	0 - 00:00 hrs
0203-293	4.363	324.103	Below Maximum Depth	0.427	0 - 14:41 hrs	0	21.823	0	5.452	0	15.065	1.633	0.427	0	0	0	0 - 00:00 hrs
0203-294	2.905	326.135	Below Link Crown	1.155	0 - 14:37 hrs	0	43.749	0	5.457	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-295	3.455	327.455	Below Link Crown	6.585	0 - 13:03 hrs	0	43.752	0	5.454	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-296	4.501	328.551	Below Maximum Depth	4.789	0 - 12:56 hrs	0	43.752	0	5.451	0.001	5.383	1.001	4.789	0	0	0	0 - 00:00 hrs
0203-297	3.945	329.655	Surcharged	-0.445	0 - 12:55 hrs	0	95.198	0	5.484	-0.003	5.27	0.445	0	0.891	2.631	53.691	0 - 12:07 hrs
0203-298	6.69	316.22	Surcharged	0	0 - 11:55 hrs	0	108.098	0	14.712	-0.006	5.614	2.19	0	0	0	12.588	0 - 11:55 hrs
0203-299	6.198	320.038	Surcharged	-0.468	0 - 12:33 hrs	157.14	157.14	4.259	4.262	0	3.764	3.198	0	0.759	1.865	110.974	0 - 12:15 hrs
0203-300	5.723	320.703	Surcharged	-0.493	0 - 12:52 hrs	259.866	259.866	7.864	7.868	0	7.357	2.723	0	1.852	3.583	207.592	0 - 12:15 hrs
0203-301	9.21	309.21	Surcharged	-0.75	0 - 15:26 hrs	0	130.987	0	22.509	0.013	11.818	4.21	0	0.7	4.684	45.053	0 - 16:36 hrs
0203-302	10.643	305.833	Surcharged	-0.713	0 - 15:27 hrs	239.576	385.932	7.266	33.71	0.042	13.31	5.563	0	3.108	5.908	230.745	0 - 12:15 hrs
0203-303	6.318	307.068	Surcharged	-0.498	0 - 12:45 hrs	139.127	139.127	3.878	3.88	0	11.885	3.318	0	0.908	3.601	110.275	0 - 12:15 hrs
0203-304	1.439	312.789	Below Link Crown	1.751	0 - 14:41 hrs	0	20.468	0	5.458	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-305	3.336	315.666	Surcharged	-0.106	0 - 14:41 hrs	0	20.468	0	5.462	0.001	15.139	0.836	0	0	6.964	0.254	0 - 11:52 hrs
0203-306	4.657	324.987	Surcharged	-0.547	0 - 14:41 hrs	0	43.723	0	5.464	0.001	15.005	1.157	0	1.622	7.487	23.577	0 - 12:48 hrs
0203-307	3.779	317.979	Below Maximum Depth	2.251	0 - 13:07 hrs	0	52.456	0	7.869	0	6.409	0.279	2.251	0	0	0	0 - 00:00 hrs
0203-308	3.736	316.236	Below Maximum Depth	4.614	0 - 13:30 hrs	0	52.453	0	7.865	0.002	6.333	0.236	4.614	0	0	0	0 - 00:00 hrs
0203-309	3.738	314.408	Below Maximum Depth	3.442	0 - 14:07 hrs	0	52.45	0	7.856	0	5.524	0.138	3.442	0	0	0	0 - 00:00 hrs
0203-310	3.631	312.771	Below Maximum Depth	4.889	0 - 14:47 hrs	0	52.433	0	7.851	0.006	3.699	0.061	4.889	0	0	0	0 - 00:00 hrs
0203-311	7.35	312.91	Surcharged	0	0 - 11:55 hrs	0	53.881	0	7.844	-0.001	7.108	3.35	0	0	0	9.42	0 - 11:55 hrs
0203-312	8.222	310.222	Surcharged	-0.622	0 - 14:45 hrs	0	100.123	0	14.693	0.007	9.507	3.222	0	1.332	4.685	40.19	0 - 16:34 hrs
0203-313	7.56	311.81	Surcharged	0	0 - 11:53 hrs	0	100.123	0	14.72	0.002	9.343	2.56	0	0	0.003	8.137	0 - 11:53 hrs
0203-314	7.672	313.162	Surcharged	-0.062	0 - 13:48 hrs	0	100.225	0	14.651	0.004	7.829	2.672	0	0.014	0.596	12.124	0 - 13:51 hrs
0203-315	6.42	321.05	Below Maximum Depth	0	0 - 11:52 hrs	0	72.29	0	10.499	-0.004	7.735	2.78	0	0	0	3.422	0 - 11:52 hrs
0203-316	6.919	322.969	Surcharged	-0.499	0 - 13:00 hrs	329.226	329.226	10.458	10.463	0	7.887	3.419	0	2.592	3.865	266.478	0 - 12:15 hrs
0203-317	8.811	306.931	Surcharged	-0.401	0 - 15:38 hrs	0	123.533	0	22.554	0.004	11.905	3.731	0	0.92	4.653	56.809	0 - 16:55 hrs
0203-318	4.16	283.299	Below Maximum Depth	2.291	0 - 12:33 hrs	0	39.579	0	11.721	0.003	20.666	1.16	2.291	0	0	0	0 - 00:00 hrs
0203-319	5.33	273.03	Below Maximum Depth	10.45	0 - 12:15 hrs	0	60.178	0	4.932	0.005	0.396	1.33	10.45	0	0	0	0 - 00:00 hrs
0203-320	1.687	279.679	Below Link Crown	4.562	0 - 13:32 hrs	0	29.287	0	3.979	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-321	2.263	280.555	Below Link Crown	6.047	0 - 13:27 hrs	0	29.288	0	3.991	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-322	4.651	274.786	Below Maximum Depth	1.214	0 - 13:03 hrs	0	26.203	0	4.748	0.01	9.503	0.651	1.214	0	0	0	0 - 00:00 hrs
0203-323	5.456	274.565	Below Link Crown	28.055	0 - 13:03 hrs	0	26.203	0	4.739	0.047	0	0	0	0	0	0	0 - 00:00 hrs
0203-324	1.46	274.375	Below Link Crown	28.245	0 - 13:04 hrs	0	26.202	0	4.692	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-325	6.59	292.734	Below Link Crown	8.026	0 - 12:26 hrs	0	208.089	0	22.681	0.206	0	0	0	0	0	0	0 - 00:00 hrs
0203-326	2.236	273.184	Below Link Crown	4.616	0 - 12:15 hrs	132.788	132.788	3.752	3.754	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-327	3.242	270.342	Below Link Crown	6.758	0 - 12:15 hrs	0	131.73	0	3.754	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-328	5.964	269.168	Below Link Crown	4.132	0 - 12:15 hrs	0	199.468	0	9.926	0.009	0	0	0	0	0	0	0 - 00:00 hrs
0203-329	6.299	291.725	Below Link Crown	4.634	0 - 12:29 hrs	0	198.146	0	22.476	0.135	0	0	0	0	0	0	0 - 00:00 hrs
0203-330	2.853	307.715	Below Link Crown	0.985	0 - 12:18 hrs	0	72.61	0	4.071	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-331	7.363	301.363	Surcharged	-0.013	0 - 16:39 hrs	0	147.611	0	33.592	0.037	12.613	1.363	0	0	1.636	0.04	0 - 15:44 hrs
0203-332	5.522	299.022	Below Link Crown	0.578	0 - 12:41 hrs	0	147.604	0	33.563	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-333	7.329	302.329	Surcharged	-1.049	0 - 16:22 hrs	0	168.327	0	33.639	0.028	12.575	1.329	0	0.696	6.285	33.824	0 - 12:08 hrs
0203-334	6.746	306.386	Surcharged	-0.006	0 - 15:27 hrs	0	41.482	0	3.871	0	11.89	3.216	0	0	0.009	1.951	0 - 15:27 hrs
0203-335	3.888	268.275	Below Link Crown	10.825	0 - 12:33 hrs	0	141.861	0	10.479	-0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-336	2.936	289.146	Below Maximum Depth	5.414	0 - 12:22 hrs	0	17.57	0	1.947	0	3.781	0.936	5.414	0	0	0	0 - 00:00 hrs
0203-337	2.225	303.115	Below Link Crown	4.885	0 - 12:11 hrs	0	61.336	0	13.313	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-338	2.334	295.964	Below Link Crown	2.313	0 - 12:19 hrs	0	76.551	0	6.156	0.009	0	0	0	0	0	0	0 - 00:00 hrs
0203-339	1.15	296.2	Below Link Crown	7.9	0 - 12:15 hrs	64.512	128.648	2.86	10.142	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-340	6.73	316.86	Surcharged	-0.71	0 - 13:48 hrs	0	69.443	0	10.488	0	7.801	2.73	0	0.365	2.805	10.461	0 - 11:55 hrs
0203-341	3.267	260.289	Below Link Crown	8.211	0 - 16:04 hrs	0	251.94	0	58.016	0.012	0	0	0	0	0	0	0 - 00:00 hrs
0203-342	6.439	272.167	Surcharged	-1.566	0 - 12:22 hrs	0	64.615	0	7.891	0.003	5.009	1.578	0	0.049	2.478	15.326	0 - 12:10 hrs
0203-343	13.721	315.007	Surcharged	-0.097	0 - 12:00 hrs	158.344	158.344	5.709	5.711	0	9.841	7.721	0	0.042	0.189	37.181	0 - 12:00 hrs
0203-344	9.443	308.554	Surcharged	-0.354	0 - 13:48 hrs	0	184.144	0	5.719	0.002	10.844	3.298	0	1.284	5.367	155.721	0 - 12:14 hrs
0203-345	2.535	256.572	Below Link Crown	8.257	0 - 15:03 hrs	0	296.042	0	65.885	0.034	0	0	0	0	0	0	0 - 00:00 hrs
0203-346	1.275	258.228	Below Link Crown	6.571	0 - 12:33 hrs	0	47.093	0	7.884	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-347	6.112	264.808	Below Link Crown	1.153	0 - 12:33 hrs	0	47.298	0	7.889	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-348	4.375	264.889	Below Link Crown	2.911	0 - 12:33 hrs	0	48.418	0	7.894	0.003	0	0	0	0	0	0	0 - 00:00 hrs

Table B-3a. Existing System Analysis - Nodes
10-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-349	7.522	268.917	Below Maximum Depth	0.12	0 - 12:26 hrs	0	49.285	0	7.9	0.008	1.066	0.331	0.12	0	0	0	0 - 00:00 hrs
0203-350	6.341	268.956	Below Link Crown	0.85	0 - 12:26 hrs	0	50.721	0	7.9	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-351	3.426	278.906	Below Link Crown	3.854	0 - 12:18 hrs	0	65.925	0	1.973	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-352	5.937	288.07	Below Link Crown	1.008	0 - 12:15 hrs	0	263.853	0	24.469	0.01	0	0	0	0	0	0	0 - 00:00 hrs
0203-353	5.966	282.531	Below Link Crown	1.064	0 - 12:19 hrs	0	269.413	0	26.342	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-354	3.138	278.855	Below Link Crown	3.892	0 - 12:19 hrs	0	269.37	0	26.332	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-355	5.858	274.377	Below Link Crown	1.096	0 - 12:22 hrs	0	268.955	0	26.319	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-356	5.474	273.228	Below Link Crown	3.072	0 - 12:22 hrs	89.825	329.024	2.52	28.834	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-357	9.213	270.627	Surcharged	-0.497	0 - 12:42 hrs	0	319.229	0	29.829	0.01	2.559	0.749	0	0.529	1.242	67.346	0 - 12:19 hrs
0203-358	7.831	268.863	Surcharged	-0.463	0 - 12:45 hrs	0	258.31	0	29.779	0.01	2.578	0.51	0	0.024	1.278	7.016	0 - 12:12 hrs
0203-359	6.254	266.004	Below Link Crown	1.096	0 - 12:51 hrs	0	280.909	0	32.626	0.01	0	0	0	0	0	0	0 - 00:00 hrs
0203-360	2.269	253.076	Below Link Crown	14.424	0 - 12:59 hrs	0	335.347	0	40.554	0.012	0	0	0	0	0	0	0 - 00:00 hrs
0203-361	3.899	260.758	Below Link Crown	5.872	0 - 12:48 hrs	0	100.153	0	8.014	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-362	3.614	278.934	Below Link Crown	4.329	0 - 15:04 hrs	0	253.366	0	47.305	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-363	6.469	286.929	Below Link Crown	0.476	0 - 12:15 hrs	0	262.186	0	24.456	0.009	0	0	0	0	0	0	0 - 00:00 hrs
0203-364	2.998	276.964	Below Link Crown	5.072	0 - 15:04 hrs	0	253.366	0	47.243	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-365	9.2	295.6	Surcharged	0	0 - 14:47 hrs	0	176.553	0	24.086	-0.001	5.906	3.7	0	0	0	24.821	0 - 14:47 hrs
0203-366	12.297	285.581	Surcharged	-0.381	0 - 12:41 hrs	0	215.429	0	24.699	0.004	4.424	0.396	0	1.527	2.211	215.427	0 - 12:15 hrs
0203-367	13.932	286.381	Surcharged	-3.369	0 - 12:15 hrs	364.71	423.47	11.047	47.074	0.016	5.279	4.717	0	0.14	2.432	40.833	0 - 12:04 hrs
0203-368	10.35	277.011	Surcharged	-0.694	0 - 14:32 hrs	0	283.944	0	46.46	0.005	12.518	2.429	0	3.772	6.098	92.594	0 - 12:15 hrs
0203-369	6.402	284.063	Below Maximum Depth	1.256	0 - 14:45 hrs	0	96.478	0	12.439	0.002	8.465	1.054	1.256	0	0	0	0 - 00:00 hrs
0203-370	8.296	275.193	Surcharged	-0.072	0 - 15:03 hrs	0	204.026	0	46.429	0	6.458	0.075	0	0.194	3.218	7.924	0 - 14:27 hrs
0203-371	0	270.605	Below Link Invert	4.595	0 - 00:00 hrs	0	0	0	0	0	48	0	4.595	0	0	0	0 - 00:00 hrs
0203-372	8.628	272.922	Below Maximum Depth	0.088	0 - 14:55 hrs	0	216.576	0	49.249	0.016	1.131	0.065	0.088	0	0	0	0 - 00:00 hrs
0203-373	14.961	272.524	Surcharged	-2.005	0 - 14:55 hrs	0	216.215	0	49.232	0.004	13.522	2.005	0	0.048	6.761	12.813	0 - 11:59 hrs
0203-374	13.174	270.666	Surcharged	-0.666	0 - 16:54 hrs	0	213.527	0	49.262	0.027	14.761	5.224	0	1.251	6.415	18.935	0 - 13:00 hrs
0203-375	6.235	265.601	Below Link Crown	5.099	0 - 16:59 hrs	0	200.041	0	49.195	0.021	0	0	0	0	0	0	0 - 00:00 hrs
0203-376	5.529	264.912	Below Link Crown	6.503	0 - 17:00 hrs	0	200.033	0	49.171	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-377	14.064	271.56	Surcharged	-1.56	0 - 14:56 hrs	0	215.96	0	49.224	0.014	16.57	7.064	0	0.377	6.782	26.138	0 - 12:03 hrs
0203-378	10.666	271.566	Surcharged	-0.353	0 - 12:41 hrs	165.303	165.303	5.488	5.491	0	3.561	7.666	0	0.822	1.676	108.138	0 - 12:15 hrs
0203-379	8.675	267.147	Below Maximum Depth	4.066	0 - 12:47 hrs	0	66.848	0	5.5	0.001	3.545	4.675	4.066	0	0	0	0 - 00:00 hrs
0203-380	5.64	292.64	Below Link Crown	4.66	0 - 12:19 hrs	0	131.46	0	11.338	0.013	0	0	0	0	0	0	0 - 00:00 hrs
0203-381	2.761	272.249	Below Link Crown	1.351	0 - 12:15 hrs	172.138	172.138	6.175	6.178	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-382	1.695	299.695	Below Link Crown	8.505	0 - 16:22 hrs	0	28.859	0	5.597	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-383	5.799	316.869	Below Maximum Depth	0.831	0 - 16:12 hrs	0	128.106	0	44.415	0	24.312	0.889	0.831	0	0	0	0 - 00:00 hrs
0203-384	5.82	314.82	Below Maximum Depth	1.55	0 - 16:13 hrs	0	110.245	0	43.791	0.741	24.338	0.91	1.55	0	0	0	0 - 00:00 hrs
0203-385	4.952	310.55	Below Maximum Depth	0	0 - 12:03 hrs	0	4.938	0	0.226	0	1.903	3.452	0	0.024	0.74	1.767	0 - 12:25 hrs
0203-386	3.892	310.49	Below Maximum Depth	0	0 - 12:03 hrs	7.637	9.926	0.243	0.291	0	1.748	2.642	0	0.13	0.778	9.923	0 - 12:15 hrs
0203-387	4.619	310.39	Surcharged	0	0 - 12:03 hrs	0	8.859	0	0.293	0	1.697	3.119	0	0	0	0.114	0 - 12:03 hrs
0203-388	3.839	310.61	Below Maximum Depth	0	0 - 12:03 hrs	13.913	13.913	0.339	0.339	0	1.607	2.589	0	0.043	0.303	9.096	0 - 12:15 hrs
0203-389	9.682	272.448	Below Maximum Depth	0.312	0 - 12:26 hrs	0	14.149	0	0.97	0.001	15.671	7.932	0.312	0	0	0	0 - 00:00 hrs
0203-390	9.71	272.91	Surcharged	0	0 - 12:00 hrs	42.419	42.419	1.258	1.259	0	16.388	8.46	0	0.288	0.903	34.492	0 - 12:15 hrs
0203-391	5.835	258.32	Below Link Crown	4.988	0 - 12:26 hrs	0	262.642	0	12.19	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-392	4.384	256.667	Below Link Crown	13.433	0 - 12:26 hrs	0	262.169	0	12.161	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-393	2.633	313.511	Below Link Crown	11.489	0 - 12:36 hrs	0	19.831	0	2.299	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-394	4.89	309.127	Below Link Crown	0.783	0 - 12:15 hrs	0	123.919	0	7.967	-0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-395	3.563	307.693	Below Link Crown	3.513	0 - 12:15 hrs	0	123.803	0	7.968	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-396	2.815	307.012	Below Maximum Depth	3.088	0 - 15:25 hrs	22.339	22.339	0.554	0.555	0	18.958	1.008	3.088	0	0	0	0 - 00:00 hrs
0203-397	3.471	298.104	Below Link Crown	3.185	0 - 12:18 hrs	0	37.799	0	8.853	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-398	3.359	297.992	Below Link Crown	3.003	0 - 12:18 hrs	0	37.822	0	8.846	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-399	1.428	310.072	Below Link Crown	2.775	0 - 12:15 hrs	25.912	25.912	1.231	1.231	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-400	3.288	308.696	Below Link Crown	0.534	0 - 12:15 hrs	0	25.395	0	1.23	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-401	3.352	295.566	Below Link Crown	3.834	0 - 12:21 hrs	0	123.588	0	5.681	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-402	5.548	288.045	Surcharged	-1.045	0 - 13:41 hrs	0	381.398	0	35.227	0.044	8.357	1.051	0	2.177	4.178	173.196	0 - 12:15 hrs
0203-403	5.269	287.37	Below Maximum Depth	1.105	0 - 13:56 hrs	0	203.571	0	35.12	0.012	8.145	0.855	1.105	0	0	0	0 - 00:00 hrs
0203-404	4.979	287.08	Below Link Crown	1.92	0 - 13:56 hrs	0	198.957	0	35.115	0.011	0	0	0	0	0	0	0 - 00:00 hrs
0203-405	5.054	286.686	Below Link Crown	1.814	0 - 13:59 hrs	0	198.937	0	35.112	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-406	5.011	286.418	Below Link Crown	1.482	0 - 14:00 hrs	0	198.908	0	35.115	0.012	0	0	0	0	0	0	0 - 00:00 hrs
0203-407	6.026	286.183	Below Link Crown	0.337	0 - 14:02 hrs	0	198.87	0	35.116	0.022	0	0	0	0	0	0	0 - 00:00 hrs
0203-408	5.85	285.915	Below Link Crown	0.228	0 - 14:03 hrs	0	198.833	0	35.101	0.011	0	0	0	0	0	0	0 - 00:00 hrs
0203-409	5.759	285.759	Below Link Crown	0.341	0 - 14:03 hrs	0	198.815	0	35.091	0.033	0	0	0	0	0	0	0 - 00:00 hrs
0203-410	6.345	285.195	Below Link Crown	1.705	0 - 14:10 hrs	0	198.632	0	34.995	0.011	0	0	0	0	0	0	0 - 00:00 hrs
0203-411	2.851	310.459	Below Link Crown	1.791	0 - 12:15 hrs	37.609	37.609	1.684	1.685	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-412	3.159	308.97	Below Maximum Depth	3.73	0 - 12:15 hrs	0	37.482	0	1.684	0	0.079	0.159	3.73	0	0	0	0 - 00:00 hrs
0203-413	2.487	307.27	Below Link Crown	5.33	0 - 12:15 hrs	0	37.502	0	1.685	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-414	1.843	304.047	Below Link Crown	2.243	0 - 12:15 hrs	0	37.306	0	1.685	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-415	5.887	309.492	Surcharged	-0.192	0 - 12:18 hrs	34.253	34.253	1.256	1.257	0	2.275	3.887	0	0.033	0.472	10.597	0 - 12:15 hrs
0203-416	1.417	304.172	Below Link Crown	3.528	0 - 12:18 hrs	0	23.774	0	1.254	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-417	4.932	289.502	Below Link Crown	2.507	0 - 12:25 hrs	0	123.949	0	11.316	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-418	4.701	288.065	Below Link Crown	3.766	0 - 12:26 hrs	0	123.486	0	11.315	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-419	4.526	294.45	Below Link Crown	1.65	0 - 12:34 hrs	0	25.277	0	1.209	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-420	0.72	288.441	Below Link Crown	5.87	0 - 12:34 hrs	0	17.424	0	1.208	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-421	1.209	301.351	Below Link Crown	4.649	0 - 12:15 hrs	0	15.795	0	0.529	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-422	1.971	307.721	Below Link Crown	1.479	0 - 12:15 hrs	0	14.933	0	0.683	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-423	1.643	307.049	Below Link Crown	5.551	0 - 12:15 hrs	0	14.823	0	0.683	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-424	3.159	285.788	Below Link Crown	4.612	0 - 12:33 hrs	0	135.935	0	12.497	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-425	3.241	285.58	Below Link Crown	7.92	0 - 12:34 hrs	0	134.805	0	12.496	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-426	5.041	284.125	Below Maximum Depth	2.875	0 - 14:37 hrs	0	95.8	0	12.442	0.003	7.414	0.515	2.875	0	0	0	0 - 00:00 hrs
0203-427	5.072	284.001	Below Maximum Depth	2.899	0 - 14:51 hrs	0	96.908	0	12.438	0.003	7.425	0.539	2.899	0	0	0	0 - 00:00 hrs
0203-428	5.861	270.507	Below Link Crown	7.982	0 - 13:21 hrs	0	253.378	0	47.183	0.042	0	0	0	0	0	0	0 - 00:00 hrs
0203-429	5.395	269.862	Below Link Crown	6.753	0 - 13:21 hrs	0	272.202	0	50.746	0.045	0	0	0	0	0	0	0 - 00:00 hrs
0203-430	6.717	276.613	Surcharged	-0.163	0 - 12:45 hrs	0	35.362	0	3.382	0.001	4.047	3.717	0	0.037	0.719	9.861	0 - 12:00 hrs
0203-431	4.389	335.169	Surcharged	-0.229	0 - 12:32 hrs	49.283	49.283	2.302	2.303	0	3.946	2.389	0	0.173	1.957	29.515	0 - 12:15 hrs
0203-432	4.401	275.641	Below Link Crown	2.039	0 - 12:18 hrs	0	18.573	0	0.659	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-433	4.676	275.606	Below Link Crown	3.264	0 - 12:18 hrs	0	19.444	0	0.702	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-434	4.829	275.599	Below Link Crown	3.461	0 - 12:18 hrs	56.252	78.715	2.324	3.72	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-435	2.806	273.836	Below Link Crown	5.684	0 - 12:30 hrs	0	78.639	0	3.718	0	0	0	0	0	0	0	0 - 00:00 hrs

Table B-3a. Existing System Analysis - Nodes
10-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-436	0	269.45	Below Link Invert	3.53	0 - 00:00 hrs	0	0	0	0	0	48	0	3.53	0	0	0	0 - 00:00 hrs
0203-437	1.865	272.005	Below Link Crown	4.095	0 - 12:37 hrs	0	61.407	0	3.659	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-438	1.815	266.765	Below Link Crown	7.435	0 - 12:37 hrs	0	61.294	0	3.655	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-439	4.919	330.364	Surcharged	-0.446	0 - 12:45 hrs	207.983	207.983	6.812	6.816	0	4.856	1.781	0	1.209	2.4	147.411	0 - 12:15 hrs
0203-440	4.604	324.74	Surcharged	-0.582	0 - 14:22 hrs	0	61.251	0	6.789	-0.002	12.448	1.307	0	1.994	6.22	31.973	0 - 12:29 hrs
0203-441	4.85	323.65	Surcharged	-0.19	0 - 14:33 hrs	0	31.129	0	6.81	0.003	12.533	1.85	0	0.016	3.244	0.542	0 - 14:17 hrs
0203-442	3.434	322.079	Below Maximum Depth	0.321	0 - 14:33 hrs	0	30.672	0	6.812	0.002	12.44	0.434	0.321	0	0	0	0 - 00:00 hrs
0203-443	2.999	320.952	Below Link Crown	0.848	0 - 14:33 hrs	0	30.672	0	6.813	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-444	1.638	319.03	Below Link Crown	2.671	0 - 13:07 hrs	0	30.672	0	6.813	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-445	1.437	312.767	Below Link Crown	3.099	0 - 14:15 hrs	0	30.763	0	6.805	-0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-446	3.449	310.989	Below Maximum Depth	0.691	0 - 14:15 hrs	0	30.684	0	6.806	0.001	12.429	0.412	0.691	0	0	0	0 - 00:00 hrs
0203-447	1.974	309.296	Below Link Crown	2.945	0 - 13:41 hrs	0	30.686	0	6.803	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-448	4.46	308.271	Below Maximum Depth	3.479	0 - 13:41 hrs	0	72.732	0	11.332	0.002	3.882	0.46	3.479	0	0	0	0 - 00:00 hrs
0203-449	5.517	318.235	Surcharged	-0.435	0 - 12:33 hrs	161.096	161.096	4.545	4.548	0	3.44	2.517	0	0.731	1.661	108.349	0 - 12:15 hrs
0203-450	7.132	318	Below Maximum Depth	0	0 - 12:00 hrs	0	56.709	0	4.571	0.001	3.326	4.12	0	0	0	4.574	0 - 12:00 hrs
0203-451	5.472	309.403	Surcharged	-0.503	0 - 13:41 hrs	0	53.008	0	4.558	0.001	4.743	1.972	0	0.416	2.256	9.83	0 - 12:41 hrs
0203-452	4.315	306.585	Below Maximum Depth	4.667	0 - 13:41 hrs	0	72.732	0	11.345	0.002	2.007	0.172	4.667	0	0	0	0 - 00:00 hrs
0203-453	4.83	304.54	Below Maximum Depth	0.86	0 - 13:41 hrs	0	74.536	0	11.361	-0.001	4.493	0.76	0.86	0	0	0	0 - 00:00 hrs
0203-454	7.098	302.293	Surcharged	-0.693	0 - 13:49 hrs	0	72.679	0	11.36	0.002	5.408	2.598	0	0.109	2.501	7.741	0 - 11:57 hrs
0203-455	7.589	301.159	Surcharged	-0.449	0 - 13:52 hrs	0	94.148	0	13.16	0.001	5.451	2.99	0	0.352	2.662	14.915	0 - 14:40 hrs
0203-456	3.627	302.76	Surcharged	-0.492	0 - 12:44 hrs	72.178	72.178	1.81	1.811	0	5.767	1.627	0	0.449	2.882	57.237	0 - 12:15 hrs
0203-457	7.957	299.602	Surcharged	-0.471	0 - 12:37 hrs	213.56	287.355	6.822	20.028	0.003	5.416	2.457	0	1.023	2.479	142.333	0 - 12:15 hrs
0203-458	10.185	296.694	Surcharged	-0.716	0 - 13:23 hrs	0	146.455	0	20.016	0.015	5.977	4.685	0	0.741	2.827	27.248	0 - 14:47 hrs
0203-459	7.195	298.925	Surcharged	-0.405	0 - 12:30 hrs	144.343	144.343	4.144	4.146	0	2.944	3.695	0	0.539	1.382	89.472	0 - 12:15 hrs
0203-460	7.146	297.28	Below Maximum Depth	0.817	0 - 12:38 hrs	0	55.233	0	4.116	0.002	4.397	2.719	0.817	0	0	0	0 - 00:00 hrs
0203-461	9.146	292.322	Surcharged	-0.372	0 - 13:22 hrs	0	176.551	0	24.078	0.005	13.958	3.409	0	0.112	2.74	5.538	0 - 14:48 hrs
0203-462	5.88	288.452	Below Maximum Depth	1.218	0 - 14:48 hrs	0	99.967	0	24.135	0.008	4.351	0.143	1.218	0	0	0	0 - 00:00 hrs
0203-463	4.921	297.148	Below Maximum Depth	2.352	0 - 13:18 hrs	0	62.189	0	11.307	0.001	9.473	1.421	2.352	0	0	0	0 - 00:00 hrs
0203-464	7.921	303.449	Surcharged	-0.485	0 - 13:19 hrs	288.373	288.373	11.336	11.342	0	9.476	4.921	0	2.824	4.672	227.307	0 - 12:15 hrs
0203-465	2.828	294.453	Below Link Crown	4.572	0 - 13:22 hrs	0	62.189	0	11.317	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-466	2.335	288.943	Below Link Crown	4.509	0 - 12:17 hrs	0	62.188	0	11.334	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-467	5.059	280.469	Surcharged	-0.969	0 - 12:32 hrs	0	88.629	0	11.809	0.001	12.157	0.979	0	0.808	6.078	88.629	0 - 12:08 hrs
0203-468	4.804	275.712	Surcharged	-0.512	0 - 12:51 hrs	87.63	87.63	2.832	2.833	0	5.875	1.804	0	0.566	2.936	64.417	0 - 12:15 hrs
0203-469	4.872	275.223	Below Maximum Depth	0.877	0 - 12:56 hrs	0	24.904	0	2.844	0.001	5.878	1.872	0.877	0	0	0	0 - 00:00 hrs
0203-470	5.619	274.388	Below Maximum Depth	3.856	0 - 13:26 hrs	0	24.903	0	2.848	0.001	12.369	2.619	3.856	0	0	0	0 - 00:00 hrs
0203-471	5.613	273.759	Below Maximum Depth	1.341	0 - 13:48 hrs	0	24.9	0	2.847	0	12.828	2.613	1.341	0	0	0	0 - 00:00 hrs
0203-472	4.386	295.347	Surcharged	-0.351	0 - 14:30 hrs	0	94.551	0	11.471	0.002	5.959	0.351	0	0.526	2.979	10.659	0 - 12:51 hrs
0203-473	5.864	273.371	Below Maximum Depth	1.529	0 - 14:55 hrs	0	24.895	0	2.846	0.001	13.684	2.864	1.529	0	0	0	0 - 00:00 hrs
0203-474	9.904	268.88	Surcharged	-0.28	0 - 12:22 hrs	94.143	94.143	2.555	2.556	0	3.6	6.904	0	0.211	0.749	45.089	0 - 12:15 hrs
0203-475	6.922	267.226	Below Maximum Depth	0.074	0 - 12:45 hrs	0	32.181	0	2.861	0	4.915	3.778	0.074	0	0	0	0 - 00:00 hrs
0203-476	6.744	266.706	Below Maximum Depth	0.894	0 - 12:45 hrs	0	32.183	0	2.863	0.001	4.927	3.614	0.894	0	0	0	0 - 00:00 hrs
0203-477	7.155	279.196	Surcharged	-0.496	0 - 12:53 hrs	146.584	146.584	4.578	4.58	0	6.092	4.155	0	1.003	3.044	111.979	0 - 12:15 hrs
0203-478	7.853	277.237	Surcharged	-0.489	0 - 12:45 hrs	0	38.074	0	4.589	-0.002	6.131	4.762	0	0.022	2.497	3.256	0 - 12:17 hrs
0203-479	9.084	274.827	Below Maximum Depth	0	0 - 12:22 hrs	0	38.072	0	4.58	0.004	7.275	5.925	0	0.005	0.327	1.013	0 - 12:32 hrs
0203-480	7.705	273.44	Surcharged	0	0 - 12:17 hrs	0	38.068	0	4.569	0.003	7.284	4.705	0	0.009	0.252	2.33	0 - 12:22 hrs
0203-481	8.02	329.053	Surcharged	-0.545	0 - 13:15 hrs	519.651	519.651	13.324	13.331	0	11.698	5.02	0	4.736	5.847	458.693	0 - 12:15 hrs
0203-482	7.033	322.698	Below Maximum Depth	0	0 - 11:45 hrs	0	61.336	0	13.303	0.008	11.713	4.033	0	0	0.001	4.694	0 - 11:45 hrs
0203-483	2.58	314.353	Below Link Crown	3.799	0 - 11:48 hrs	0	61.336	0	13.297	0.009	0	0	0	0	0	0	0 - 00:00 hrs
0203-484	2.609	307.728	Below Link Crown	3.712	0 - 13:15 hrs	0	61.336	0	13.301	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-485	5.263	280.443	Surcharged	-0.623	0 - 12:29 hrs	0	71.912	0	12.289	0.001	12.196	1.323	0	0.15	3.694	29.33	0 - 12:15 hrs
0203-486	2.701	298.98	Below Link Crown	6.094	0 - 13:18 hrs	0	61.368	0	13.315	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-487	3.849	297.352	Below Link Crown	5.836	0 - 12:11 hrs	0	62.67	0	13.316	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-488	8.57	296.591	Surcharged	0	0 - 12:11 hrs	252.522	313.427	9.192	23.415	0.011	2.485	2.57	0	0.107	0.137	54.459	0 - 12:15 hrs
0203-489	4.656	295.235	Surcharged	-0.135	0 - 12:33 hrs	0	73.027	0	0.899	0	2.49	1.156	0	0.595	1.224	73.024	0 - 12:15 hrs
0203-490	3.751	295.414	Below Maximum Depth	1.646	0 - 12:15 hrs	20.711	20.711	0.47	0.47	0	1.976	0.251	1.646	0	0	0	0 - 00:00 hrs
0203-491	5.988	293.065	Below Link Crown	0.035	0 - 12:15 hrs	0	214.428	0	22.845	0.009	0	0	0	0	0	0	0 - 00:00 hrs
0203-492	5.656	291.654	Below Maximum Depth	0.288	0 - 12:15 hrs	57.676	57.676	1.62	1.621	0	0.634	2.156	0.288	0	0	0	0 - 00:00 hrs
0203-493	1.719	302.637	Below Link Crown	13.963	0 - 12:15 hrs	15.856	15.856	0.529	0.529	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-494	10.218	276.291	Surcharged	-0.281	0 - 12:26 hrs	161.026	172.084	6.013	9.405	0.004	3.488	6.218	0	0.28	0.756	63.921	0 - 12:15 hrs
0203-495	6.691	273.629	Below Maximum Depth	2.503	0 - 12:15 hrs	31.221	31.221	1.073	1.073	0	1.276	4.191	2.503	0	0	0	0 - 00:00 hrs
0203-496	2.027	307.274	Below Link Crown	2.176	0 - 12:15 hrs	15.086	15.086	0.48	0.48	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-497	2.512	306.926	Below Link Crown	1.374	0 - 12:15 hrs	0	14.968	0	0.48	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-498	2.195	306.567	Below Link Crown	5.333	0 - 12:15 hrs	0	14.851	0	0.48	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-499	1.811	305.98	Below Link Crown	4.62	0 - 12:15 hrs	0	14.801	0	0.48	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-500	0.66	303.85	Below Link Crown	6.25	0 - 12:15 hrs	0	14.714	0	0.48	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-501	0.469	303.82	Below Link Crown	3.48	0 - 12:15 hrs	0	14.783	0	0.683	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-502	4.187	316.546	Below Maximum Depth	1.654	0 - 12:15 hrs	55.314	55.314	2.649	2.65	0	0.235	0.687	1.654	0	0	0	0 - 00:00 hrs
0203-503	2.752	314.037	Below Link Crown	5.878	0 - 12:15 hrs	0	55.322	0	2.652	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-504	2.191	309.987	Below Link Crown	1.856	0 - 12:15 hrs	0	60.59	0	2.848	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-505	1.452	310.054	Below Link Crown	5.968	0 - 12:14 hrs	5.829	5.829	0.197	0.197	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-506	6.03	277.294	Surcharged	-0.477	0 - 12:55 hrs	100.804	100.804	3.399	3.401	0	5.624	3.53	0	0.979	2.709	88.362	0 - 12:15 hrs
0203-507	5.729	270.229	Below Link Crown	6.386	0 - 13:21 hrs	87.801	272.208	3.628	50.769	0.019	0	0	0	0	0	0	0 - 00:00 hrs
0203-508	6.43	278.671	Below Link Crown	0.909	0 - 12:15 hrs	100.867	100.867	2.598	2.599	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-509	7.309	278.609	Below Link Crown	0.631	0 - 12:15 hrs	0	99.681	0	2.599	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-510	4.934	275.727	Surcharged	-0.468	0 - 13:18 hrs	205.487	205.487	8.868	8.872	0	8.224	1.934	0	1.987	4.096	153.283	0 - 12:15 hrs
0203-511	2.991	328.345	Below Maximum Depth	0.955	0 - 12:02 hrs	0	20.234	0	2.297	0	3.906	0.491	0.955	0	0	0	0 - 00:00 hrs
0203-512	1.527	325.686	Below Link Crown	4.565	0 - 12:02 hrs	0	19.945	0	2.3	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-513	3.498	332.578	Below Maximum Depth	0.132	0 - 12:00 hrs	0	20.254	0	2.293	0	3.921	1.498	0.132	0	0	0	0 - 00:00 hrs
0203-514	2.204	321.821	Below Link Crown	0.879	0 - 12:33 hrs	0	19.831	0	2.304	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-515	1.568	320.219	Below Link Crown	3.373	0 - 12:33 hrs	0	19.831	0	2.303	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-516	1.802	313.87	Below Link Crown	5.11	0 - 12:36 hrs	0	19.831	0	2.3	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-517	7.862	278.472	Below Link Crown	1.058	0 - 12:37 hrs	0	98.146	0	2.596	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-518	3.82	320.131	Surcharged	-0.331	0 - 12:22 hrs	73.067	73.067	2.615	2.616	0	2.34	1.42	0	0.18	1.126	35.914	0 - 12:15 hrs
0203-519	3.192	318.603	Below Link Crown	1.997	0 - 12:03 hrs	0	37.792	0	2.591	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-520	3.557	263.507	Below Link Crown	10.353	0 - 12:18 hrs	0	199.995	0	32.183	0.012	0	0	0	0	0	0	0 - 00:00 hrs
0203-521	4.43	322.23	Below Maximum Depth	1.914	0 - 12:44 hrs	0	35.754	0	3.795	0	4.62	0.93	1.914	0	0	0	0 - 00:00 hrs
0203-522	5.087	323.087	Below Maximum Depth	1.586	0 - 12:45 hrs	0	35.756	0	3.798	0.001	4.685	1.587	1.586	0	0	0	0 - 00:00 hrs

Table B-3a. Existing System Analysis - Nodes
10-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-523	6.044	324.544	Surcharged	-0.344	0 - 12:37 hrs	112.336	112.336	3.781	3.782	0	4.726	2.544	0	0.522	2.254	76.923	0 - 12:15 hrs
0203-524	5.593	323.843	Below Maximum Depth	0.057	0 - 12:45 hrs	0	35.753	0	3.799	0	4.709	2.093	0.057	0	0	0	0 - 00:00 hrs
0203-525	2.98	267.29	Below Link Crown	14.01	0 - 12:18 hrs	0	162.657	0	30.271	0.017	0	0	0	0	0	0	0 - 00:00 hrs
0203-526	3.989	321.535	Below Maximum Depth	1.465	0 - 12:37 hrs	0	35.753	0	3.793	0	4.547	0.489	1.465	0	0	0	0 - 00:00 hrs
0203-527	3.31	320.801	Below Link Crown	1.97	0 - 12:37 hrs	0	35.753	0	3.791	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-528	3.469	320.055	Below Link Crown	2.242	0 - 12:37 hrs	0	35.753	0	3.788	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-529	3.616	319.116	Below Link Crown	1.572	0 - 12:38 hrs	0	35.752	0	3.782	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-530	9.186	276.046	Below Link Crown	0.814	0 - 12:55 hrs	0	136.41	0	28.379	0.143	0	0	0	0	0	0	0 - 00:00 hrs
0203-531	11.877	324.611	Surcharged	0	0 - 12:03 hrs	56.133	56.133	1.779	1.78	0	0.744	9.377	0	0	0.001	5.529	0 - 12:03 hrs
0203-532	2.636	295.466	Below Link Crown	7.384	0 - 12:37 hrs	0	110.246	0	42.3	0.036	0	0	0	0	0	0	0 - 00:00 hrs
0203-533	2.034	302.624	Below Link Crown	2.816	0 - 13:30 hrs	0	93.528	0	20.054	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-534	3.374	306.845	Below Maximum Depth	2.362	0 - 12:37 hrs	0	22.063	0	5.451	0.001	3.012	0.374	2.362	0	0	0	0 - 00:00 hrs
0203-535	3.153	306.451	Below Maximum Depth	2.517	0 - 12:37 hrs	0	23.087	0	5.45	0	1.763	0.153	2.517	0	0	0	0 - 00:00 hrs
0203-536	8.488	305.659	Surcharged	-0.427	0 - 12:37 hrs	168.608	188.454	5.559	11.003	0.002	4.393	4.988	0	0.766	1.647	108.725	0 - 12:15 hrs
0203-537	4.841	302.012	Below Maximum Depth	3.811	0 - 12:03 hrs	0	84.021	0	11.013	0.002	3.295	0.841	3.811	0	0	0	0 - 00:00 hrs
0203-538	1.447	301.287	Below Link Crown	4.993	0 - 13:12 hrs	0	93.528	0	20.049	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-539	5.036	299.696	Below Maximum Depth	0.904	0 - 12:03 hrs	0	83.066	0	11.006	0.002	3.274	1.036	0.904	0	0	0	0 - 00:00 hrs
0203-540	5.396	296.386	Below Maximum Depth	1.164	0 - 12:03 hrs	0	80.597	0	10.992	0.001	3.479	1.356	1.164	0	0	0	0 - 00:00 hrs
0203-541	2.877	293.017	Below Link Crown	3.423	0 - 13:03 hrs	0	80.598	0	10.997	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-542	5.07	305.952	Below Maximum Depth	1.554	0 - 12:37 hrs	0	31.81	0	5.451	0.001	3.315	1.57	1.554	0	0	0	0 - 00:00 hrs
0203-543	5.654	290.114	Below Maximum Depth	1.026	0 - 13:41 hrs	0	80.582	0	10.994	0.002	3.406	1.654	1.026	0	0	0	0 - 00:00 hrs
0203-544	4.826	287.926	Below Maximum Depth	5.924	0 - 13:41 hrs	0	80.582	0	10.995	0.001	3.431	0.786	5.924	0	0	0	0 - 00:00 hrs
0203-545	4.497	284.475	Surcharged	-0.575	0 - 14:37 hrs	0	76.444	0	10.994	0.008	20.386	0.587	0	2.535	10.192	53.611	0 - 12:32 hrs
0203-546	4.316	284.266	Below Link Crown	2.804	0 - 14:30 hrs	0	34.552	0	10.979	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-547	4.285	298.995	Below Link Crown	3.805	0 - 12:15 hrs	0	94.78	0	20.02	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-548	4.239	284.159	Below Maximum Depth	3.121	0 - 14:23 hrs	0	33.662	0	10.976	0.002	17.162	0.349	3.121	0	0	0	0 - 00:00 hrs
0203-549	2.873	281.713	Below Link Crown	3.877	0 - 12:33 hrs	0	39.579	0	11.717	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-550	9.984	276.899	Below Link Crown	0.301	0 - 12:52 hrs	0	974.768	0	179.331	0.149	0	0	0	0	0	0	0 - 00:00 hrs
0203-551	3.027	278.477	Below Link Crown	4.023	0 - 12:18 hrs	0	62.59	0	1.969	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-552	5.787	278.847	Below Maximum Depth	2.003	0 - 13:03 hrs	0	26.203	0	4.75	0.002	9.378	2.777	2.003	0	0	0	0 - 00:00 hrs
0203-553	4.019	275.039	Below Maximum Depth	5.661	0 - 13:03 hrs	0	26.203	0	4.75	0.007	3.736	0.019	5.661	0	0	0	0 - 00:00 hrs
0203-554	2.872	274.692	Below Link Crown	1.348	0 - 12:15 hrs	32.845	32.845	0.955	0.956	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-555	5.394	273.464	Below Maximum Depth	2.046	0 - 12:15 hrs	0	32.615	0	0.955	0	0.199	0.744	2.046	0	0	0	0 - 00:00 hrs
0203-556	1.498	268.348	Below Link Crown	7.852	0 - 12:15 hrs	0	60.183	0	4.926	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-557	9.379	298.399	Below Link Crown	4.701	0 - 12:15 hrs	0	452.283	0	78.584	0.018	0	0	0	0	0	0	0 - 00:00 hrs
0203-558	6.026	267.428	Below Link Crown	13.702	0 - 12:33 hrs	58.038	1,097.82	1.414	194.03	0.07	0	0	0	0	0	0	0 - 00:00 hrs
0203-559	4.362	299.072	Below Link Crown	3.728	0 - 12:15 hrs	0	94.205	0	20.024	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-560	5.666	350.886	Surcharged	-0.236	0 - 12:25 hrs	578.466	578.466	21.204	21.215	0	1.35	1.086	0	0.865	0.661	214.129	0 - 12:15 hrs
0203-561	6.86	342.52	Below Maximum Depth	0	0 - 12:03 hrs	0	242.069	0	21.173	0.013	2.964	1.86	0	0.001	0.011	9.313	0 - 12:03 hrs
0203-562	6.696	332.696	Surcharged	-0.996	0 - 16:16 hrs	0	76.506	0	12.127	0.004	13.955	1.026	0	2.386	6.977	31.451	0 - 12:22 hrs
0203-563	6.532	334.602	Surcharged	-0.522	0 - 12:56 hrs	405.525	405.525	12.12	12.126	0	8.908	0.862	0	3.062	4.441	330.519	0 - 12:15 hrs
0203-564	5.107	346.207	Surcharged	-0.507	0 - 12:45 hrs	0	365.223	0	21.257	0.014	2.895	0.527	0	2.236	1.448	128.876	0 - 12:06 hrs
0203-565	1.872	335.252	Below Link Crown	4.258	0 - 12:47 hrs	0	242.069	0	21.207	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-566	4.649	334.009	Below Link Crown	3.131	0 - 12:08 hrs	0	242.048	0	21.201	0.05	0	0	0	0	0	0	0 - 00:00 hrs
0203-567	4.793	329.203	Below Link Crown	2.987	0 - 12:49 hrs	0	241.994	0	21.126	0.013	0	0	0	0	0	0	0 - 00:00 hrs
0203-568	5.572	327.242	Below Link Crown	2.698	0 - 12:14 hrs	0	241.943	0	21.114	0.02	0	0	0	0	0	0	0 - 00:00 hrs
0203-569	4.193	324.473	Below Link Crown	2.527	0 - 13:33 hrs	0	249.359	0	21.096	0.018	0	0	0	0	0	0	0 - 00:00 hrs
0203-570	6.31	324.27	Surcharged	-0.27	0 - 13:37 hrs	0	254.863	0	20.972	0.027	3.49	1.21	0	1.068	1.61	48.905	0 - 12:25 hrs
0203-571	8.021	320.681	Surcharged	-0.481	0 - 12:33 hrs	0	214.768	0	21.064	0.188	3.421	0.491	0	0.258	1.709	64.852	0 - 12:15 hrs
0203-572	9.795	320.405	Below Link Crown	0.295	0 - 12:30 hrs	0	222.013	0	20.812	0.159	0	0	0	0	0	0	0 - 00:00 hrs
0203-573	9.715	320.325	Below Link Crown	0.375	0 - 12:27 hrs	622.968	729.099	41.12	61.781	0.112	0	0	0	0	0	0	0 - 00:00 hrs
0203-574	8.807	319.417	Surcharged	-0.417	0 - 13:15 hrs	0	728.332	0	61.643	0.157	4.881	0.457	0	3.72	2.44	232.849	0 - 12:18 hrs
0203-575	7.052	317.662	Surcharged	-0.562	0 - 16:12 hrs	0	515.279	0	61.645	0.258	24.312	0.612	0	28.198	12.154	407.93	0 - 12:52 hrs
0203-576	1.649	310.139	Below Link Crown	11.561	0 - 16:14 hrs	0	110.245	0	43.048	0.109	0	0	0	0	0	0	0 - 00:00 hrs
0203-577	3.411	298.47	Below Link Crown	9.733	0 - 16:16 hrs	0	110.245	0	42.941	0.065	0	0	0	0	0	0	0 - 00:00 hrs
0203-578	2.535	297.665	Below Link Crown	10.608	0 - 16:22 hrs	0	110.245	0	42.876	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-579	4.385	297.233	Below Link Crown	12.487	0 - 16:25 hrs	0	110.245	0	42.77	0.224	0	0	0	0	0	0	0 - 00:00 hrs
0203-580	4.209	295.019	Below Link Crown	7.301	0 - 12:36 hrs	0	110.247	0	42.264	0.081	0	0	0	0	0	0	0 - 00:00 hrs
0203-581	6.936	299.586	Surcharged	-0.266	0 - 12:18 hrs	98.433	98.433	2.711	2.712	0	1.09	3.936	0	0.128	0.492	35.683	0 - 12:15 hrs
0203-582	3.403	294.663	Below Link Crown	6.537	0 - 12:34 hrs	0	110.254	0	42.183	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-583	6.5	294.62	Below Link Crown	5.28	0 - 12:34 hrs	0	112.054	0	42.158	0.056	0	0	0	0	0	0	0 - 00:00 hrs
0203-584	8.436	294.616	Below Link Crown	5.584	0 - 12:34 hrs	0	538.526	0	120.669	0.112	0	0	0	0	0	0	0 - 00:00 hrs
0203-585	8.337	294.477	Below Link Crown	5.023	0 - 12:34 hrs	0	533.653	0	120.552	0.055	0	0	0	0	0	0	0 - 00:00 hrs
0203-586	8.299	294.249	Below Link Crown	5.951	0 - 12:36 hrs	0	531.18	0	120.497	0.08	0	0	0	0	0	0	0 - 00:00 hrs
0203-587	9.08	293.7	Below Link Crown	5.1	0 - 12:36 hrs	0	526.147	0	120.417	0.124	0	0	0	0	0	0	0 - 00:00 hrs
0203-588	10.724	293.554	Below Link Crown	4.516	0 - 12:34 hrs	0	522.03	0	120.291	0.181	0	0	0	0	0	0	0 - 00:00 hrs
0203-589	8.045	293.105	Below Link Crown	8.295	0 - 12:34 hrs	0	520.965	0	120.109	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-590	1.846	327.776	Below Link Crown	2.624	0 - 16:17 hrs	0	51.211	0	12.14	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-591	2.816	323.866	Surcharged	-0.196	0 - 16:32 hrs	0	51.187	0	12.129	0.009	6.072	0.196	0	0.035	3.034	0.856	0 - 15:56 hrs
0203-592	4.255	294.785	Below Maximum Depth	2.045	0 - 12:33 hrs	0	65.745	0	2.686	0.003	0.493	0.255	2.045	0	0	0	0 - 00:00 hrs
0203-593	1.186	317.366	Below Link Crown	2.434	0 - 16:34 hrs	0	50.499	0	12.11	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-594	3.874	312.804	Surcharged	-0.204	0 - 18:28 hrs	0	50.499	0	12.104	0.027	14.853	0.274	0	0.817	7.408	6.909	0 - 16:28 hrs
0203-595	2.877	310.867	Below Link Crown	0.233	0 - 18:29 hrs	0	44.029	0	12.081	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-596	1.885	308.245	Below Link Crown	1.255	0 - 18:30 hrs	0	44.029	0	12.07	0.009	0	0	0	0	0	0	0 - 00:00 hrs
0203-597	2.891	300.421	Below Link Crown	4.279	0 - 18:31 hrs	0	44.029	0	12.06	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-598	2.55	299.46	Below Link Crown	4.54	0 - 12:15 hrs	0	44.028	0	12.054	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-599	5.252	299.283	Below Link Crown	4.008	0 - 12:15 hrs	0	44.19	0	12.044	0.01	0	0	0	0	0	0	0 - 00:00 hrs
0203-600	7.254	298.954	Below Link Crown	1.906	0 - 12:15 hrs	438.412	518.958	14.471	78.768	0.02	0	0	0	0	0	0	0 - 00:00 hrs
0203-601	7.438	298.458	Below Link Crown	2.892	0 - 12:15 hrs	0	462.61	0	78.59	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-602	2.516	295.606	Below Link Crown	9.894	0 - 12:37 hrs	0	110.244	0	42.391	0.092	0	0	0	0	0	0	0 - 00:00 hrs
0203-603	5.094	309.834	Surcharged	-0.534	0 - 13:26 hrs	526.713	526.713	20.07	20.08	0	12.064	0.545	0	5.769	6.031	441.466	0 - 12:15 hrs
0203-604	4.557	308.602	Surcharged	-0.003	0 - 13:26 hrs	0	93.53	0	20.096	0	1.051	0.003	0	0	0.523	0.024	0 - 13:14 hrs
0203-605	3.949	307.979	Below Link Crown	0.621	0 - 13:26 hrs	0	93.528	0	20.086	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-606	2.63	304.63	Below Link Crown	1.97	0 - 13:27 hrs	0	93.528	0	20.072	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-607	1.98	303.73	Below Link Crown	1.47	0 - 13:27 hrs	0	93.528	0	20.061	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-608	1.612	299.752	Below Link Crown	4.618	0 - 12:17 hrs	0	93.537	0	20.047	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-609	4.172	299.202	Below Link Crown	4.028	0 - 12:15 hrs	0	93.506	0	20.054	0.017	0	0	0	0	0	0	0 - 00:00 hrs

Table B-3a. Existing System Analysis - Nodes
10-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-610	4.427	299.137	Below Link Crown	3.863	0 - 12:15 hrs	0	93.817	0	20.036	0.01	0	0	0	0	0	0	0 - 00:00 hrs
0203-611	10.127	292.477	Below Link Crown	5.023	0 - 12:33 hrs	0	701.017	0	130.773	0.105	0	0	0	0	0	0	0 - 00:00 hrs
0203-612	7.953	292.623	Below Link Crown	8.377	0 - 12:33 hrs	169.378	651.934	8.217	128.174	0.114	0	0	0	0	0	0	0 - 00:00 hrs
0203-613	9.689	291.429	Below Link Crown	4.171	0 - 12:53 hrs	0	693.481	0	130.63	0.137	0	0	0	0	0	0	0 - 00:00 hrs
0203-614	11.059	291.199	Below Link Crown	3.031	0 - 12:56 hrs	0	682.43	0	130.492	0.222	0	0	0	0	0	0	0 - 00:00 hrs
0203-615	10.795	290.935	Below Link Crown	5.865	0 - 12:57 hrs	0	667.943	0	130.268	0.283	0	0	0	0	0	0	0 - 00:00 hrs
0203-616	10.854	290.814	Below Link Crown	5.887	0 - 12:59 hrs	0	648.032	0	129.983	0.409	0	0	0	0	0	0	0 - 00:00 hrs
0203-617	10.484	290.614	Below Link Crown	1.586	0 - 12:59 hrs	0	682.46	0	137.453	0.499	0	0	0	0	0	0	0 - 00:00 hrs
0203-618	10.943	290.493	Below Maximum Depth	0.007	0 - 12:59 hrs	0	658.653	0	136.958	0.201	0.317	0.013	0.007	0	0	0	0 - 00:00 hrs
0203-619	11.31	290.31	Below Link Crown	0.49	0 - 13:00 hrs	0	655.462	0	136.758	0.248	0	0	0	0	0	0	0 - 00:00 hrs
0203-620	10.403	289.833	Below Link Crown	3.997	0 - 13:00 hrs	0	653.845	0	136.514	0.14	0	0	0	0	0	0	0 - 00:00 hrs
0203-621	9.349	291.849	Below Link Crown	5.771	0 - 12:49 hrs	0	696.426	0	130.67	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-622	10.035	289.755	Below Link Crown	4.075	0 - 13:00 hrs	62.85	671.093	2.419	138.793	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-623	5.242	284.792	Below Link Crown	2.108	0 - 12:59 hrs	0	781.349	0	148.474	0.079	0	0	0	0	0	0	0 - 00:00 hrs
0203-624	4.346	285.036	Below Maximum Depth	4.984	0 - 12:59 hrs	0	110.503	0	9.791	0.005	2.517	0.336	4.984	0	0	0	0 - 00:00 hrs
0203-625	6.769	290.429	Below Link Crown	4.471	0 - 12:52 hrs	0	138.966	0	9.748	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-626	6.444	294.114	Below Link Crown	0.086	0 - 12:15 hrs	93.724	181.155	2.777	9.817	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-627	3.199	296.529	Below Link Crown	3.251	0 - 13:18 hrs	0	53.549	0	4.419	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-628	4.054	282.774	Below Link Crown	3.326	0 - 12:59 hrs	0	797.637	0	150.712	0.057	0	0	0	0	0	0	0 - 00:00 hrs
0203-629	4.742	281.758	Below Link Crown	3.672	0 - 12:57 hrs	76.28	882.533	1.962	160.616	0.065	0	0	0	0	0	0	0 - 00:00 hrs
0203-630	8.253	281.329	Below Link Crown	4.171	0 - 12:59 hrs	0	882.267	0	160.559	0.312	0	0	0	0	0	0	0 - 00:00 hrs
0203-631	7.829	279.904	Below Link Crown	4.596	0 - 13:00 hrs	24.272	927.901	0.725	166.224	0.328	0	0	0	0	0	0	0 - 00:00 hrs
0203-632	6.692	278.582	Below Link Crown	5.418	0 - 12:59 hrs	0	927.812	0	165.903	0.178	0	0	0	0	0	0	0 - 00:00 hrs
0203-633	2.563	281.473	Below Link Crown	2.027	0 - 12:33 hrs	0	39.578	0	11.716	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-634	2.169	280.529	Below Link Crown	2.391	0 - 12:33 hrs	0	39.57	0	11.713	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-635	1.958	277.478	Below Link Crown	5.102	0 - 12:53 hrs	0	39.553	0	11.705	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-636	5.543	277.373	Below Link Crown	5.747	0 - 12:53 hrs	0	39.27	0	11.703	0.034	0	0	0	0	0	0	0 - 00:00 hrs
0203-637	4.593	277.363	Below Link Crown	6.737	0 - 12:53 hrs	0	962.779	0	177.401	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-638	10.938	276.658	Below Link Crown	6.342	0 - 12:51 hrs	0	975.172	0	179.23	0.178	0	0	0	0	0	0	0 - 00:00 hrs
0203-639	7.992	275.952	Below Link Crown	9.248	0 - 12:37 hrs	270.124	1,032.85	8.24	187.286	0.144	0	0	0	0	0	0	0 - 00:00 hrs
0203-640	6.536	274.616	Below Link Crown	6.864	0 - 12:37 hrs	0	1,032.73	0	187.088	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-641	7.295	273.195	Below Link Crown	6.105	0 - 12:38 hrs	0	1,032.59	0	186.941	0.213	0	0	0	0	0	0	0 - 00:00 hrs
0203-642	7.191	271.851	Below Link Crown	10.019	0 - 12:37 hrs	54.133	1,044.70	1.448	188.173	0.296	0	0	0	0	0	0	0 - 00:00 hrs
0203-643	4.791	269.501	Below Link Crown	12.499	0 - 12:37 hrs	0	1,044.57	0	187.877	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-644	6.691	266.411	Below Link Crown	15.339	0 - 12:34 hrs	0	1,097.25	0	193.963	0.139	0	0	0	0	0	0	0 - 00:00 hrs
0203-645	8.923	264.563	Below Link Crown	14.237	0 - 12:36 hrs	0	1,096.67	0	193.825	0.273	0	0	0	0	0	0	0 - 00:00 hrs
0203-646	7.356	263.566	Below Link Crown	15.734	0 - 12:36 hrs	0	1,096.16	0	193.552	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-647	3.142	280.156	Below Link Crown	1.828	0 - 12:15 hrs	0	68.224	0	1.976	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-648	2.955	280.525	Below Link Crown	2.075	0 - 12:15 hrs	43.373	43.373	1.252	1.253	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-649	2.272	280.422	Below Link Crown	3.728	0 - 12:15 hrs	26.316	26.316	0.723	0.723	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-650	4.68	287.1	Surcharged	-0.21	0 - 13:41 hrs	0	80.582	0	10.993	0.005	3.41	0.64	0	0.046	1.295	1.635	0 - 13:00 hrs
0203-651	4.26	284.06	Below Maximum Depth	2.08	0 - 14:18 hrs	0	33.321	0	10.973	0.005	8.077	0.09	2.08	0	0	0	0 - 00:00 hrs
0203-652	6.982	315.21	Surcharged	-0.456	0 - 12:45 hrs	228.507	228.507	7.883	7.887	0	4.617	3.982	0	1.326	2.278	159.945	0 - 12:15 hrs
0203-653	6.022	308.672	Below Maximum Depth	0.268	0 - 11:59 hrs	0	70.428	0	7.9	0.002	4.586	2.522	0.268	0	0	0	0 - 00:00 hrs
0203-654	2.222	300.942	Below Link Crown	1.858	0 - 12:00 hrs	0	68.974	0	7.888	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-655	7.451	301.941	Surcharged	-0.661	0 - 16:35 hrs	0	150.149	0	33.649	0.016	12.597	1.451	0	0.361	6	13.698	0 - 12:21 hrs
0203-656	3.297	297.117	Below Link Crown	2.962	0 - 12:56 hrs	0	69.03	0	7.871	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-657	6.549	292.149	Surcharged	-0.449	0 - 12:48 hrs	0	178.435	0	9.809	0.017	3.038	2.689	0	0.419	1.431	63.861	0 - 12:15 hrs
0203-658	7.293	290.353	Below Link Crown	5.197	0 - 12:52 hrs	0	110.634	0	9.781	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-659	3.98	286.21	Below Link Crown	7.88	0 - 12:57 hrs	0	110.528	0	9.791	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-660	6.24	279.52	Surcharged	-0.52	0 - 13:03 hrs	158.346	158.346	4.758	4.761	0	9.385	3.24	0	1.306	4.652	132.719	0 - 12:15 hrs
0203-661	7.301	301.741	Surcharged	-0.391	0 - 16:38 hrs	0	148.059	0	33.575	0.016	12.589	1.301	0	0.197	5.565	7.271	0 - 12:41 hrs
0203-662	5.309	302.499	Surcharged	-0.419	0 - 12:36 hrs	0	89.661	0	4.379	0.004	2.712	1.809	0	0.451	1.351	37.814	0 - 12:07 hrs
0203-663	5.642	301.412	Below Maximum Depth	0.248	0 - 12:03 hrs	0	57.91	0	4.42	0	2.702	2.142	0.248	0	0	0	0 - 00:00 hrs
0203-664	4.642	298.942	Below Maximum Depth	2.028	0 - 12:03 hrs	0	53.549	0	4.419	0	2.724	1.142	2.028	0	0	0	0 - 00:00 hrs
0203-665	6.4	298.86	Below Maximum Depth	0.01	0 - 12:41 hrs	0	147.647	0	33.559	0.013	1.856	0.4	0.01	0	0	0	0 - 00:00 hrs
0203-666	7.717	304.347	Surcharged	-0.187	0 - 12:25 hrs	66.539	66.539	2.648	2.65	0	1.926	4.717	0	0.076	0.601	20.628	0 - 12:15 hrs
0203-667	7.71	302.95	Surcharged	0	0 - 12:44 hrs	0	45.97	0	2.629	0.001	2.113	4.44	0	0	0.002	5.84	0 - 12:47 hrs
0203-668	5.777	299.217	Surcharged	-0.487	0 - 12:42 hrs	0	45.97	0	2.631	0	2.187	2.597	0	0.159	1.053	11.089	0 - 12:07 hrs
0203-669	5.144	297.824	Below Maximum Depth	0.346	0 - 12:42 hrs	0	36.768	0	2.649	0.001	2.253	2.144	0.346	0	0	0	0 - 00:00 hrs
0203-670	3.623	296.113	Surcharged	-0.113	0 - 12:42 hrs	0	36.768	0	2.65	0.001	1.581	0.123	0	0.001	0.756	0.078	0 - 12:19 hrs
0203-671	6.207	288.807	Below Maximum Depth	6.743	0 - 12:53 hrs	0	110.528	0	9.794	0.001	3.155	1.707	6.743	0	0	0	0 - 00:00 hrs
0203-672	5.274	287.624	Below Maximum Depth	6.466	0 - 12:56 hrs	0	110.528	0	9.792	0.001	2.968	0.774	6.466	0	0	0	0 - 00:00 hrs
0203-673	6.31	298.71	Below Maximum Depth	0	0 - 12:07 hrs	0	226.446	0	33.892	0.013	1.619	0.31	0	1.386	0.553	226.446	0 - 12:15 hrs
0203-674	6.64	289.24	Surcharged	0	0 - 12:15 hrs	72.937	72.937	2.447	2.448	0	0.595	2.64	0	0	0.003	0.115	0 - 12:15 hrs
0203-675	5.138	287.618	Below Maximum Depth	1.152	0 - 12:14 hrs	0	72.882	0	2.448	0.009	0.313	1.138	1.152	0	0	0	0 - 00:00 hrs
0203-676	4.869	284.049	Below Link Crown	3.481	0 - 12:57 hrs	0	797.714	0	150.838	0.121	0	0	0	0	0	0	0 - 00:00 hrs
0203-677	6.897	298.827	Below Maximum Depth	0.153	0 - 12:15 hrs	0	147.705	0	32.856	0.031	2.194	0.897	0.153	0	0	0	0 - 00:00 hrs
0203-678	6.11	300.43	Surcharged	-0.4	0 - 12:40 hrs	170.103	170.103	6.21	6.213	0	3.364	2.61	0	0.769	1.68	103.989	0 - 12:15 hrs
0203-679	7.15	298.95	Below Link Crown	1.07	0 - 12:15 hrs	0	194.426	0	44.661	0.026	0	0	0	0	0	0	0 - 00:00 hrs
0203-680	5.255	291.138	Surcharged	-0.404	0 - 12:48 hrs	127.019	127.019	4.237	4.239	0	5.389	2.255	0	0.787	2.605	92.964	0 - 12:15 hrs
0203-681	4.661	289.471	Below Maximum Depth	2.979	0 - 12:48 hrs	0	38.699	0	4.241	-0.003	5.222	1.331	2.979	0	0	0	0 - 00:00 hrs
0203-682	4.875	287.875	Below Maximum Depth	0.445	0 - 12:48 hrs	0	38.695	0	4.236	0.001	5.002	0.875	0.445	0	0	0	0 - 00:00 hrs
0203-683	4.634	287.524	Below Maximum Depth	0.726	0 - 12:48 hrs	0	38.263	0	4.234	0	4.897	0.634	0.726	0	0	0	0 - 00:00 hrs
0203-684	5.28	287.12	Below Maximum Depth	0.85	0 - 12:45 hrs	0	37.387	0	4.232	0.001	5.115	1.28	0.85	0	0	0	0 - 00:00 hrs
0203-685	6.162	286.602	Below Maximum Depth	0.909	0 - 12:45 hrs	0	35.469	0	4.233	0.002	5.265	1.662	0.909	0	0	0	0 - 00:00 hrs
0203-686	6.213	286.377	Below Maximum Depth	0.718	0 - 12:45 hrs	0	35.432	0	4.23	0.001	5.304	1.713	0.718	0	0	0	0 - 00:00 hrs
0203-687	5.979	286.143	Below Link Crown	1.342	0 - 12:48 hrs	0	35.416	0	4.229	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-688	4.6	285.671	Surcharged	-0.003	0 - 12:15 hrs	43.234	43.234	1.342	1.342	0	0.605	1.6	0	0	0.024	0.778	0 - 12:15 hrs
0203-689	2.381	283.414	Below Link Crown	2.249	0 - 12:15 hrs	0	42.453	0	1.341	0.014	0	0	0	0	0	0	0 - 00:00 hrs

Table B-3b. Existing System Analysis - Pipes/Channels
10-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-001-022	3.883	345.652	0.807	131.669	Free Surface	0 - 12:48 hrs	7.533	7.537	0.381	0.801	213.983	28.959	6.648	0	0	10.649	0	0	0
0203-002-001	3	68.703	1.061	37.53	Backwater	0 - 12:15 hrs	5.309	5.309	0.546	1	31.173	0.873	2.999	7.773	7.773	19.904	0	0	1
0203-003-051	7.47	1,836.26	1.173	147.94	Free Surface	0 - 12:11 hrs	1.17	4.095	0.081	0.979	1,688.32	28.401	31.255	0	0	2.453	0	0	0
0203-004-003	3.5	70.599	0.717	150.721	Exceeds Capacity	0 - 12:10 hrs	7.18	7.327	2.135	1	-80.123	28.4	6	6.155	6.717	6.155	6.706	6.155	0
0203-005-041	4	336.322	0.564	178.288	Backwater	0 - 12:17 hrs	6.963	6.963	0.53	1	158.035	21.026	7.413	5.445	5.868	5.445	0	5.445	0
0203-006-005	4.17	340.431	0.535	72.084	Backwater	0 - 17:37 hrs	2.877	3.043	0.212	1	268.348	11.483	7.017	5.032	5.032	5.769	0	0	0
0203-007-040	3.06	227.444	0.761	87.931	Free Surface	0 - 14:33 hrs	5.592	5.848	0.387	0.929	139.512	11.482	6.349	0	2.453	0	0	0	0
0203-008-007	3.75	289.554	0.703	87.93	Free Surface	0 - 14:33 hrs	4.451	4.451	0.304	0.932	201.623	11.481	6.178	0	1.293	0	0	0	0
0203-009-467	4.08	204.974	0.478	66.094	Backwater	0 - 18:01 hrs	3.539	3.58	0.322	1	138.88	11.464	5.474	6.078	6.38	6.078	0	4.951	0
0203-010-008	3.5	155.722	0.302	87.93	Backwater	0 - 14:33 hrs	3.865	3.865	0.565	1	67.792	11.482	6.5	3.14	3.201	3.14	0	3.14	0
0203-011-039	3.82	361.971	0.957	87.936	Free Surface	0 - 14:30 hrs	5.478	5.663	0.243	0.721	274.034	11.495	6.19	0	0	0	0	0	0
0203-012-011	3.4	179.651	0.437	87.937	Free Surface	0 - 14:30 hrs	4.316	4.316	0.489	0.922	91.714	11.504	6.5	0	1.492	0	0	0	0
0203-013-012	3	215.243	0.901	87.937	Backwater	0 - 14:30 hrs	4.51	4.51	0.409	1	127.306	11.512	6.5	3.181	3.19	3.183	0	3.179	0
0203-014-017	5.5	200.833	0.358	102.59	Backwater	0 - 13:00 hrs	4.318	4.32	0.511	1	98.243	11.483	5.489	1.653	2.501	1.669	0	1.645	0
0203-015-014	5.5	584.361	3.028	102.59	Free Surface	0 - 13:00 hrs	4.341	4.417	0.176	0.984	481.77	11.491	5.5	0	0	2.501	0	0	0
0203-016-025	3.5	86.614	0.741	62.36	Backwater	0 - 12:17 hrs	6.482	6.482	0.72	1	24.254	5.759	3.497	2.021	2.021	2.042	0	1.987	0
0203-017-018	4.035	221.445	0.332	102.386	Backwater	0 - 12:33 hrs	4.495	4.495	0.462	1	119.059	11.475	6.73	2.984	3.001	3.082	0	2.556	0
0203-018-472	4.035	202.107	0.276	94.551	Backwater	0 - 13:49 hrs	4.151	4.151	0.468	1	107.556	11.471	6.73	2.872	3.082	2.98	0	2.775	0
0203-019-020	3	95.745	2.061	39.262	Backwater	0 - 13:41 hrs	5.554	5.554	0.41	1	56.483	2.551	2.966	1.947	1.947	1.96	0	0.206	0
0203-020-021	3	3.682	0.003	40.061	Exceeds Capacity	0 - 13:38 hrs	5.668	5.668	10.88	1	-36.379	2.568	2.996	1.949	1.96	1.949	5.108	1.949	0
0203-021-023	3	55.487	0.692	40.015	Backwater	0 - 13:38 hrs	5.661	5.661	0.721	1	15.471	2.581	2.998	1.95	1.95	1.979	0	0.243	0
0203-022-525	10.92	4,890.27	0.824	162.657	Free Surface	0 - 12:15 hrs	3.651	3.674	0.033	0.243	4,727.61	30.271	25.145	0	0	0	0	0	0
0203-023-024	3	58.562	0.771	44.38	Backwater	0 - 13:00 hrs	6.278	6.278	0.758	1	14.182	2.575	2.981	1.768	1.987	1.768	0	1.166	0
0203-024-016	3	80.465	1.455	62.36	Backwater	0 - 12:17 hrs	8.822	8.822	0.775	1	18.105	5.749	2.98	1.942	1.942	1.996	0	1.78	0
0203-025-026	3.5	111.064	1.219	61.95	Backwater	0 - 12:02 hrs	6.665	7.315	0.558	1	49.115	5.766	3.473	1.62	2.042	1.62	0	1.62	0
0203-026-027	3.5	99.78	0.984	59.43	Backwater	0 - 13:00 hrs	6.177	6.751	0.596	1	40.351	5.758	3.5	1.621	1.621	1.988	0	0	0
0203-027-028	4	133.8	0.868	59.43	Backwater	0 - 13:00 hrs	4.729	5.376	0.444	1	74.371	5.751	3.951	1.729	1.776	1.729	0	1.729	0
0203-028-029	4.5	158.864	0.653	61.527	Backwater	0 - 13:45 hrs	4.013	4.411	0.387	1	97.337	5.758	4.499	1.646	1.646	1.986	0	0	0
0203-029-030	4.5	85.729	0.19	79.174	Backwater	0 - 13:19 hrs	4.978	4.978	0.924	1	6.555	5.709	4.481	1.828	1.986	1.828	0	1.533	0
0203-030-037	7.66	386.522	0.309	79.296	Free Surface	0 - 13:19 hrs	2.752	2.853	0.205	0.963	307.226	5.742	5.324	0	0	0.319	0	0	0
0203-031-022	4.5	22.455	0.013	45.566	Free Surface	0 - 12:15 hrs	4.18	4.18	2.029	0.648	-23.111	1.328	4.5	0	0	0	0.35	0	0
0203-032-033	2.5	83.636	4.158	39.381	Free Surface	0 - 12:18 hrs	10.092	10.092	0.471	0.741	44.255	1.901	2.5	0	0.859	0	0	0	0
0203-033-520	8.14	2,355.24	0.771	199.995	Free Surface	0 - 12:18 hrs	3.561	3.567	0.085	0.405	2,155.24	32.183	29.084	0	0	0	0	0	0
0203-034-009	4.08	269.154	0.824	65.564	Backwater	0 - 18:06 hrs	3.445	3.445	0.244	1	203.59	11.464	5.474	6.356	6.356	6.38	0	0	0
0203-035-010	5.391	1,184.67	3.322	87.932	Free Surface	0 - 14:32 hrs	4.653	5.33	0.074	0.598	1,096.73	11.483	6.436	0	0	0	0	0	0
0203-036-035	5.33	290.679	2.466	87.937	Free Surface	0 - 14:32 hrs	5.679	5.95	0.303	0.515	202.742	11.487	6.136	0	0	0	0	0	0
0203-037-038	3.923	268.973	0.973	156.951	Backwater	0 - 12:15 hrs	8.769	8.769	0.584	1	112.022	11.551	5.364	2.462	2.462	2.503	0	1.839	0
0203-038-015	5	322.127	1.53	102.597	Backwater	0 - 13:00 hrs	5.225	5.817	0.318	1	219.53	11.492	4.998	1.742	2.425	1.742	0	1.742	0
0203-039-036	3.883	682.362	3.144	87.936	Free Surface	0 - 14:32 hrs	4.979	4.979	0.129	0.789	594.426	11.49	6.442	0	0	0	0	0	0
0203-040-034	3.98	279.318	0.963	87.894	Free Surface	0 - 14:33 hrs	6.14	6.191	0.315	0.83	191.423	11.494	5.772	0	0	6.362	0	0	0
0203-041-042	4.06	499.996	0.664	113.104	Backwater	0 - 12:02 hrs	3.594	4.425	0.226	1	386.892	21.03	10.421	5.368	5.402	5.519	0	0.054	0
0203-042-043	4.16	563.61	1.528	111.455	Backwater	0 - 12:03 hrs	4.395	4.677	0.198	1	452.155	21.029	6.861	5.49	5.49	6.416	0	0	0
0203-043-044	8.63	2,960.15	2.046	108.502	Free Surface	0 - 12:03 hrs	1.375	1.77	0.037	0.793	2,851.64	21.026	35.201	0	0	0	0	0	0
0203-044-045	8.63	367.618	0.032	103.283	Free Surface	0 - 12:02 hrs	1.282	1.701	0.281	0.813	264.335	21.02	35.938	0	0	0	0	0	0
0203-045-046	10.92	3,308.14	0.377	101.602	Free Surface	0 - 15:45 hrs	0.582	0.94	0.031	0.674	3,206.54	21.002	48.532	0	0	0	0	0	0
0203-046-047	16.9	4,107.02	0.223	102.439	Free Surface	0 - 15:41 hrs	0.971	1.438	0.025	0.435	4,004.58	20.96	31.096	0	0	0	0	0	0
0203-047-048	8.14	1,396.26	0.271	103.355	Free Surface	0 - 15:18 hrs	0.603	1.133	0.074	0.892	1,292.91	20.944	50.126	0	0	0	0	0	0
0203-048-049	7.17	1,567.97	0.556	107.927	Backwater	0 - 14:53 hrs	0.547	0.697	0.069	1	1,460.04	23.524	40.93	1.762	1.762	3.159	0	0	0
0203-049-050	8.06	304.652	0.023	108.326	Backwater	0 - 14:51 hrs	0.637	0.824	0.356	1	196.326	23.509	38.362	0.29	0.29	0.379	0	0	0
0203-050-004	8.06	279.054	0.019	108.829	Backwater	0 - 14:51 hrs	0.64	0.844	0.39	1	170.225	23.491	38.362	0.379	0.379	0.486	0	0	0
0203-051-530	9.53	1,383.85	0.423	136.41	Free Surface	0 - 12:12 hrs	1.027	1.383	0.099	0.897	1,247.44	28.379	26.645	0	0	0	0	0	0
0203-052-053	3	63.59	0.909	24.965	Backwater	0 - 12:15 hrs	3.532	3.532	0.393	1	38.624	0.727	2.951	0.728	0.728	0.731	0	0.021	1
0203-053-054	3	48.022	0.518	24.966	Backwater	0 - 12:15 hrs	3.532	3.625	0.52	1	23.056	0.726	2.835	0.73	0.732	0.732	0	0.339	1
0203-054-055	3	84.505	1.605	24.977	Backwater	0 - 12:15 hrs	3.534	3.534	0.296	1	59.528	0.727	2.911	0.732	0.732	0.791	0	0.001	0
0203-055-056	3.5	168.299	2.798	44.338	Backwater	0 - 12:15 hrs	4.608	5.218	0.263	1	123.96	2.491	3.499	0.776	0.776	0.802	0	0.001	0
0203-056-057	3.5	83.517	0.689	44.337	Backwater	0 - 12:15 hrs	4.608	4.608	0.531	1	39.18	2.496	3.5	0.808	0.81	0.833	0	0.729	0
0203-057-058	3	74.237	1.239	44.414	Backwater	0 - 12:48 hrs	6.283	6.283	0.598	1	29.823	2.607	3	0.875	0.877	0.886	0	0.857	0
0203-058-238	3.5	90.882	0.816	50.062	Backwater	0 - 12:03 hrs	5.203	5.203	0.551	1	40.82	2.906	3.499	0.835	0.835	1.071	0	0.019	0
0203-059-058	3	54.649	0.671	9.208	Backwater	0 - 12:03 hrs	1.303	3.117	0.169	1	45.44	0.296	2.999	0.786	0.786	0.836	0	0	2
0203-060-061	3.5	142.302	2.001	35.731	Free Surface	0 - 12:42 hrs	6.168	6.897	0.251	0.845	106.57	3.774	3.497	0	0	0	0	0	0
0203-061-238	3.5	172.123	2.927	37.403	Free Surface	0 - 12:51 hrs	5.131	6.368	0.217	0.981	134.719	3.772	3.498	0	0	1.071	0	0	0
0203-062-063	5	162.88	0.391	101.651	Backwater	0 - 12:06 hrs	5.192	5.192	0.624	1	61.229	7.775	4.997	0.71	0.753	0.71	0	0.71	0
0203-063-064	5	130.257	0.25	100.038	Backwater	0 - 12:07 hrs	5.154	5.434	0.768	1	30.22	7.764	4.997	0.38	0.755	0.38	0	0.38	0
0203-064-065	5	183.236	0.495	99.709	Backwater	0 - 12:15 hrs	5.078	5.078	0.544	1	83.527	7.76	4.984	0.485	0.485	0.859	0	0	0
0203-065-066	5	159.984	0.377	99.709	Backwater	0 - 12:15 hrs	5.078	5.078	0.623	1	60.275	7.754	4.997	0.315	0.859	0.315	0	0.315	0
0203-066-067	5	161.359	0.384	99.716	Free Surface	0 - 12:15 hrs	5.176	5.18	0.618	0.951	61.644	7.754	4.997	0	0.315	0	0	0	0
0203-067-239	5	206.753	0.63	99.447	Free Surface	0 - 12:15 hrs	5.434	5.622	0.481	0.886	107.306	7.754	5	0	0	0	0	0	0
0203-068-215	3.066	1,149.61	20.197	19.805	Free Surface	0 - 12:15 hrs	6.071	6.073	0.017	0.254	1,129.81	0.561	8.327	0	0	0	0	0	0
0203-069-068	2	25.455	1.266	19.8	Free Surface	0 - 12:15 hrs	4.85	4.85	0.389	0.619	5.656	0.561	1.997	0	0	0	0	0	0
0203-070-325	12.854	4,967.02	0.992	208.089	Free Surface	0 - 12:21 hrs	2.472	2.51	0.042	0.342	4,758.93	22.681	24.316	0	0	0	0	0	0
0203-071-060	3.5	187.895	3.488	35.78	Free Surface	0 - 12:51 hrs	5.328	5.618	0.19	0.68	152.115	3.775	3.498	0	0	0	0	0	0
0203-072-228	4.5	186.529	0.9	11.133	Free Surface	0 - 12:15 hrs	1.14	2.871	0.06	0.67	175.396	0.44	4.494	0	0	0	0	0	0
0203-073-074	4.5	4.183	0	18.69	Free Surface	0 - 12:07 hrs	1.262	2.02	4.468	0.909	-14.507	0.419	4.487	0	0	0	0.635	0	0
0203-074-075	4.5	221.385	1.267	24.472	Free Surface	0 - 12:06 hrs	1.697	3.523	0.111	0.947	196.913	0.413	4.448	0	0	0.46	0	0	0
0203-075-076	4.5	325.803	2.745	26.745	Backwater	0 - 12:06 hrs	1.682	3.454	0.082	1	299.057	0.442	4.395	1.317	1.317	1.378	0	0.001	0
0203-076-078	3.5	68.953	0.47	45.947	Backwater	0 - 12:27 hrs	4.776	4.776	0.666	1	23.005	4.925	3.499	1.535	1.575	1.535	0	1.535	0
0203-077-073	4.5	160.442	0.666	15.999	Free Surface	0 - 12:07 hrs	1.171	2.442	0.1	0.863	144.443	0.433	4.398	0	0	0	0	0	0
0203-078-079	3.5	93.392	0.862	45.947	Backwater	0 - 12:29 hrs	4.776	4.776	0.492	1	47.445	4.927	3.5	1.535	1.535	1.603	0	0	0
0203-079-080	3.5	54.172	0.29	45.947	Backwater	0 - 12:29 hrs	4.776	4.776	0.848	1	8.225	4.928	3.5	1.546	1.603	1.546	0	1.546	0
0203-080-081	3.5	87.521	0.757	45.947	Backwater	0 - 12:29 hrs	4.776	4.776	0.525	1	41.574	4.931	3.5	1.546	1.546	1.657	0	0	0
0203-081-082	3.5	69.53	0.478	45.947	Backwater	0 - 12:29 hrs	4.776	4.776	0.661	1	23.583	4.931	3.5	1.567	1.66	1.567	0	1.567	0
0203-082-083	3.5	6.926	0.005	45.947	Exceeds Capacity	0 - 12:29 hrs	4.776	4.776	6.634	1	-39.021	4.931	3.5	1.352	1.573	1.352	6.71	1.352	0
0203-083-084	4	131.346	0.836	45.948	Free Surface	0 - 12:27 hrs	3.671	4.021	0.35	0.983	85.398	4.93	4	0	0	1.351	0	0	0
0203-084-256	4	101.062	0.495	45.948	Backwater	0 - 12:29 hrs	3.656	3.656	0.455	1	55.114	4.931	4	1.389	1.391	1.394	0	1.377	0
0203-085-086	4	70.749	0.243	45.95	Free Surface	0 - 12:27 hrs	4.386	4.406	0.649	0.809	24.799	4.929	4	0	0	0	0	0	0

Table B-3b. Existing System Analysis - Pipes/Channels
10-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-086-087	4	154.972	1.164	46.129	Free Surface	0 - 12:21 hrs	4.463	4.725	0.298	0.823	108.843	4.928	4	0	0	0	0	0	0
0203-087-092	4.5	84.096	0.183	50.32	Free Surface	0 - 12:15 hrs	3.923	3.927	0.598	0.752	33.776	4.962	4.5	0	0	0	0	0	0
0203-088-089	3	82.098	1.515	33.605	Free Surface	0 - 12:15 hrs	5.97	6.303	0.409	0.743	48.493	1.238	2.995	0	0	0	0	0	0
0203-089-090	3	60.036	0.81	33.385	Free Surface	0 - 12:15 hrs	5.075	5.076	0.556	0.879	26.651	1.239	2.994	0	0	0	0	0	0
0203-090-091	3	65.069	0.952	33.183	Free Surface	0 - 12:15 hrs	5.739	5.739	0.51	0.762	31.886	1.239	2.999	0	0	0	0	0	0
0203-091-087	3	88.207	1.749	7.144	Free Surface	0 - 13:25 hrs	1.411	2.865	0.081	0.869	81.063	0.035	3	0	0	0.171	0	0	0
0203-091-093	3	49.976	0.561	28.032	Free Surface	0 - 12:15 hrs	4.845	5.087	0.561	0.763	21.944	1.204	3	0	0	0	0	0	0
0203-092-094	5	130.84	0.252	50.21	Free Surface	0 - 12:15 hrs	4.874	4.954	0.384	0.52	80.63	4.953	4.999	0	0	0	0	0	0
0203-093-094	3	32.421	0.236	27.849	Free Surface	0 - 12:15 hrs	4.186	4.186	0.859	0.895	4.572	1.205	3	0	0.113	0	0	0	0
0203-094-338	2.97	136.306	0.132	76.551	Free Surface	0 - 12:17 hrs	1.668	1.776	0.562	0.79	59.754	6.156	28.362	0	0	0	0	0	0
0203-095-096	3.5	90.975	0.818	53.169	Backwater	0 - 11:56 hrs	5.526	5.526	0.584	1	37.806	8.847	3.489	4.108	4.114	4.11	0	4.107	2
0203-096-097	3.5	101.427	1.016	53.069	Backwater	0 - 11:56 hrs	5.516	5.516	0.523	1	48.358	8.857	3.498	4.112	4.112	4.136	0	4.106	2
0203-097-098	4	103.324	0.517	53.18	Backwater	0 - 11:56 hrs	4.261	4.263	0.515	1	50.145	8.862	4	4.073	4.099	4.073	0	4.073	0
0203-098-099	4	97.211	0.458	52.953	Free Surface	0 - 13:18 hrs	4.228	4.326	0.545	0.986	44.258	8.866	3.988	0	4.086	0	0	0	0
0203-099-100	4	100.312	0.488	52.953	Free Surface	0 - 13:18 hrs	4.23	4.262	0.528	0.985	47.359	8.868	3.988	0	0	0	0	0	0
0203-100-101	4	83.923	0.341	52.953	Free Surface	0 - 13:19 hrs	4.345	4.345	0.631	0.931	30.97	8.868	3.999	0	0	0	0	0	0
0203-101-102	5	90.752	1.15	52.953	Free Surface	0 - 13:19 hrs	4.045	4.082	0.583	0.633	37.799	8.866	4.998	0	0	0	0	0	0
0203-102-103	5	185.211	0.506	52.953	Free Surface	0 - 13:19 hrs	4.341	4.468	0.286	0.596	132.258	8.865	4.964	0	0	0	0	0	0
0203-103-104	5	159.475	0.375	52.952	Free Surface	0 - 13:21 hrs	4.413	4.506	0.332	0.588	106.522	8.862	4.988	0	0	0	0	0	0
0203-104-341	5.5	207.433	0.382	52.948	Free Surface	0 - 13:22 hrs	4.216	4.326	0.255	0.532	154.485	8.854	5.496	0	0	0	0	0	0
0203-105-106	2	30.06	1.766	17.569	Backwater	0 - 13:38 hrs	5.592	5.609	0.584	1	12.492	1.948	1.998	2.031	2.692	2.031	0	2.031	0
0203-106-336	2	28.691	1.609	17.57	Backwater	0 - 13:38 hrs	5.593	5.685	0.612	1	11.122	1.947	1.954	1.855	2.031	1.889	0	0.478	0
0203-107-108	2	28.341	1.57	17.584	Backwater	0 - 13:38 hrs	5.707	6.338	0.62	1	10.757	1.938	1.986	1.449	2.6	1.449	0	0.45	1
0203-108-353	2.5	51.358	1.568	17.633	Backwater	0 - 13:38 hrs	3.926	4.179	0.343	1	33.725	1.936	2.5	1.271	1.271	5.963	0	0	0
0203-109-001	13.779	15,450.54	0.802	335.322	Free Surface	0 - 13:00 hrs	3.514	3.514	0.022	0.142	15,115.21	40.527	59.717	0	0	0	0	0	0
0203-110-109	16.67	43,091.18	5.225	335.33	Free Surface	0 - 13:00 hrs	5.972	5.972	0.008	0.153	42,755.85	40.53	37.952	0	0	0	0	0	0
0203-111-110	16.67	32,295.05	2.935	335.337	Free Surface	0 - 13:00 hrs	5.306	5.306	0.01	0.164	31,959.71	40.534	38.931	0	0	0	0	0	0
0203-112-218	7.321	243.809	0.423	240.846	Free Surface	0 - 13:30 hrs	5.164	5.44	0.988	0.9	2.962	32.567	8.103	0	2.14	0	0	0	0
0203-113-357	8.464	406.283	0.082	319.229	Backwater	0 - 12:21 hrs	5.141	5.141	0.786	1	87.054	29.829	8.717	1.28	1.323	1.28	0	1.28	0
0203-114-355	6.954	1,349.50	0.794	268.955	Free Surface	0 - 12:22 hrs	5.265	5.653	0.199	0.802	1,080.54	26.319	10.037	0	0	0	0	0	0
0203-115-353	7.03	1,566.16	1.225	253.636	Free Surface	0 - 12:19 hrs	4.494	4.494	0.162	0.924	1,312.52	24.404	9.591	0	0	0.461	0	0	0
0203-116-115	9.15	3,747.00	0.711	255.103	Free Surface	0 - 12:17 hrs	3.158	3.627	0.068	0.689	3,491.90	24.433	19.147	0	0	0	0	0	0
0203-117-116	6.945	921.659	0.399	260.205	Free Surface	0 - 12:15 hrs	5.664	5.965	0.282	0.749	661.455	24.439	9.605	0	0	0	0	0	0
0203-118-372	8.563	803.823	0.95	198.629	Free Surface	0 - 14:56 hrs	2.587	4.52	0.247	0.891	605.194	46.405	17.663	0	0	0.565	0	0	0
0203-119-366	7.336	447.07	0.386	117.919	Free Surface	0 - 14:19 hrs	1.922	3.673	0.264	0.88	329.151	24.11	21.976	0	0	2.211	0	0	0
0203-120-003	22.5	12,809.94	0.912	261.627	Free Surface	0 - 12:27 hrs	5.575	5.575	0.02	0.245	12,548.31	12.157	17.027	0	0	0	0	0	0
0203-121-120	17.772	22,770.23	2.632	261.754	Free Surface	0 - 12:26 hrs	2.651	2.68	0.011	0.283	22,508.48	12.158	32.924	0	0	0	0	0	0
0203-122-392	17.772	3,239.21	0.053	262.169	Free Surface	0 - 12:26 hrs	3.032	3.036	0.081	0.262	2,977.04	12.161	31.29	0	0	0	0	0	0
0203-123-122	20	2,602.91	0.05	262.325	Free Surface	0 - 12:26 hrs	2.869	2.869	0.101	0.254	2,340.58	12.176	18	0	0	0	0	0	0
0203-124-391	6.887	1,318.52	1.785	262.642	Free Surface	0 - 12:25 hrs	3.176	3.213	0.199	0.838	1,055.88	12.19	26.453	0	0	0	0	0	0
0203-125-124	6.724	2,774.56	11.136	91.51	Free Surface	0 - 12:25 hrs	2.732	2.733	0.033	0.563	2,683.05	2.305	17.663	0	0	0	0	0	0
0203-126-125	6.174	1,373.44	3.659	91.517	Free Surface	0 - 12:25 hrs	5.663	5.663	0.067	0.411	1,281.92	2.306	12.708	0	0	0	0	0	0
0203-127-126	4.532	720.569	2.378	91.586	Free Surface	0 - 12:25 hrs	3.545	3.547	0.127	0.583	628.983	2.305	19.536	0	0	0	0	0	0
0203-128-127	2.699	140.425	0.406	91.89	Free Surface	0 - 12:23 hrs	2.752	2.752	0.654	0.843	48.534	2.308	27.314	0	0	0	0	0	0
0203-128-129	4.861	7.073	0	49.282	Free Surface	0 - 12:10 hrs	1.017	1.174	6.967	0.945	-42.209	1.861	23.825	0	0	0	2.296	0	0
0203-129-342	4.861	498.481	0.673	30.999	Free Surface	0 - 15:15 hrs	0.803	1.865	0.062	0.976	467.482	3.334	24.715	0	0	2.504	0	0	0
0203-130-124	7.936	627.086	0.675	172.554	Free Surface	0 - 12:22 hrs	3.462	4.043	0.275	0.698	454.532	9.887	15.709	0	0	0	0	0	0
0203-131-130	7.259	399.334	0.298	173.558	Free Surface	0 - 12:19 hrs	3.239	3.375	0.435	0.77	225.776	9.89	19.386	0	0	0	0	0	0
0203-132-131	8.018	540.547	0.563	175.028	Free Surface	0 - 12:18 hrs	3.87	3.905	0.324	0.688	365.52	9.898	14.943	0	0	0	0	0	0
0203-133-132	6.815	448.438	0.712	175.29	Free Surface	0 - 12:17 hrs	4.188	4.211	0.391	0.772	273.149	9.904	15.892	0	0	0	0	0	0
0203-134-328	4.533	193.541	0.93	124.375	Backwater	0 - 12:52 hrs	3.667	3.667	0.643	1	69.166	6.175	13.642	0.723	0.723	0.788	0	0	0
0203-135-005	9.15	3,341.27	2.172	67.835	Free Surface	0 - 13:14 hrs	9.059	10.572	0.02	0.205	3,273.44	3.655	10.513	0	0	0	0	0	1
0203-136-437	5.947	17.321	0	61.407	Free Surface	0 - 12:36 hrs	2.304	2.309	3.545	0.423	-44.086	3.659	18.565	0	0	0	1.811	0	0
0203-137-136	6.797	23.695	0	61.96	Free Surface	0 - 12:32 hrs	1.176	1.185	2.615	0.489	-38.265	3.677	28.643	0	0	0	1.349	0	0
0203-138-137	6.268	600.479	0.087	69.37	Free Surface	0 - 12:22 hrs	1.026	1.123	0.116	0.524	531.109	3.712	41.672	0	0	0	0	0	0
0203-139-432	4.941	1,402.11	2.904	18.573	Free Surface	0 - 12:25 hrs	0.265	1.239	0.013	0.809	1,383.54	0.648	27.858	0	0	0	0	0	0
0203-140-139	9.026	1,769.19	0.482	17.36	Free Surface	0 - 12:25 hrs	0.393	1.796	0.01	0.392	1,751.83	0.648	25.546	0	0	0	0	0	0
0203-141-140	8.612	1,878.86	0.563	15.666	Free Surface	0 - 12:23 hrs	0.394	1.156	0.008	0.361	1,863.19	0.649	24.59	0	0	0	0	0	0
0203-142-141	6.92	832.122	0.288	22.227	Free Surface	0 - 12:14 hrs	1.18	1.585	0.027	0.308	809.896	0.654	18.134	0	0	0	0	0	0
0203-143-004	17.323	21,642.13	0.992	271.725	Free Surface	0 - 13:37 hrs	3.392	3.392	0.013	0.083	21,370.40	50.152	63.821	0	0	0	0	0	0
0203-144-143	19	992.533	0	271.729	Free Surface	0 - 13:37 hrs	2.361	2.361	0.274	0.093	720.805	50.196	65	0	0	0	0	0	0
0203-145-144	18.74	4,051.12	0.094	271.737	Free Surface	0 - 13:36 hrs	4.799	4.799	0.067	0.229	3,779.38	50.246	26.437	0	0	0	0	0	0
0203-146-145	10.21	90.41	0.001	271.734	Free Surface	0 - 13:34 hrs	1.999	1.999	3.006	0.661	-181.325	50.309	37.633	0	0	0	6.36	0	0
0203-147-146	9.691	2,334.74	0.658	271.735	Free Surface	0 - 13:33 hrs	1.954	1.954	0.116	0.708	2,063.00	50.341	33.224	0	0	0	0	0	0
0203-148-147	15.381	252.174	0.002	271.736	Free Surface	0 - 13:33 hrs	2.836	2.836	1.078	0.459	-19.563	50.357	25.132	0	0	0	3.933	0	0
0203-149-148	14.554	2,720.41	0.165	271.738	Free Surface	0 - 13:33 hrs	1.956	1.956	0.1	0.504	2,448.67	50.374	33.831	0	0	0	0	0	0
0203-150-149	7.733	78.841	0.002	271.741	Free Surface	0 - 13:33 hrs	1.594	1.594	3.447	0.962	-192.9	50.392	45.024	0	0	0	6.72	0	0
0203-151-150	8.225	2,435.01	1.458	271.746	Free Surface	0 - 13:33 hrs	1.668	1.668	0.112	0.873	2,163.26	50.409	44.182	0	0	0	0	0	0
0203-152-151	16.837	2,557.95	0.144	271.765	Free Surface	0 - 13:32 hrs	2.731	2.731	0.106	0.416	2,286.18	50.44	27.917	0	0	0	0	0	0
0203-153-152	8.005	344.331	0.082	271.788	Free Surface	0 - 13:30 hrs	2.417	2.418	0.789	0.91	72.544	50.467	30.711	0	0	0	0	0	0
0203-154-153	7.008	33.026	0.001	271.805	Exceeds Capacity	0 - 13:30 hrs	2.118	2.118	8.23	1	-238.779	50.485	35.833	4.22	4.387	4.22	13.087	4.22	0
0203-155-154	10.079	70.597	0.001	271.84	Free Surface	0 - 13:27 hrs	1.799	1.862	3.851	0.775	-201.243	50.511	38.683	0	0	0	7.04	0	0
0203-156-155	9.089	2,711.45	2.503	271.881	Free Surface	0 - 13:26 hrs	2.302	2.305	0.1	0.841	2,439.57	50.536	24.104	0	0	0	0	0	0
0203-157-156	11.338	119.826	0.002	271.901	Free Surface	0 - 13:26 hrs	2.554	2.653	2.269	0.665	-152.076	50.546	23.715	0	0	0	5.574	0	0
0203-158-157	19.416	423.315	0.002	271.918	Free Surface	0 - 13:26 hrs	2.141	2.16	0.642	0.404	151.397	50.554	26.657	0	0	0	0	0	0
0203-159-158	9.951	100.399	0.001	271.979	Free Surface	0 - 13:25 hrs	1.212	1.316	2.709	0.806	-171.58	50.579	53.05	0	0	0	6.032	0	0
0203-160-159	7.221	2,619.35	2.339	272.083	Free Surface	0 - 13:23 hrs	1.468	1.526	0.104	0.989	2,347.27	50.609	48.174	0	0	4.433	0	0	0
0203-161-160	7.818	3,015.45	4.818	272.15	Free Surface	0 - 13:22 hrs	3.25	3.727	0.09	0.647	2,743.30	50.629	19.049	0	0	0	0	0	0
0203-162-161	7.818	1,242.62	0.818	272.286	Free Surface	0 - 13:22 hrs	5.246	5.534	0.219	0.428	970.333	50.65	18.159	0	0	0	0	0	0
0203-163-428	7.946	723.967	0.687	253.378	Free Surface	0 - 15:07 hrs	4.188	4.201	0.35	0.659	470.59	47.18	13.466	0	0	0	0	0	0
0203-164-163	8.07	714.158	0.628	253.365	Free Surface	0 - 15:06 hrs	4.727	4.728	0.355	0.583	460.793	47.222	13.381	0	0	0	0	0	0
0203-165-364	8.07	2,155.64	5.723	253.366	Free Surface	0 - 15:04 hrs	4.291	4.291	0.118	0.633	1,902.28	47.243	13.532	0	0	0	0	0	0
0203-166-362	7.943	1,142.03	1.468	253.366	Free Surface	0 - 15:03 hrs	3.619	3.619	0.222	0.693	888.66	47.305	14.193	0	0	0	0	0	0
0203-167-166	8.144	114.204	0.071	253.366	Free Surface	0 - 15:03 hrs	4.444	4.444	2.219	0.954	-139.162	47.343	7.866	0	4.14	0	5.394	0	0
0203-168-167	8.144	444.795	1.081	253.371	Backwater	0 - 15:00 hrs	4.226	4.226	0.57	1	191.424	47.369	7.867	3.563	3.563	4.14	0	0	0

Table B-3b. Existing System Analysis - Pipes/Channels
10-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-169-168	4.473	1,222.99	4.319	253.396	Backwater	0 - 14:53 hrs	3.29	3.29	0.207	1	969.595	47.39	18.555	4.043	4.043	5.756	0	0	0
0203-170-169	4.473	203.446	0.12	198.576	Backwater	0 - 13:55 hrs	2.578	3.423	0.976	1	4.87	34.968	18.555	4.043	4.125	4.043	0	4.043	0
0203-171-410	6.907	1,099.60	0.666	198.632	Free Surface	0 - 13:55 hrs	1.583	1.771	0.181	0.906	900.972	34.995	21.114	0	0	0	0	0	0
0203-172-171	6.907	848.777	0.397	198.67	Free Surface	0 - 13:53 hrs	1.67	1.946	0.234	0.861	650.107	35.019	21.054	0	0	0	0	0	0
0203-173-403	4.414	349.406	0.283	203.571	Backwater	0 - 12:07 hrs	2.574	2.578	0.583	1	145.835	35.12	21.335	4.067	4.095	4.072	0	3.62	0
0203-174-169	4.533	21.186	0.003	102.422	Exceeds Capacity	0 - 16:30 hrs	1.911	2.745	4.834	1	-81.236	12.441	14.018	3.988	4.054	3.988	6.165	3.988	0
0203-175-426	4.526	264.171	0.399	95.8	Backwater	0 - 16:42 hrs	1.987	2.094	0.363	1	168.371	12.442	13.596	1.27	1.27	3.707	0	0	0
0203-176-175	4.505	162.954	0.141	95.25	Backwater	0 - 16:43 hrs	1.962	2.05	0.585	1	67.704	12.44	14.298	1.497	1.497	1.64	0	0	0
0203-177-176	4.26	265.263	0.478	94.699	Backwater	0 - 16:43 hrs	1.861	1.871	0.357	1	170.564	12.452	14.066	3.344	3.344	4.866	0	0	0
0203-178-177	4.484	537.161	2.016	130.707	Free Surface	0 - 12:33 hrs	2.778	2.784	0.243	0.95	406.454	12.468	13.3	0	0	4.836	0	0	0
0203-179-178	4.423	225.92	0.285	131.998	Free Surface	0 - 12:33 hrs	2.819	2.838	0.584	0.822	93.923	12.481	13.88	0	0	0	0	0	0
0203-180-179	11.458	179.059	0.002	132.541	Free Surface	0 - 12:33 hrs	2.138	2.159	0.74	0.32	46.519	12.488	21.774	0	0	0	0	0	0
0203-181-424	7.728	54.713	0.001	135.935	Free Surface	0 - 12:29 hrs	2.381	2.588	2.485	0.436	-81.223	12.497	22.187	0	0	0	2.749	0	0
0203-182-181	8.53	826.671	0.097	137.261	Free Surface	0 - 12:27 hrs	2.141	2.294	0.166	0.434	689.41	12.503	28.76	0	0	0	0	0	0
0203-183-182	8.571	1,197.10	0.206	138.494	Free Surface	0 - 12:26 hrs	1.772	1.816	0.116	0.471	1,058.61	12.51	27.835	0	0	0	0	0	0
0203-184-183	7.568	1,253.86	3.236	139.205	Free Surface	0 - 12:26 hrs	4.414	4.491	0.111	0.566	1,114.66	12.516	11.721	0	0	0	0	0	0
0203-185-184	7.408	864.065	1.475	18.532	Free Surface	0 - 12:41 hrs	0.614	1.208	0.021	0.571	845.533	1.209	12.881	0	0	0	0	0	0
0203-186-185	6.59	1,544.80	3.044	17.967	Free Surface	0 - 12:41 hrs	0.587	1.008	0.012	0.468	1,526.83	1.209	15.237	0	0	0	0	0	0
0203-187-246	7.439	443.039	0.112	125.984	Free Surface	0 - 12:22 hrs	2.572	3	0.284	0.571	317.054	11.317	23.554	0	0	0	0	0	0
0203-188-380	9.535	234.929	0.033	131.46	Free Surface	0 - 12:18 hrs	2.345	2.372	0.56	0.629	103.469	11.338	18.813	0	0	0	0	0	0
0203-189-188	10.121	1,440.98	1.382	134.65	Free Surface	0 - 12:17 hrs	2.648	2.692	0.093	0.626	1,306.33	11.346	16.238	0	0	0	0	0	0
0203-190-189	9.496	1,159.96	1.946	24.542	Free Surface	0 - 12:22 hrs	0.791	2.673	0.021	0.574	1,135.42	1.254	11.818	0	0	0	0	0	0
0203-191-190	11.035	1,486.19	4.607	23.768	Free Surface	0 - 12:18 hrs	2.214	3.558	0.016	0.298	1,462.42	1.254	6.518	0	0	0	0	0	0
0203-192-419	6.08	388.922	0.56	25.277	Free Surface	0 - 12:14 hrs	1.525	1.89	0.065	0.571	363.645	1.209	11.586	0	0	0	0	0	0
0203-193-192	4.437	919.169	2.701	14.353	Free Surface	0 - 12:17 hrs	2.117	3.157	0.016	0.258	904.816	0.681	14.15	0	0	0	0	0	0
0203-194-193	3.615	209.313	0.967	14.503	Free Surface	0 - 12:15 hrs	2.635	2.635	0.069	0.214	194.81	0.682	8.072	0	0	0	0	0	0
0203-195-402	4.497	425.77	0.454	381.398	Backwater	0 - 12:22 hrs	4.686	4.686	0.896	1	44.372	35.227	18.833	1.028	1.028	4.178	0	0.403	0
0203-196-401	3.568	232.948	0.404	123.588	Free Surface	0 - 12:15 hrs	3.148	3.293	0.531	0.802	109.36	5.681	18.733	0	0	0	0	0	0
0203-197-196	3.568	505.968	1.907	81.271	Free Surface	0 - 12:18 hrs	3.33	3.419	0.161	0.555	424.697	4.545	16.205	0	0	0	0	0	0
0203-198-330	2.169	48.278	0.68	48.279	Exceeds Capacity	0 - 12:14 hrs	3.419	3.419	1	1	-0.002	2.842	10.228	0.272	0.336	0.279	0.001	0.265	0
0203-199-197	5.362	628.759	0.855	81.371	Free Surface	0 - 12:17 hrs	4.259	4.259	0.129	0.352	547.388	4.544	15.074	0	0	0	0	0	0
0203-200-199	6.864	525.155	0.561	14.567	Free Surface	0 - 12:15 hrs	0.754	0.754	0.028	0.366	510.587	0.479	10.171	0	0	0	0	0	0
0203-201-202	14.057	1,337.49	0.537	19.87	Free Surface	0 - 12:14 hrs	2.202	2.822	0.015	0.282	1,317.62	2.297	4.907	0	0	0	0	0	0
0203-202-204	4.551	38.21	0.033	22.003	Free Surface	0 - 12:18 hrs	0.827	1.39	0.576	0.916	16.207	2.297	10.428	0	0	0	0	0	0
0203-203-204	4.685	59.632	0.106	40.607	Free Surface	0 - 12:19 hrs	2.41	2.791	0.681	0.756	19.024	2.616	9.645	0	0	0	0	0	0
0203-204-205	4.769	902.174	3.745	124.844	Free Surface	0 - 12:15 hrs	2.273	2.539	0.138	0.889	777.33	7.969	22.507	0	0	0	0	0	0
0203-205-394	4.769	274.159	0.346	123.919	Free Surface	0 - 12:15 hrs	2.258	2.655	0.452	0.886	150.24	7.967	24.063	0	0	0	0	0	1
0203-206-207	5.829	866.55	1.228	123.366	Free Surface	0 - 12:15 hrs	2.124	2.656	0.142	0.788	743.185	7.977	34.341	0	0	11.423	0	0	0
0203-207-209	8.65	1,034.29	0.319	117.679	Free Surface	0 - 12:17 hrs	0.87	1.047	0.114	0.952	916.606	7.789	38.617	0	0	2.837	0	0	0
0203-208-212	1.777	31.788	0.523	24.055	Backwater	0 - 15:33 hrs	2.029	2.029	0.757	1	7.734	8.336	14.184	0.678	0.678	5.814	0	0	0
0203-209-208	1.163	9.217	1.556	24.055	Exceeds Capacity	0 - 15:32 hrs	8.281	8.281	2.61	1	-14.837	8.344	4.297	12.131	13.133	12.131	12.515	12.131	0
0203-210-209	5.187	692.46	5.419	93.017	Backwater	0 - 12:17 hrs	2.157	2.681	0.134	1	599.443	0.617	14.214	11.436	11.436	11.855	0	0	0
0203-211-210	3.936	59.684	0.584	22.341	Backwater	0 - 12:15 hrs	1.496	1.933	0.374	1	37.343	0.556	6.01	11.747	11.747	11.785	0	0	1
0203-212-213	1.777	27.411	0.389	24.054	Backwater	0 - 15:33 hrs	1.897	1.909	0.878	1	3.356	8.324	14.184	2.195	5.814	2.259	0	0.572	0
0203-213-217	5.579	277.504	0.202	38.237	Free Surface	0 - 12:17 hrs	1.414	2.089	0.138	0.49	239.267	8.861	14.146	0	0	0	0	0	0
0203-214-213	6.004	529.609	0.526	19.117	Free Surface	0 - 12:15 hrs	0.833	0.987	0.036	0.431	510.492	0.557	13.893	0	0	0	0	0	0
0203-215-214	6.004	1,441.56	3.896	19.765	Free Surface	0 - 12:15 hrs	1.613	1.687	0.014	0.282	1,421.79	0.562	10.859	0	0	0	0	0	0
0203-216-069	3.066	755.983	8.734	20.26	Free Surface	0 - 12:15 hrs	2.301	3.067	0.027	0.418	735.723	0.562	13.753	0	0	0	0	0	0
0203-217-397	4	240.254	2.091	37.799	Free Surface	0 - 12:18 hrs	1.328	1.855	0.157	0.791	202.455	8.853	9	0	0	0	0	0	0
0203-218-360	8	616.736	0.931	335.347	Free Surface	0 - 12:59 hrs	6.882	6.882	0.544	0.508	281.388	40.554	12	0	0	0	0	0	0
0203-219-218	15.742	3,098.77	0.197	99.7	Free Surface	0 - 12:48 hrs	1.455	1.646	0.032	0.372	2,999.07	8.001	23.692	0	0	0	0	0	0
0203-220-219	7.957	1,410.25	0.559	99.902	Free Surface	0 - 12:48 hrs	1.334	1.857	0.071	0.58	1,310.35	8.031	26.734	0	0	0	0	0	0
0203-221-352	6	472.126	0.361	263.853	Free Surface	0 - 12:15 hrs	5.529	5.582	0.559	0.995	208.273	24.469	8	0	0.277	0	0	0	0
0203-222-107	2	27.207	1.446	17.584	Backwater	0 - 13:38 hrs	5.625	5.663	0.646	1	9.622	1.941	1.962	1.454	1.454	2.6	0	0	1
0203-223-358	6	781.339	0.561	258.31	Backwater	0 - 12:41 hrs	4.305	4.305	0.331	1	523.029	29.779	10	1.483	1.522	1.483	0	1.482	0
0203-224-475	3	31.878	0.228	32.181	Exceeds Capacity	0 - 14:18 hrs	4.553	4.553	1.009	1	-0.303	2.861	3	2.452	2.452	2.457	0.018	2.451	0
0203-225-422	2.5	28.674	0.489	14.933	Free Surface	0 - 12:15 hrs	3.635	3.636	0.521	0.78	13.74	0.683	2.499	0	0	0	0	0	0
0203-226-227	3.5	48.818	0.235	74.923	Exceeds Capacity	0 - 12:07 hrs	7.787	7.787	1.535	1	-26.105	4.452	3.5	1.599	1.61	1.6	0.374	1.596	0
0203-227-076	3.5	40.108	0.159	72.746	Exceeds Capacity	0 - 12:18 hrs	7.561	7.561	1.814	1	-32.637	4.51	3.5	1.575	1.6	1.575	0.465	1.573	0
0203-228-077	4.5	123.55	0.395	13.511	Free Surface	0 - 12:07 hrs	1.13	3.03	0.109	0.754	110.039	0.441	4.367	0	0	0	0	0	0
0203-229-511	2.25	27.334	0.779	20.234	Backwater	0 - 12:00 hrs	5.089	5.089	0.74	1	7.099	2.297	2.25	1.962	1.965	1.963	0	1.957	0
0203-230-512	2.5	22.565	0.303	19.945	Free Surface	0 - 12:02 hrs	4.831	4.845	0.884	0.805	2.62	2.3	2.5	0	1.962	0	0	0	0
0203-231-514	3	56.333	0.713	19.831	Free Surface	0 - 12:33 hrs	4.278	4.556	0.352	0.624	36.502	2.304	2.992	0	0	0	0	0	0
0203-232-233	3.5	113.931	1.282	19.831	Free Surface	0 - 12:33 hrs	6.137	6.137	0.174	0.369	94.1	2.302	3.378	0	0	0	0	0	0
0203-233-516	3.5	100.268	0.993	19.831	Free Surface	0 - 12:34 hrs	5.038	5.306	0.198	0.428	80.437	2.3	3.463	0	0	0	0	0	0
0203-234-529	4	56.772	0.156	35.752	Free Surface	0 - 12:37 hrs	2.926	2.926	0.63	0.935	21.02	3.782	4	0	0	0	0	0	0
0203-235-236	3.5	54.672	0.295	35.752	Free Surface	0 - 12:38 hrs	5.095	5.095	0.654	0.684	18.92	3.778	3.499	0	0	0	0	0	0
0203-236-237	3.5	140.904	1.961	35.753	Free Surface	0 - 12:38 hrs	6.693	6.694	0.254	0.543	105.151	3.777	3.498	0	0	0	0	0	0
0203-237-071	3.5	113.012	1.262	35.752	Free Surface	0 - 12:40 hrs	5.33	5.375	0.316	0.658	77.26	3.775	3.479	0	0	0	0	0	0
0203-238-062	5	380.356	2.133	102.232	Backwater	0 - 12:06 hrs	5.207	5.253	0.269	1	278.124	7.777	4.999	0.6	0.754	0.6	0	0.6	0
0203-239-245	5	163.665	0.393	135.479	Free Surface	0 - 12:18 hrs	3.221	3.222	0.828	0.841	28.186	16.587	10	0	0	0	0	0	0
0203-240-494	4	124.539	0.752	36.563	Backwater	0 - 12:53 hrs	2.91	3.526	0.294	1	87.976	3.389	3.968	1.163	1.163	1.744	0	0.002	0
0203-241-254	3	38.818	0.339	31.234	Backwater	0 - 12:15 hrs	4.419	4.419	0.805	1	7.584	1.073	3	0.765	0.765	2.211	0	0.145	0
0203-242-243	4.333	114.727	0.416	100.153	Backwater	0 - 12:47 hrs	6.791	6.791	0.873	1	14.574	8.016	4.333	1.757	1.784	1.757	0	1.757	0
0203-243-361	4.333	74.203	0.174	100.153	Free Surface	0 - 12:47 hrs	6.923	7.068	1.35	0.95	-25.95	8.014	4.333	0	1.757	0	1.706	0	0
0203-244-462	5.737	112.706	0.521	99.967	Backwater	0 - 14:18 hrs	3.632	3.632	0.887	1	12.739	24.135	6.184	2.173	7.088	2.173	0	2.173	0
0203-245-070	5	39.928	0.023	135.443	Free Surface	0 - 12:18 hrs	4.305	4.312	3.392	0.63	-95.515	16.576	10	0	0	0	3.932	0	0
0203-246-417	7.439	3,676.70	7.719	123.949	Free Surface	0 - 12:23 hrs	2.243	4.377	0.034	0.602	3,552.75	11.316	24.811	0	0	0	0	0	0
0203-247-602	12.356	1,517.96	0.118	110.244	Free Surface	0 - 16:22 hrs	2.717	2.717	0.073	0.237	1,407.72	42.391	18.981	0	0	0	0	0	0
0203-248-318	3	67.56	1.026	33.324	Backwater	0 - 15:51 hrs	4.714	4.714	0.493	1	34.236	10.961	3	10.333	10.481	10.333	0	10.333	0
0203-249-196	2.151	129.724	3.804	39.197	Free Surface	0 - 12:15 hrs	3.68	3.68	0.302	0.781	90.527	1.141	9.091	0	0	0.343	0	0	0
0203-250-545	3.91	89.055	0.375	76.444	Backwater	0 - 12:44 hrs	2.97	2.97	0.858	1	12.61	10.994	7.382	2.562	2.562	10.193	0	1.788	0
0203-251-546	5.09	136.033	0.361	34.552	Free Surface	0 - 11:55 hrs	1.359	1.36	0.254	0.851	101.481	10.979	7.728	0	0	0	0	0	0
0203-252-626	6.45	1,853.34	4.54	90.238	Free Surface	0 - 12:42 hrs	2.417	4.284	0.049	0.638	1,763.11	7.039	19.609	0	0	0	0	0	0
0203-253-434	5.141	97.055	0.011	34.129	Free Surface	0 - 12:23 hrs	0.309	0.322	0.352	0.94	62.925	1.394	43.914	0	0	0	0	0	0

Table B-3b. Existing System Analysis - Pipes/Channels
10-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-254-335	10.591	74.207	0	141.861	Free Surface	0 - 12:14 hrs	3.182	3.255	1.912	0.4	-67.654	10.479	24.522	0	0	0	1.213	0	2
0203-255-635	4.56	164.413	1.087	39.553	Free Surface	0 - 12:33 hrs	3.638	3.973	0.241	0.492	124.86	11.705	6.15	0	0	0	0	0	0
0203-256-085	4	33.719	0.055	45.948	Free Surface	0 - 12:29 hrs	3.745	3.745	1.363	0.947	-12.23	4.93	4	0	0	1.394	1.59	0	0
0203-257-321	4.392	206.69	0.099	29.288	Free Surface	0 - 13:26 hrs	1.007	1.141	0.142	0.533	177.403	3.991	24.879	0	0	0	0	0	0
0203-258-257	3	2.934	0.002	29.288	Free Surface	0 - 13:26 hrs	4.363	4.426	9.984	0.903	-26.354	3.992	3	0	2.906	0	11.43	0	0
0203-259-258	3	44.007	0.435	29.288	Backwater	0 - 13:26 hrs	4.143	4.143	0.666	1	14.719	3.995	3	2.842	2.842	2.906	0	2.828	0
0203-260-259	3	40.111	0.214	29.676	Backwater	0 - 12:04 hrs	4.198	4.289	0.74	1	10.435	4	3	2.834	2.839	2.842	0	2.829	0
0203-261-260	3	38.498	0.333	31.996	Backwater	0 - 12:03 hrs	4.694	4.698	0.831	1	6.502	4.003	2.986	2.837	2.871	2.839	0	2.834	1
0203-262-261	2.5	26.97	0.432	32.579	Exceeds Capacity	0 - 12:02 hrs	6.637	6.637	1.208	1	-5.61	4.004	2.497	2.901	2.925	2.906	2.883	2.89	0
0203-263-262	3	37.42	0.315	32.325	Backwater	0 - 12:02 hrs	4.573	4.573	0.864	1	5.094	3.989	3	2.872	2.876	2.885	0	2.869	0
0203-264-265	2	19.5	0.743	17.723	Backwater	0 - 12:06 hrs	5.642	5.853	0.909	1	1.777	0.751	2	0.452	0.457	0.469	0	0.451	0
0203-265-266	3	22.859	0.117	17.509	Backwater	0 - 12:18 hrs	2.477	2.477	0.766	1	5.35	0.76	3	0.433	0.453	0.433	0	0.433	0
0203-266-267	3	53.494	0.643	17.507	Free Surface	0 - 12:18 hrs	2.479	2.479	0.327	0.998	35.986	0.76	2.998	0	0.449	0	0	0	0
0203-267-318	3	49.041	0.541	17.492	Free Surface	0 - 12:18 hrs	2.477	2.477	0.357	0.998	31.549	0.76	2.999	0	0	10.333	0	0	0
0203-268-631	12.401	4,258.40	0.223	915.436	Free Surface	0 - 13:00 hrs	2.972	2.972	0.215	0.623	3,342.96	164.171	62.185	0	0	0	0	0	0
0203-269-268	3.496	26.348	0.192	33.656	Free Surface	0 - 12:56 hrs	3.601	3.61	1.277	0.715	-7.308	4.22	4.257	0	2.766	0	2.669	0	0
0203-270-658	12.11	5,684.14	1.865	110.634	Free Surface	0 - 12:34 hrs	0.774	1.471	0.019	0.626	5,573.50	9.781	32.124	0	0	0	0	0	0
0203-271-662	2.89	97.449	1.376	89.661	Backwater	0 - 12:08 hrs	5.592	5.592	0.92	1	7.788	4.379	6.37	0.458	0.458	1.397	0	0.44	0
0203-272-273	4	127.985	0.794	71.416	Free Surface	0 - 12:17 hrs	8.629	8.679	0.558	0.785	56.57	7.879	3.998	0	0	0	0	0	0
0203-273-617	10.9	5,582.39	1.231	71.944	Free Surface	0 - 13:48 hrs	0.411	1.284	0.013	0.653	5,510.45	7.883	38.869	0	0	0	0	0	0
0203-274-275	3.92	107.358	0.572	73.616	Free Surface	0 - 12:56 hrs	7.312	7.552	0.686	0.883	33.742	8.011	3.177	0	2.461	0	0	0	1
0203-275-276	4	208.467	0.182	73.602	Free Surface	0 - 12:56 hrs	3.337	3.405	0.353	0.788	134.864	8.014	7	0	0	0	0	0	0
0203-276-277	4.1	200.517	0.198	73.59	Free Surface	0 - 12:56 hrs	4.941	4.941	0.367	0.615	126.927	8.006	6.742	0	0	0	0	0	0
0203-277-629	4.23	291.179	3.455	73.588	Free Surface	0 - 12:57 hrs	3.996	5.135	0.253	0.706	217.59	8.003	6.948	0	0	1.487	0	0	0
0203-278-274	4	56.829	0.054	29.241	Backwater	0 - 12:22 hrs	1.462	1.462	0.515	1	27.588	1.821	5	2.194	2.194	2.421	0	0.689	2
0203-279-278	3.5	88.814	0.779	29.219	Backwater	0 - 12:22 hrs	3.037	3.037	0.329	1	59.595	1.819	3.499	0.917	0.917	2.5	0	0	2
0203-280-279	3.5	56.3	0.313	29.212	Backwater	0 - 12:22 hrs	3.036	3.829	0.519	1	27.088	1.81	3.477	0.908	0.908	0.917	0	0.206	0
0203-281-280	3	43.759	0.43	29.946	Backwater	0 - 12:03 hrs	4.236	4.236	0.684	1	13.813	1.808	3	0.915	0.915	0.925	0	0.906	0
0203-282-281	3	33.701	0.255	30.874	Backwater	0 - 12:03 hrs	4.368	4.368	0.916	1	2.827	1.806	3	0.909	0.925	0.91	0	0.908	0
0203-283-274	3.5	66.952	0.443	57.099	Backwater	0 - 13:44 hrs	5.935	5.935	0.853	1	9.852	6.189	3.498	2.467	2.467	2.519	0	1.996	1
0203-284-297	3.5	2.371	0.001	95.198	Exceeds Capacity	0 - 12:18 hrs	9.895	9.895	40.146	1	-92.826	5.484	3.486	2.635	2.695	2.635	18.502	2.635	0
0203-285-534	3	77.681	1.356	22.063	Free Surface	0 - 13:41 hrs	3.495	3.593	0.284	0.964	55.618	5.451	3	0	0	1.506	0	0	0
0203-286-285	3	90.715	1.85	20.585	Free Surface	0 - 13:41 hrs	4.468	4.928	0.227	0.759	70.13	5.452	2.993	0	0	0	0	0	0
0203-287-286	3	68.923	1.068	20.467	Free Surface	0 - 14:44 hrs	5.312	5.335	0.297	0.557	48.455	5.453	3	0	0	0	0	0	0
0203-288-287	3	52.782	0.626	20.467	Free Surface	0 - 14:42 hrs	4.248	4.328	0.388	0.645	32.314	5.454	3	0	0	0	0	0	0
0203-289-288	3	35.822	0.288	20.467	Free Surface	0 - 14:42 hrs	3.476	3.505	0.571	0.776	15.355	5.456	2.999	0	0	0	0	0	0
0203-290-304	2.5	33.019	0.648	20.468	Free Surface	0 - 14:41 hrs	4.951	4.951	0.62	0.785	12.551	5.458	2.5	0	7.497	0	0	0	0
0203-291-305	2.5	38.403	0.877	20.468	Backwater	0 - 14:41 hrs	4.17	4.17	0.533	1	17.935	5.462	2.5	7.54	7.54	7.57	0	7.493	2
0203-292-291	2	28.481	1.585	20.468	Backwater	0 - 14:41 hrs	6.515	6.515	0.719	1	8.013	5.459	1.999	7.509	7.509	7.589	0	0	1
0203-293-292	2	27.328	1.459	21.929	Backwater	0 - 11:52 hrs	7.117	7.14	0.802	1	5.399	5.451	2	7.509	7.581	7.509	0	7.509	1
0203-294-306	3.5	111.399	1.226	43.723	Free Surface	0 - 12:51 hrs	4.822	4.835	0.392	0.915	67.676	5.464	3.499	0	0	7.503	0	0	0
0203-295-294	3.5	77.262	0.59	43.749	Free Surface	0 - 12:49 hrs	4.856	5.129	0.566	0.898	33.513	5.457	3.497	0	0	0	0	0	0
0203-296-295	3.5	26.661	0.07	43.752	Free Surface	0 - 12:49 hrs	4.556	4.556	1.641	0.994	-17.091	5.454	3.5	0	2.691	0	2.767	0	0
0203-297-296	3.5	149.798	2.217	43.752	Backwater	0 - 12:49 hrs	4.548	4.548	0.292	1	106.046	5.451	3.48	2.635	2.635	2.691	0	0	0
0203-298-314	4.5	229.799	0.808	100.225	Backwater	0 - 13:30 hrs	6.302	7.19	0.436	1	129.575	14.651	4.496	2.807	2.807	4.302	0	0.001	3
0203-299-298	3	50.348	0.57	46.492	Backwater	0 - 12:23 hrs	6.577	6.577	0.923	1	3.855	4.231	2.987	1.882	1.882	2.815	0	1.881	0
0203-300-307	3	70.727	1.124	52.456	Backwater	0 - 12:30 hrs	7.421	7.421	0.742	1	18.271	7.869	2.999	3.303	3.678	3.303	0	3.303	0
0203-301-317	5	253.25	0.946	123.533	Backwater	0 - 14:57 hrs	6.291	6.291	0.488	1	129.718	22.554	4.999	5.909	5.909	5.967	0	4.188	0
0203-302-333	5.08	39.693	0.032	168.327	Exceeds Capacity	0 - 11:52 hrs	4.674	4.674	4.241	1	-128.634	33.639	7.536	6.352	6.655	6.352	7.487	6.047	0
0203-303-334	3	67.685	1.03	41.482	Backwater	0 - 11:52 hrs	5.868	5.868	0.613	1	26.203	3.871	2.999	5.939	5.943	5.945	0	2.672	0
0203-304-289	2.5	50.953	1.543	20.468	Free Surface	0 - 14:41 hrs	5.041	5.227	0.402	0.771	30.485	5.458	2.499	0	0	0	0	0	0
0203-305-290	2.5	28.637	0.487	20.468	Backwater	0 - 14:41 hrs	4.17	4.17	0.715	1	8.169	5.46	2.5	7.497	7.57	7.497	0	7.497	1
0203-306-293	2.5	45.114	1.21	21.823	Backwater	0 - 11:52 hrs	4.446	4.446	0.484	1	23.292	5.452	2.499	7.533	7.556	7.533	0	7.533	1
0203-307-308	3.5	108.726	1.168	52.453	Backwater	0 - 12:30 hrs	5.452	5.553	0.482	1	56.272	7.865	3.49	3.14	3.204	3.166	0	1.723	0
0203-308-309	3.5	95.984	0.91	52.45	Backwater	0 - 12:30 hrs	5.459	5.499	0.546	1	43.534	7.856	3.498	2.76	3.166	2.761	0	2.759	0
0203-309-310	3.5	106.384	1.118	52.433	Backwater	0 - 12:32 hrs	5.508	6.285	0.493	1	53.951	7.851	3.49	1.849	3.112	1.849	0	1.849	0
0203-310-311	3.5	121.546	1.459	53.881	Backwater	0 - 11:55 hrs	6.97	8.091	0.443	1	67.665	7.844	3.499	2.408	2.408	3.587	0	0	0
0203-311-301	4	119.146	0.688	52.407	Backwater	0 - 12:33 hrs	4.17	4.664	0.44	1	66.739	7.826	3.998	3.554	3.554	5.945	0	0	0
0203-312-301	5	184.133	0.5	86.37	Backwater	0 - 11:55 hrs	4.399	4.63	0.469	1	97.764	14.684	4.989	4.752	4.753	5.909	0	0.002	0
0203-313-312	5	227.511	0.763	100.123	Backwater	0 - 12:55 hrs	5.099	6.102	0.44	1	127.388	14.693	4.999	4.669	4.67	4.753	0	0.001	4
0203-314-313	5	209.24	0.645	100.123	Backwater	0 - 12:55 hrs	5.099	5.77	0.479	1	109.118	14.72	4.986	3.914	3.914	4.67	0	1.948	5
0203-315-340	3.5	106.06	1.111	69.443	Backwater	0 - 11:52 hrs	7.218	7.218	0.655	1	36.618	10.488	3.499	3.87	3.87	3.907	0	0.919	0
0203-316-315	3.5	69.433	0.476	72.29	Exceeds Capacity	0 - 11:52 hrs	7.514	7.518	1.041	1	-2.856	10.499	3.499	3.867	3.944	3.867	0.013	3.866	0
0203-317-302	5.08	262.51	1.382	120.68	Backwater	0 - 11:56 hrs	3.351	3.351	0.46	1	141.829	22.571	7.536	5.951	5.951	6.655	0	0.002	0
0203-318-549	3	67.552	1.026	39.579	Free Surface	0 - 12:33 hrs	5.63	5.63	0.586	0.979	27.972	11.717	3	0	10.333	0	0	0	0
0203-319-556	4	56.408	0.154	60.183	Free Surface	0 - 12:15 hrs	6.54	6.54	1.067	0.687	-3.775	4.926	4	0	0.198	0	0.075	0	0
0203-320-319	3	48.238	4.952	29.286	Free Surface	0 - 13:32 hrs	4.943	4.957	0.607	0.781	18.951	3.975	2.998	0	0	2.104	0	0	0
0203-321-320	4.392	162.289	0.061	29.287	Free Surface	0 - 13:29 hrs	1.412	1.489	0.18	0.45	133.002	3.979	21.009	0	0	0	0	0	0
0203-322-323	4	194.09	1.826	26.203	Backwater	0 - 13:03 hrs	2.085	2.944	0.135	1	167.888	4.739	3.997	4.752	4.752	19.821	0	0	0
0203-323-324	6	498.726	0.855	26.202	Free Surface	0 - 13:03 hrs	1.263	1.263	0.053	0.576	472.524	4.692	6	0	0	0	0	0	2
0203-324-008	11.346	4,998.01	0.94	26.202	Free Surface	0 - 13:04 hrs	3.54	3.54	0.005	0.09	4,971.81	4.709	12.26	0	0	0	0	0	17
0203-325-329	9.647	578.421	0.106	198.146	Free Surface	0 - 12:25 hrs	2.469	2.559	0.343	0.668	380.275	22.476	25.198	0	0	0	0	0	0
0203-326-327	6.218	1,235.41	1.437	131.73	Free Surface	0 - 12:15 hrs	4.047	4.049	0.107	0.44	1,103.68	3.754	18.575	0	0	0	0	0	0
0203-327-328	10	2,249.26	1.211	129.425	Free Surface	0 - 12:15 hrs	2.841	2.992	0.058	0.459	2,119.84	3.752	18.598	0	0	0	0	0	0
0203-328-133	4.533	193.213	0.927	175.483	Backwater	0 - 12:15 hrs	5.174	5.174	0.908	1	17.73	9.917	13.642	0.788	0.788	0.862	0	0.544	0
0203-329-195	9.647	621.526	0.122	195.739	Free Surface	0 - 12:30 hrs	2.851	3.167	0.315	0.616	425.787	22.343	23.167	0	0	0	0	0	0
0203-330-199	2.169	73.922	1.595	67.643	Backwater	0 - 12:18 hrs	4.79	4.79	0.915	1	6.279	4.065	10.228	0.279	0.279	0.351	0	0.223	0
0203-331-332	5.08	73.265	0.108	147.604	Exceeds Capacity	0 - 16:30 hrs	4.39	4.404	2.015	1	-74.339	33.563	7.536	1.038	6.409	1.038	6.75	1.038	0
0203-332-665	6	917.899	0.494	147.647	Free Surface	0 - 16:29 hrs	2.554	2.687	0.161	0.96	770.252	33.559	12	0	0	0.928	0	0	0
0203-333-655	6	240.786	0.322	150.149	Backwater	0 - 11:52 hrs	2.141	2.144	0.624	1	90.637	33.649	12	6.287	6.287	6.298	0	0.002	0
0203-334-302	3.5	153.045	2.314	39.374	Backwater	0 - 11:52 hrs	4.092	4.092	0.257	1	113.671	3.869	3.5	5.947	5.947	7.683	0	0	0
0203-335-009	10.591	5,438.11	2.093	315.49	Free Surface	0 - 12:22 hrs	16.102	16.102	0.058	0.312	5,122.62	10.709	17.334	0	0	0	0	0	3
0203-336-222	2	26.059	1.327	17.572	Backwater	0 - 13:38 hrs	5.62	5.888	0.674	1	8.487	1.944	1.946	1.449	1.889	1.454	0	0.201	0
0203-337-486	4.5	213.147	1.175	61.368	Free Surface	0 - 12:53 hrs	7.365	8.052	0.288	0.519	151.779	13.315	4.5	0	0	0	0	0	0
0203-338-070	4.647	318.699	0.132	74.095	Free Surface	0 - 12:19 hrs	1.772	1.772	0.232	0.494	244.604	6.148	24.419	0	0	0	0	0	0

Table B-3b. Existing System Analysis - Pipes/Channels
10-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-339-189	4.819	2,243.90	2.013	127.216	Free Surface	0 - 12:15 hrs	1.309	1.309	0.057	0.619	2,116.68	10.141	55.9	0	0	1.391	0	0	0
0203-340-298	4	132.209	0.847	85.268	Backwater	0 - 13:51 hrs	6.785	6.785	0.645	1	46.941	10.481	3.999	2.853	3.9	2.853	0	2.852	2
0203-341-345	8	1,383.33	0.495	251.921	Free Surface	0 - 15:27 hrs	7.302	7.44	0.182	0.36	1,131.41	58.006	12	0	0	0	0	0	0
0203-342-350	3	84.516	1.606	50.721	Backwater	0 - 12:15 hrs	7.176	7.176	0.6	1	33.796	7.9	2.999	3.527	3.527	3.735	0	0.348	0
0203-343-344	6	212.05	0.251	184.144	Backwater	0 - 12:14 hrs	6.513	6.513	0.868	1	27.906	5.719	5.984	4.92	4.92	5.422	0	0.205	0
0203-344-382	2	14.788	0.427	28.859	Free Surface	0 - 14:27 hrs	9.551	9.57	1.952	0.924	-14.071	5.597	1.999	0	6.202	0	5.856	0	0
0203-345-002	10.792	35,212.01	40.439	296.038	Free Surface	0 - 15:03 hrs	8.998	8.998	0.008	0.177	34,915.97	65.854	27.422	0	0	0	0	0	0
0203-346-345	7.846	738.424	0.86	47.091	Free Surface	0 - 12:33 hrs	2.232	2.232	0.064	0.241	691.333	7.879	11.857	0	0	0	0	0	0
0203-347-346	3	53.584	0.645	47.093	Free Surface	0 - 12:33 hrs	8.741	8.741	0.879	0.713	6.491	7.884	2.999	0	3.817	0	0	0	0
0203-348-347	7.265	454.602	0.802	47.298	Free Surface	0 - 12:23 hrs	1.006	1.752	0.104	0.722	407.304	7.889	9.492	0	0	0	0	0	0
0203-349-348	3	31.929	0.229	48.418	Exceeds Capacity	0 - 12:19 hrs	6.85	6.85	1.516	1	-16.489	7.894	2.999	3.447	3.924	3.447	3.774	3.447	0
0203-350-349	7.191	473.764	1.015	49.285	Free Surface	0 - 12:18 hrs	0.84	1.264	0.104	0.941	424.479	7.9	9.584	0	0	0.533	0	0	0
0203-351-551	7.04	318.643	0.203	62.59	Free Surface	0 - 12:15 hrs	2.878	4.436	0.196	0.458	256.053	1.969	11.255	0	0	0	0	0	0
0203-352-363	6.945	878.302	0.362	262.186	Free Surface	0 - 12:15 hrs	4.684	4.75	0.299	0.893	616.117	24.456	9.613	0	0	0	0	0	0
0203-353-354	7.03	983.531	0.483	269.37	Free Surface	0 - 12:19 hrs	7.11	7.11	0.274	0.648	714.161	26.332	9.496	0	0	0	0	0	0
0203-354-114	7.03	1,353.80	0.915	269.502	Free Surface	0 - 12:21 hrs	7.779	8.064	0.199	0.599	1,084.30	26.325	9.482	0	0	0	0	0	0
0203-355-356	6	934.066	0.802	269.002	Free Surface	0 - 12:22 hrs	4.749	5.315	0.288	0.944	665.065	26.313	10	0	0	0	0	0	0
0203-356-113	8.464	2,294.28	2.604	327.229	Free Surface	0 - 12:17 hrs	6.724	6.782	0.143	0.823	1,967.05	28.84	8.695	0	0	1.323	0	0	0
0203-357-223	6	829.961	0.633	258.396	Backwater	0 - 12:38 hrs	4.307	4.307	0.311	1	571.565	29.788	10	1.522	1.553	1.522	0	1.522	0
0203-358-359	7.321	274.216	0.535	258.122	Free Surface	0 - 12:44 hrs	5.252	5.253	0.941	0.927	16.094	29.76	8.125	0	1.289	0	0	0	0
0203-359-112	7.321	466.386	1.548	280.829	Free Surface	0 - 12:44 hrs	5.714	5.715	0.602	0.927	185.557	32.606	8.115	0	0	2.14	0	0	0
0203-360-111	16.67	50,175.86	7.084	335.343	Free Surface	0 - 12:59 hrs	6.549	6.549	0.007	0.145	49,840.52	40.541	37.25	0	0	0	0	0	0
0203-361-220	7.957	146.481	0.006	100.106	Free Surface	0 - 12:48 hrs	2.019	2.65	0.683	0.449	46.375	8.015	22.053	0	0	0	0	0	0
0203-362-165	7.943	1,483.04	2.475	253.366	Free Surface	0 - 15:03 hrs	3.687	3.687	0.171	0.682	1,229.67	47.291	14.182	0	0	0	0	0	0
0203-363-117	6.945	873.512	0.358	260.893	Free Surface	0 - 12:15 hrs	4.786	4.811	0.299	0.871	612.619	24.444	9.611	0	0	0	0	0	0
0203-364-164	8.07	2,005.71	4.955	253.366	Free Surface	0 - 15:04 hrs	5.924	5.924	0.126	0.481	1,752.34	47.238	13.076	0	0	0	0	0	0
0203-365-461	5.5	515.198	2.354	176.551	Backwater	0 - 12:55 hrs	7.431	7.431	0.343	1	338.647	24.078	5.498	2.953	2.953	7.157	0	0	0
0203-366-367	6	500.191	1.395	145.937	Backwater	0 - 14:18 hrs	5.161	5.161	0.292	1	354.255	24.091	5.972	7.539	7.539	10.363	0	1.56	0
0203-367-368	3.377	255.263	2.077	283.944	Exceeds Capacity	0 - 12:15 hrs	8.307	8.307	1.112	1	-28.681	46.46	19.528	4.724	4.724	6.258	0.88	2.521	0
0203-368-370	6	157.161	0.804	204.026	Backwater	0 - 11:56 hrs	5.667	5.667	1.298	1	-46.865	46.429	6	7.978	7.978	8.947	6.208	0	0
0203-369-427	4	474.879	0.305	96.908	Backwater	0 - 16:42 hrs	1.803	1.912	0.204	1	377.971	12.438	14	4.207	4.232	4.215	0	0.182	0
0203-370-118	4.513	345.587	0.998	198.285	Backwater	0 - 15:14 hrs	3.683	4.232	0.574	1	147.303	46.417	21.428	3.229	3.229	6.895	0	0	0
0203-372-373	8.563	802.787	0.948	216.215	Backwater	0 - 13:42 hrs	2.315	4.341	0.269	1	586.572	49.232	19.12	0.565	0.565	6.761	0	0	0
0203-373-377	7	177.398	0.45	215.96	Exceeds Capacity	0 - 13:44 hrs	4.407	4.407	1.217	1	-38.562	49.224	7	8.283	8.308	8.284	6.1	8.275	0
0203-374-375	3.862	144.305	0.401	200.041	Exceeds Capacity	0 - 16:05 hrs	5.191	5.191	1.386	1	-55.736	49.195	17.32	7.381	7.381	7.957	6.969	7.081	0
0203-375-376	7.377	166.742	0.058	200.033	Free Surface	0 - 16:04 hrs	3.485	3.485	1.2	0.797	-33.291	49.171	14.729	0	0	0	6.841	0	0
0203-376-341	11.182	2,080.21	1.59	200.032	Free Surface	0 - 16:04 hrs	6.977	7.692	0.096	0.391	1,880.18	49.162	11.691	0	0	0	0	0	0
0203-377-374	7	43.345	0.027	213.527	Exceeds Capacity	0 - 13:45 hrs	4.358	4.358	4.926	1	-170.182	49.262	7	8.169	8.284	8.169	9.634	8.169	0
0203-378-379	3	78.635	1.39	66.848	Backwater	0 - 13:40 hrs	9.457	9.457	0.85	1	11.786	5.5	3	1.78	1.78	1.83	0	1.738	0
0203-379-242	4	89.876	0.391	66.848	Backwater	0 - 13:40 hrs	5.32	5.32	0.744	1	23.028	5.494	3.999	1.772	1.772	1.813	0	1.694	0
0203-380-187	9.535	663.228	0.26	129.12	Free Surface	0 - 12:21 hrs	3.375	3.399	0.195	0.519	534.108	11.325	15.687	0	0	0	0	0	0
0203-381-134	4.101	493.715	1.219	169.469	Free Surface	0 - 12:15 hrs	3.222	3.222	0.343	0.837	324.247	6.179	32.965	0	0	0.761	0	0	0
0203-382-339	9	320.398	0.393	28.85	Free Surface	0 - 14:30 hrs	6.205	6.279	0.09	0.147	291.548	5.599	4	0	0	0	0	0	0
0203-383-384	4.91	116.495	0.091	110.245	Backwater	0 - 16:12 hrs	2.045	2.045	0.946	1	6.25	43.791	12.036	12.156	12.156	12.169	0	0	0
0203-384-576	4.91	75.684	0.038	110.245	Free Surface	0 - 16:13 hrs	3.183	3.183	1.457	0.668	-34.561	43.048	11.705	0	12.169	0	12.607	0	0
0203-385-057	1.5	12.834	1.493	4.923	Backwater	0 - 12:03 hrs	2.786	2.786	0.384	1	7.911	0.083	1.5	0.952	0.952	1.779	0	0.001	0
0203-386-385	1.25	8.204	1.613	4.938	Backwater	0 - 12:03 hrs	2.012	3.101	0.301	1	3.266	0.107	1.249	0.874	0.874	1.067	0	0	0
0203-387-059	1.5	11.672	1.235	8.851	Backwater	0 - 12:03 hrs	5.009	5.009	0.758	1	2.821	0.294	1.5	0.848	0.848	0.944	0	0.082	1
0203-388-387	1.25	7.721	1.429	8.859	Backwater	0 - 12:03 hrs	3.609	3.609	0.574	1	-1.137	0.293	1.246	0.804	0.804	0.879	0	0.001	1
0203-389-113	1.75	11.978	0.571	14.146	Exceeds Capacity	0 - 12:00 hrs	5.881	5.881	1.181	1	-2.169	0.969	1.738	7.836	7.836	20.387	0.177	0.414	0
0203-390-389	1.25	5.902	0.835	14.149	Exceeds Capacity	0 - 12:00 hrs	5.765	5.765	1.199	1	-8.247	0.97	1.25	8.194	8.194	11.586	0.187	1.295	0
0203-391-123	6.887	598.08	0.367	262.524	Free Surface	0 - 12:26 hrs	3.422	3.475	0.439	0.804	335.557	12.188	25.541	0	0	0	0	0	0
0203-392-121	17.772	12,618.16	0.808	262.07	Free Surface	0 - 12:26 hrs	4.002	4.292	0.021	0.222	12,356.09	12.159	28.372	0	0	0	0	0	0
0203-393-201	14.057	3,408.70	3.486	19.831	Free Surface	0 - 12:36 hrs	3.125	3.389	0.006	0.248	3,388.87	2.298	4.002	0	0	0	0	0	0
0203-394-395	4	77.157	0.289	65.03	Free Surface	0 - 12:15 hrs	5.289	5.289	0.843	0.945	12.127	4.115	4	0	0.314	0	0	0	0
0203-395-206	5.829	807.214	1.066	123.789	Free Surface	0 - 12:15 hrs	3.907	3.909	0.153	0.546	683.425	7.968	19.68	0	0	0	0	0	0
0203-396-211	1.807	81.029	6.177	22.333	Backwater	0 - 12:15 hrs	2.357	2.716	0.276	1	58.696	0.556	9.996	9.479	9.479	12.063	0	0	0
0203-397-398	4	5.609	0.001	37.822	Free Surface	0 - 12:18 hrs	1.231	1.742	6.743	0.854	-32.213	8.846	9	0	0	0	13.248	0	0
0203-398-239	4	56.247	0.115	37.893	Free Surface	0 - 12:18 hrs	1.263	2.65	0.674	0.834	18.353	8.84	9	0	0	0	0	0	0
0203-399-400	3	59.881	0.806	25.395	Free Surface	0 - 12:15 hrs	4.542	4.542	0.424	0.738	34.485	1.23	3	0	0	0.207	0	0	0
0203-400-330	3.82	39.41	0.21	25.135	Free Surface	0 - 12:15 hrs	2.262	2.445	0.638	0.794	14.275	1.229	7.252	0	0	0	0	0	0
0203-401-195	4	182.264	1.61	104.852	Free Surface	0 - 12:19 hrs	8.681	8.689	0.575	0.919	77.412	5.676	4	0	0	2.029	0	0	0
0203-402-173	4.497	396.477	0.394	269.183	Backwater	0 - 12:34 hrs	3.307	3.307	0.679	1	127.294	35.127	18.833	4.03	4.178	4.03	0	4.03	0
0203-403-404	4	36.617	0.007	198.957	Exceeds Capacity	0 - 13:48 hrs	2.369	2.415	5.433	1	-162.34	35.115	21	4.145	4.217	4.145	9.251	4.145	2
0203-404-405	6.83	653.514	0.416	198.937	Free Surface	0 - 13:49 hrs	2.483	3.474	0.304	0.734	454.577	35.112	17.357	0	0	0	0	0	0
0203-405-406	4	1,076.74	0.63	198.908	Backwater	0 - 13:49 hrs	2.368	2.679	0.185	1	877.829	35.115	21	4.091	4.098	4.106	0	3.222	0
0203-406-407	6.363	925.76	0.729	198.87	Free Surface	0 - 13:51 hrs	1.923	2.653	0.215	0.867	726.89	35.116	19.341	0	0	0	0	0	0
0203-407-408	4	686.455	0.256	198.833	Backwater	0 - 13:52 hrs	2.367	2.367	0.29	1	487.622	35.101	21	4.371	4.378	4.376	0	4.273	0
0203-408-409	6.078	408.194	0.133	198.815	Free Surface	0 - 13:52 hrs	1.714	2.234	0.487	0.955	209.379	35.091	20.903	0	0	0	0	0	0
0203-409-172	6.078	295.612	0.07	198.753	Free Surface	0 - 13:52 hrs	1.733	2.216	0.672	0.945	96.859	35.057	20.899	0	0	0	0	0	0
0203-410-170	8	246.927	0.244	198.614	Free Surface	0 - 13:55 hrs	4.163	4.975	0.402	0.747	48.313	34.982	4	0	0	0	0	0	0
0203-411-412	3	112.659	2.853	37.482	Free Surface	0 - 12:15 hrs	5.34	5.34	0.333	0.975	75.178	1.684	2.998	0	0	0.039	0	0	0
0203-412-413	3	98.132	2.165	37.502	Free Surface	0 - 12:15 hrs	5.539	5.539	0.382	0.915	60.63	1.685	2.999	0	0.039	0	0	0	0
0203-413-414	3	75.537	1.283	37.306	Free Surface	0 - 12:15 hrs	6.846	6.848	0.494	0.72	38.231	1.685	2.997	0	0	0	0	0	0
0203-414-339	3	94.644	2.014	36.767	Free Surface	0 - 12:15 hrs	9.813	9.813	0.388	0.524	57.878	1.682	2.999	0	0	0	0	0	0
0203-415-416	2	17.553	0.602	23.774	Free Surface	0 - 12:18 hrs	8.318	8.318	1.354	0.854	-6.221	1.254	1.999	0	1.138	0	0.505	0	0
0203-416-191	4.928	659.285	2.587	23.773	Free Surface	0 - 12:18 hrs	3.138	3.223	0.036	0.345	635.512	1.254	8.906	0	0	0	0	0	0
0203-417-418	6	304.449	4.893	123.486	Free Surface	0 - 12:25 hrs	5.092	5.109	0.406	0.802	180.963	11.315	5.999	0	0	0	0	0	0
0203-418-184	6.773	478.547	0.151	122.93	Free Surface	0 - 12:25 hrs	1.627	1.647	0.257	0.667	355.617	11.311	23.257	0	0	0	0	0	0
0203-419-420	2	21.115	8.248	17.424	Free Surface	0 - 12:34 hrs	7.658	7.658	0.825	0.68	3.692	1.208	2	0	1.4	0	0	0	0
0203-420-186	6.59	1,773.95	4.014	17.424	Free Surface	0 - 12:34 hrs	1.578	3.402	0.01	0.21	1,756.52	1.208	11.828	0	0	0	0	0	0
0203-421-192	5.831	443.929	2.958	15.623	Free Surface	0 - 12:15 hrs	3.892	4.008	0.035	0.288	428.306	0.529	4.673	0	0	0	0	0	0
0203-422-423	3	49.047	0.541	14.823	Free Surface	0 - 12:15 hrs	3.335	3.337	0.302	0.602	34.224	0.683	2.997	0	0	0	0	0	0
0203-423-501	3	108.54	2.648	14.783	Free Surface	0 - 12:15 hrs	6.652	6.652	0.136	0.352	93.757	0.683	2.857	0	0	0	0	0	0
0203-424-425	5	849.536	0.219	134.805	Free Surface	0 - 12:30 hrs	2.135	2.248	0.159	0.64	714.731	12.496	20	0	0	0	0	0	0

Table B-3b. Existing System Analysis - Pipes/Channels
10-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-425-180	11.155	5,446.72	0.483	133.345	Free Surface	0 - 12:32 hrs	1.229	1.401	0.024	0.316	5,313.38	12.492	46.251	0	0	0	0	0	0
0203-426-369	4	471.649	0.301	96.478	Backwater	0 - 16:42 hrs	1.765	1.855	0.205	1	375.171	12.439	14	4.224	4.258	4.232	0	0.221	0
0203-427-174	4.533	224.617	0.327	97.666	Backwater	0 - 16:40 hrs	2.157	2.43	0.435	1	126.951	12.434	14.018	3.713	3.713	4.054	0	0	0
0203-428-507	8	1,551.51	0.228	253.424	Free Surface	0 - 15:07 hrs	2.458	2.467	0.163	0.724	1,298.08	47.136	18	0	0	0	0	0	0
0203-429-162	12.147	1,032.00	0.184	272.192	Free Surface	0 - 13:21 hrs	4.19	4.19	0.264	0.372	759.807	50.701	17.349	0	0	0	0	0	0
0203-430-240	3	42.608	0.408	36.56	Backwater	0 - 12:53 hrs	5.172	5.176	0.858	1	6.048	3.383	2.966	1.759	2.023	1.814	0	0.538	0
0203-431-513	2	29.241	1.671	20.254	Backwater	0 - 12:00 hrs	6.447	6.447	0.693	1	8.988	2.293	2	1.96	1.973	1.96	0	1.959	1
0203-432-433	5	128.573	0.244	19.444	Free Surface	0 - 12:25 hrs	1.067	1.078	0.151	0.908	109.129	0.648	4.998	0	0	0	0	0	0
0203-433-253	4.946	221.964	0.118	20.851	Free Surface	0 - 12:26 hrs	0.271	0.292	0.094	0.961	201.113	0.645	26.722	0	0	0	0	0	0
0203-434-435	5	107.609	0.171	78.639	Free Surface	0 - 12:18 hrs	5.037	5.048	0.731	0.748	28.97	3.718	4.999	0	0	0	0	0	0
0203-435-138	6.268	2,359.30	1.346	77.589	Free Surface	0 - 12:18 hrs	1.463	1.578	0.033	0.471	2,281.71	3.717	37.998	0	0	0	0	0	0
0203-437-438	5.5	449.896	1.795	61.294	Free Surface	0 - 12:37 hrs	8.798	8.798	0.136	0.334	388.602	3.655	5.184	0	0	0	0	0	0
0203-438-135	9.15	6,022.25	7.055	61.301	Free Surface	0 - 12:37 hrs	4.65	4.905	0.01	0.222	5,960.95	3.661	12.313	0	0	0	0	0	0
0203-439-440	3	87.529	1.722	61.251	Backwater	0 - 12:33 hrs	8.665	8.665	0.7	1	26.278	6.789	3	2.428	2.428	6.224	0	2.42	0
0203-440-441	3	80.476	1.456	31.129	Backwater	0 - 14:22 hrs	4.404	4.404	0.387	1	49.347	6.81	3	6.233	6.233	6.267	0	0	0
0203-441-442	3	14.501	0.047	30.672	Exceeds Capacity	0 - 14:34 hrs	4.339	4.339	2.115	1	-16.171	6.812	3	6.22	6.267	6.22	6.617	6.22	0
0203-442-443	3	43.012	0.416	30.672	Free Surface	0 - 14:34 hrs	4.411	4.411	0.713	0.955	12.34	6.813	2.999	0	6.22	0	0	0	0
0203-443-444	3	81.077	1.478	30.672	Free Surface	0 - 14:34 hrs	5.27	5.271	0.378	0.768	50.405	6.813	2.999	0	0	0	0	0	0
0203-444-445	3	93.201	1.953	30.763	Free Surface	0 - 14:15 hrs	8.951	9.093	0.33	0.49	62.438	6.805	3	0	0	0	0	0	0
0203-445-446	3	81.206	1.482	30.684	Free Surface	0 - 14:41 hrs	5.499	5.534	0.378	0.739	50.522	6.806	2.999	0	0	6.215	0	0	0
0203-446-447	3	51.337	0.592	30.686	Free Surface	0 - 14:41 hrs	5.393	5.582	0.598	0.829	20.65	6.803	3	0	6.22	0	0	0	0
0203-447-448	3	125.519	3.541	34.079	Free Surface	0 - 14:14 hrs	6.011	7.38	0.272	0.829	91.439	6.81	3	0	0	2.365	0	0	0
0203-448-452	4	240.383	2.801	72.732	Backwater	0 - 11:59 hrs	6.227	6.254	0.303	1	167.652	11.345	4	1.003	1.941	1.003	0	1.003	0
0203-449-450	3	160.418	5.785	56.709	Backwater	0 - 12:00 hrs	8.023	8.024	0.354	1	103.709	4.571	2.991	1.663	1.72	1.663	0	1.661	0
0203-450-451	3	71.197	1.139	53.008	Backwater	0 - 12:26 hrs	7.499	7.499	0.745	1	18.19	4.558	3	1.663	1.663	2.398	0	0.001	0
0203-451-448	3.5	31.481	0.098	43.95	Exceeds Capacity	0 - 11:59 hrs	4.568	4.568	1.396	1	-12.469	4.522	3.499	2.33	2.372	2.333	2.367	2.33	0
0203-452-453	4	164.465	1.311	74.536	Backwater	0 - 11:57 hrs	7.342	7.631	0.453	1	89.929	11.361	4	1.549	1.549	2.247	0	0	0
0203-453-454	4	184.959	1.658	72.679	Backwater	0 - 13:41 hrs	5.784	7.438	0.393	1	112.28	11.36	3.99	2.258	2.258	2.718	0	0	0
0203-454-455	4.5	211.484	1.157	72.237	Backwater	0 - 14:40 hrs	4.595	5.097	0.342	1	139.247	11.34	4.499	2.703	2.704	2.725	0	0.001	0
0203-455-457	4.5	164.682	0.701	114.532	Backwater	0 - 14:26 hrs	7.201	7.201	0.695	1	50.149	13.203	4.499	2.737	2.737	2.857	0	0.774	0
0203-456-455	2	39.779	3.092	25.756	Backwater	0 - 14:49 hrs	8.199	8.199	0.647	1	14.022	1.82	2	2.883	2.883	5.173	0	0	0
0203-457-458	5.5	268.326	0.638	146.455	Backwater	0 - 12:22 hrs	6.164	6.164	0.546	1	121.87	20.016	5.5	2.708	2.708	2.989	0	0	0
0203-458-365	5.5	112.891	0.113	149.615	Exceeds Capacity	0 - 13:23 hrs	6.297	6.297	1.325	1	-36.724	19.975	5.5	2.951	2.989	2.953	2.864	2.95	0
0203-459-460	3.5	120.316	1.43	55.233	Backwater	0 - 12:21 hrs	5.741	5.741	0.459	1	65.083	4.116	3.49	1.467	1.471	2.198	0	1.442	0
0203-460-365	3.5	92.077	0.838	55.232	Backwater	0 - 12:21 hrs	5.741	5.741	0.6	1	36.844	4.111	3.5	2.869	2.869	2.986	0	0.83	0
0203-461-244	5.737	36.296	0.054	173.5	Exceeds Capacity	0 - 13:18 hrs	6.304	6.304	4.78	1	-137.204	24.077	6.184	6.931	6.978	7.087	7.155	6.358	0
0203-462-119	5.737	112.77	0.521	99.933	Free Surface	0 - 14:18 hrs	3.832	4.34	0.886	0.971	12.838	24.119	6.147	0	2.173	0	0	0	0
0203-463-465	3.5	87.513	0.757	62.189	Free Surface	0 - 13:19 hrs	6.836	6.932	0.711	0.897	25.324	11.317	3.499	0	4.737	0	0	0	0
0203-464-463	3	66.062	0.981	62.189	Backwater	0 - 13:19 hrs	8.798	8.798	0.941	1	3.873	11.307	3	4.738	4.738	4.758	0	4.737	0
0203-465-466	4	108.88	0.575	62.188	Free Surface	0 - 13:22 hrs	7.538	7.538	0.571	0.628	46.692	11.334	3.998	0	0	0	0	0	0
0203-466-367	4	154.166	1.152	63.772	Free Surface	0 - 12:19 hrs	6.11	8.109	0.414	0.792	90.394	11.341	3.997	0	0	2.64	0	0	0
0203-467-485	3.94	223.265	0.212	71.912	Backwater	0 - 17:38 hrs	2.657	2.657	0.322	1	151.354	11.462	8.105	6.094	6.102	6.098	0	2.705	0
0203-468-469	3	124.699	3.495	24.904	Backwater	0 - 12:00 hrs	3.523	4.214	0.2	1	99.795	2.844	2.999	2.938	2.938	2.939	0	0.076	1
0203-469-470	3	45.052	0.456	24.903	Backwater	0 - 12:00 hrs	3.523	3.981	0.553	1	20.148	2.848	2.998	2.939	2.939	6.184	0	0	1
0203-470-471	3	35.858	0.289	24.9	Backwater	0 - 12:00 hrs	3.523	3.523	0.694	1	10.958	2.847	2.998	6.184	6.184	6.413	0	1.776	3
0203-471-473	3	98.839	2.196	24.895	Backwater	0 - 12:00 hrs	3.522	3.547	0.252	1	73.944	2.846	2.988	6.413	6.413	6.842	0	0.001	4
0203-472-013	4.033	172.862	0.159	87.94	Free Surface	0 - 14:30 hrs	3.566	3.741	0.509	0.987	84.922	11.523	7.053	0	2.982	0	0	0	0
0203-473-372	3	49.747	0.556	24.892	Backwater	0 - 12:00 hrs	3.522	3.522	0.5	1	24.855	2.845	3	6.842	6.842	6.903	0	0.003	2
0203-474-242	3	65.121	0.953	49.565	Backwater	0 - 12:21 hrs	7.012	7.012	0.761	1	15.556	2.543	2.998	1.799	1.799	1.979	0	0.784	0
0203-475-476	3	58.078	0.758	32.183	Backwater	0 - 14:18 hrs	4.553	4.553	0.554	1	25.896	2.863	3	2.46	2.473	2.464	0	2.451	1
0203-476-359	3	24.18	0.131	32.193	Exceeds Capacity	0 - 14:18 hrs	4.554	4.554	1.331	1	-8.013	2.865	3	2.458	2.499	2.705	1.087	2.421	0
0203-477-478	3	55.864	0.702	38.074	Backwater	0 - 11:56 hrs	5.386	6.21	0.682	1	17.79	4.589	3	3.046	3.046	3.065	0	0.009	0
0203-478-479	3	52.374	0.617	38.072	Backwater	0 - 11:56 hrs	5.386	5.386	0.727	1	14.303	4.58	2.999	3.072	3.072	3.637	0	0.002	0
0203-479-480	3	4.209	0.004	38.068	Exceeds Capacity	0 - 11:56 hrs	5.386	5.386	9.045	1	-33.86	4.569	3	3.642	3.683	3.642	7.571	3.642	2
0203-480-342	3	3.562	0.003	38.063	Exceeds Capacity	0 - 11:56 hrs	5.385	5.385	10.687	1	-34.502	4.557	3	3.527	3.642	3.527	8.933	3.527	0
0203-481-482	3	74.134	1.235	61.336	Backwater	0 - 13:15 hrs	8.677	8.677	0.827	1	12.798	13.303	3	5.849	5.849	5.857	0	5.848	0
0203-482-483	3	65.191	0.955	61.336	Free Surface	0 - 13:15 hrs	9.178	9.178	0.941	0.915	3.855	13.297	3	0	5.857	0	0	0	0
0203-483-484	3.5	127.295	1.601	61.336	Free Surface	0 - 13:15 hrs	9.371	9.618	0.482	0.644	65.958	13.301	3.499	0	0	0	0	0	0
0203-484-337	4.5	186.418	0.899	61.336	Free Surface	0 - 13:15 hrs	7.971	7.971	0.329	0.487	125.082	13.313	4.5	0	0	0	0	0	0
0203-485-006	3.9	296.101	0.613	71.933	Backwater	0 - 17:38 hrs	3.192	3.25	0.243	1	224.168	11.477	6.636	5.705	6.106	5.709	0	3.546	0
0203-486-487	5	258.438	0.985	62.67	Free Surface	0 - 12:03 hrs	6.873	7.463	0.242	0.583	195.768	13.316	5	0	0	0	0	0	0
0203-487-488	5	256.983	0.974	66.284	Free Surface	0 - 12:22 hrs	3.747	5.895	0.258	0.885	190.698	13.315	4.998	0	0	1.379	0	0	0
0203-488-491	6	195.36	0.213	214.428	Free Surface	0 - 12:11 hrs	7.62	7.635	1.098	0.999	-19.069	22.845	6	0	1.243	0	0.314	0	0
0203-489-488	3.5	167.486	2.771	52.763	Backwater	0 - 12:11 hrs	5.484	5.484	0.315	1	114.723	0.474	3.499	1.245	1.245	1.277	0	0.467	0
0203-490-489	3.5	116.974	1.352	20.712	Backwater	0 - 12:15 hrs	2.153	3.511	0.177	1	96.262	0.47	3.498	0.988	0.988	1.245	0	0	0
0203-491-221	6	442.205	1.09	211.411	Free Surface	0 - 12:19 hrs	7.505	7.776	0.478	0.999	230.794	22.835	6	0	0	0.222	0	0	0
0203-492-221	3.5	68.221	0.46	57.656	Backwater	0 - 12:15 hrs	5.993	5.993	0.845	1	10.565	1.621	3.5	0.222	0.317	0.222	0	0.222	0
0203-493-421	3	95.492	2.05	15.795	Free Surface	0 - 12:15 hrs	4.619	4.619	0.165	0.487	79.697	0.529	2.998	0	0	0	0	0	0
0203-494-254	4	74.23	0.267	110.387	Exceeds Capacity	0 - 12:32 hrs	8.784	8.784	1.487	1	-36.157	9.429	4	0.992	1.744	0.993	0.989	0.992	0
0203-495-241	2.5	20.372	0.247	31.213	Exceeds Capacity	0 - 12:15 hrs	6.359	6.359	1.532	1	-10.841	1.073	2.5	0.632	0.638	0.727	0.275	0.578	0
0203-496-497	3	50.948	0.583	14.968	Free Surface	0 - 12:15 hrs	2.612	2.612	0.294	0.756	35.98	0.48	2.992	0	0	0	0	0	0
0203-497-498	3	15.612	0.055	14.851	Free Surface	0 - 12:15 hrs	2.498	2.499	0.951	0.784	0.761	0.48	2.999	0	0	0	0	0	0
0203-498-499	3	24.975	0.14	14.801	Free Surface	0 - 12:15 hrs	3.056	3.057	0.593	0.648	10.174	0.48	2.997	0	0	0	0	0	0
0203-499-500	3	51.689	0.601	14.714	Free Surface	0 - 12:15 hrs	5.359	5.359	0.285	0.412	36.975	0.48	2.948	0	0	0	0	0	0
0203-500-200	6.864	1,240.30	3.132	14.697	Free Surface	0 - 12:15 hrs	1.342	1.343	0.012	0.235	1,225.60	0.48	8.547	0	0	0	0	0	0
0203-501-194	3.615	519.532	5.96	14.776	Free Surface	0 - 12:15 hrs	3.164	3.169	0.028	0.186	504.756	0.683	7.936	0	0	0	0	0	0
0203-502-503	3.5	74.926	0.555	55.322	Free Surface	0 - 12:15 hrs	6.104	6.104	0.738	0.893	19.605	2.652	3.499	0	0.118	0	0	0	0
0203-503-504	3.5	106.95	1.13	54.723	Free Surface	0 - 12:15 hrs	7.546	7.771	0.512	0.705	52.227	2.651	3.496	0	0	0	0	0	0
0203-504-198	3.075	230.775	0.995	59.956	Free Surface	0 - 12:15 hrs	1.815	2.267	0.26	0.856	170.819	2.851	20.789	0	0	0.156	0	0	0
0203-505-504	3	58.702	0.775	5.882	Free Surface	0 - 12:15 hrs	1.314	1.959	0.1	0.606	52.82	0.197	2.991	0	0	0	0	0	0
0203-506-430	2.5	30.24	0.544	35.362	Exceeds Capacity	0 - 12:55 hrs	7.204	7.204	1.169	1	-5.123	3.382	2.494	2.718	2.812	2.723	1.736	1.856	0
0203-507-429	8	765.468	0.056	272.202	Free Surface	0 - 13:19 hrs	2.719	2.719	0.356	0.695	493.266	50.746	18	0	0	0	0	0	0
0203-508-509	7.34	1,006.51	1.616	99.681	Free Surface	0 - 12:15 hrs	1.171	2.918	0.099	0.936	906.832	2.599	25.536	0	0	0	0	0	0
0203-509-517	7.66	974.388	1.962	98.146	Free Surface	0 - 12:15 hrs	2.59	2.59	0.101	0.977	876.243	2.596	5.326	0	0	1.288	0	0	0
0203-510-095	3	255.354	14.657	53.201	Backwater	0 - 11:56 hrs	7.526	7.526	0.208	1	202.153	8.851	2.986	4.112	4.112	4.155	0	0	2

Table B-3b. Existing System Analysis - Pipes/Channels
10-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-511-230	2.5	96.373	5.521	19.831	Backwater	0 - 12:32 hrs	4.04	4.04	0.206	1	76.542	2.3	2.5	1.953	1.953	1.962	0	0.001	0
0203-512-231	2.5	51.032	1.548	19.831	Free Surface	0 - 12:32 hrs	6.325	6.529	0.389	0.61	31.202	2.302	2.493	0	0	0	0	0	0
0203-513-229	2	34.719	2.355	20.231	Backwater	0 - 12:00 hrs	6.44	6.44	0.583	1	14.488	2.293	2	1.96	1.96	1.965	0	1.958	1
0203-514-515	3	39.502	0.351	19.831	Free Surface	0 - 12:33 hrs	4.384	4.384	0.502	0.611	19.671	2.303	2.993	0	0	0	0	0	0
0203-515-232	3	84.046	1.588	19.831	Free Surface	0 - 12:33 hrs	5.712	5.74	0.236	0.493	64.215	2.302	2.999	0	0	0	0	0	0
0203-516-393	3.5	136.994	1.854	19.831	Free Surface	0 - 12:36 hrs	3.086	3.086	0.145	0.634	117.163	2.299	3.498	0	0	0	0	0	0
0203-517-048	8.92	861.063	0.529	97.038	Free Surface	0 - 12:15 hrs	1.059	1.088	0.113	0.863	764.026	2.592	23.923	0	0	0	0	0	0
0203-518-519	2.4	58.661	0.743	37.792	Backwater	0 - 12:21 hrs	5.17	5.17	0.644	1	20.869	2.591	3.797	1.17	1.17	1.85	0	1.145	0
0203-519-203	5.134	201.594	1.52	37.784	Free Surface	0 - 12:22 hrs	4.286	4.382	0.187	0.654	163.81	2.616	5.827	0	0	0	0	0	0
0203-520-006	7.17	2,505.53	1.421	199.645	Free Surface	0 - 12:18 hrs	3.854	3.854	0.08	0.376	2,305.89	32.176	26.724	0	0	0	0	0	0
0203-521-526	3.5	87.303	0.753	35.753	Backwater	0 - 12:37 hrs	3.716	3.716	0.41	1	51.55	3.793	3.499	2.273	2.31	2.273	0	2.273	2
0203-522-521	3.5	35.258	0.123	35.754	Exceeds Capacity	0 - 12:44 hrs	3.716	3.716	1.014	1	-0.496	3.795	3.5	2.31	2.343	2.31	1.419	2.308	2
0203-523-524	3.5	68.693	0.466	35.753	Backwater	0 - 12:37 hrs	3.716	3.716	0.52	1	32.94	3.799	3.499	2.354	2.363	2.354	0	2.354	3
0203-524-522	3.5	51.644	0.263	35.756	Backwater	0 - 12:45 hrs	3.716	3.716	0.692	1	15.888	3.798	3.5	2.341	2.354	2.343	0	2.341	3
0203-525-033	16.9	11,949.49	1.886	160.766	Free Surface	0 - 12:18 hrs	5.09	5.132	0.013	0.178	11,788.72	30.252	15.948	0	0	0	0	0	0
0203-526-527	3.5	30.056	0.089	35.753	Free Surface	0 - 12:37 hrs	3.746	3.767	1.19	0.973	-5.697	3.791	3.5	0	2.273	0	2.313	0	0
0203-527-528	3.5	101.622	1.02	35.753	Free Surface	0 - 12:37 hrs	3.753	4.152	0.352	0.968	65.87	3.788	3.5	0	0	0	0	0	0
0203-528-234	4	131.535	0.839	35.752	Free Surface	0 - 12:37 hrs	2.964	3.064	0.272	0.916	95.783	3.785	3.988	0	0	0	0	0	0
0203-529-235	4	77.78	0.293	35.752	Free Surface	0 - 12:37 hrs	3.076	3.076	0.46	0.872	42.028	3.779	3.998	0	0	0	0	0	0
0203-530-001	9.53	528.594	0.062	127.203	Free Surface	0 - 13:07 hrs	0.681	0.734	0.241	0.982	401.391	28.237	27.437	0	0	0.746	0	0	0
0203-531-055	2.5	55.941	1.86	56.128	Exceeds Capacity	0 - 12:15 hrs	11.434	11.434	1.003	1	-0.187	1.781	2.5	0.372	0.372	0.809	0.003	0.231	0
0203-532-580	9.45	2,462.51	1.34	110.247	Free Surface	0 - 16:22 hrs	3.05	3.054	0.045	0.362	2,352.26	42.264	20.334	0	0	0	0	0	0
0203-533-538	3	287.313	0.382	93.528	Free Surface	0 - 13:27 hrs	4.482	4.489	0.326	0.58	193.786	20.049	12	0	0	0	0	0	0
0203-534-535	3	63.109	0.895	23.087	Backwater	0 - 13:41 hrs	3.899	4.606	0.366	1	40.022	5.45	2.999	0.881	1.506	0.881	0	0.881	0
0203-535-542	3	89.294	1.792	31.81	Backwater	0 - 13:41 hrs	4.959	6.933	0.356	1	57.484	5.451	2.974	0.881	0.881	1.674	0	0	0
0203-536-537	3.5	3.806	0.001	84.021	Exceeds Capacity	0 - 12:02 hrs	8.733	8.733	22.077	1	-80.215	11.013	3.499	1.672	2.196	1.672	19.494	1.672	0
0203-537-539	4	126.979	0.781	83.066	Backwater	0 - 12:02 hrs	6.753	6.986	0.654	1	43.913	11.006	3.992	1.634	1.647	1.636	0	1.633	0
0203-538-608	4.87	3,433.72	7.246	93.537	Free Surface	0 - 13:29 hrs	5.809	5.919	0.027	0.31	3,340.19	20.047	12.286	0	0	0	0	0	0
0203-539-540	4	145.306	1.023	80.597	Backwater	0 - 12:37 hrs	6.414	6.414	0.555	1	64.708	10.992	4	1.636	1.636	1.74	0	0	0
0203-540-541	4	152.206	1.123	80.598	Free Surface	0 - 12:37 hrs	7.029	7.811	0.53	0.86	71.608	10.997	4	0	1.747	0	0	0	0
0203-541-543	4	189.82	1.746	80.582	Free Surface	0 - 12:37 hrs	7.027	7.255	0.425	0.86	109.238	10.994	3.995	0	0	1.703	0	0	0
0203-542-536	3.5	129.193	1.649	40.372	Backwater	0 - 13:41 hrs	4.34	4.374	0.312	1	88.822	5.441	3.499	1.658	1.658	2.196	0	0	0
0203-543-544	4	159.361	1.231	80.582	Backwater	0 - 12:37 hrs	6.412	6.412	0.506	1	78.779	10.995	4	1.678	1.703	1.727	0	1.672	0
0203-544-650	4.04	121.062	0.856	80.582	Backwater	0 - 12:37 hrs	3.453	3.453	0.666	1	40.48	10.993	7.247	1.698	1.716	1.705	0	1.631	0
0203-545-251	3.91	3.866	0.001	36.223	Exceeds Capacity	0 - 11:55 hrs	1.445	1.445	9.371	1	-32.357	10.985	7.382	9.163	10.193	9.163	19.286	9.163	0
0203-546-548	3.5	28.097	0.056	33.662	Exceeds Capacity	0 - 11:55 hrs	1.202	1.202	1.198	1	-5.565	10.976	8	10.221	10.232	10.221	9.552	10.221	0
0203-547-600	6.67	1,344.78	0.969	100.431	Free Surface	0 - 12:18 hrs	0.947	1.782	0.075	0.821	1,244.34	20.008	35.142	0	0	0.182	0	0	0
0203-548-651	3.89	111.91	0.698	33.321	Backwater	0 - 15:48 hrs	1.389	1.489	0.298	1	78.589	10.973	7.177	8.58	8.58	8.867	0	0	0
0203-549-633	4.49	145.474	0.523	39.578	Free Surface	0 - 12:33 hrs	2.061	2.062	0.272	0.605	105.897	11.716	7.814	0	0	0	0	0	0
0203-550-638	10.26	9,226.24	2.917	975.172	Free Surface	0 - 13:00 hrs	2.254	2.254	0.106	0.987	8,251.07	179.175	69.83	0	0	1.774	0	0	0
0203-551-550	3.5	380.538	14.306	61.776	Free Surface	0 - 12:17 hrs	6.653	6.727	0.162	0.932	318.762	1.969	3.5	0	0	17.544	0	0	0
0203-552-553	3	16.916	0.609	26.203	Exceeds Capacity	0 - 13:03 hrs	3.707	3.707	1.549	1	-9.286	4.75	3	4.662	4.689	4.663	4.697	4.66	0
0203-553-322	4	109.183	0.578	26.203	Backwater	0 - 13:03 hrs	2.085	2.848	0.24	1	82.98	4.748	4	1.862	1.862	4.752	0	0	0
0203-554-555	3	91.986	1.902	32.615	Free Surface	0 - 12:15 hrs	4.642	6.615	0.355	0.979	59.371	0.955	3	0	0	0.1	0	0	0
0203-555-319	4	59.203	0.17	32.643	Backwater	0 - 12:15 hrs	2.598	2.598	0.551	1	26.56	0.957	3.997	0.165	0.165	0.198	0	0.057	0
0203-556-558	4.5	250.472	1.622	59.925	Free Surface	0 - 12:15 hrs	5.322	5.322	0.239	0.666	190.547	4.924	4.5	0	0	2.811	0	0	0
0203-557-584	14	1,993.65	1.603	448.242	Free Surface	0 - 12:11 hrs	8.628	8.653	0.225	0.627	1,545.41	78.567	6	0	0	0	0	0	0
0203-558-644	17.29	23,504.65	1.58	1,097.25	Free Surface	0 - 12:32 hrs	4.401	4.524	0.047	0.368	22,407.40	193.963	54.3	0	0	0	0	0	0
0203-559-547	8.04	86.352	0.001	94.78	Free Surface	0 - 12:19 hrs	1.39	3.009	1.098	0.538	-8.428	20.02	29.488	0	0	0	4.074	0	0
0203-560-564	4.58	457.706	1.81	365.223	Backwater	0 - 12:18 hrs	7.093	7.093	0.798	1	92.483	21.257	19.156	0.675	0.675	1.448	0	0.674	0
0203-561-565	5	246.32	1.547	242.069	Free Surface	0 - 12:45 hrs	7.516	7.516	0.983	0.805	4.251	21.207	8	0	1.482	0	0	0	3
0203-562-590	4.43	15.809	0.103	51.211	Free Surface	0 - 16:16 hrs	7.491	7.491	3.239	0.708	-35.402	12.14	6.99	0	7.461	0	8.136	0	0
0203-563-562	5.67	87.661	1.863	76.506	Backwater	0 - 12:30 hrs	4.703	4.703	0.873	1	11.154	12.127	3.577	4.454	4.454	6.978	0	2.277	0
0203-564-561	4.58	331.093	0.947	242.069	Backwater	0 - 12:45 hrs	4.701	4.994	0.731	1	89.025	21.173	19.156	1.448	1.448	1.516	0	0	2
0203-565-566	6.13	3,871.66	1.408	242.048	Free Surface	0 - 12:47 hrs	1.845	1.89	0.063	0.53	3,629.62	21.201	68.934	0	0	0	0	0	1
0203-566-567	4.89	320.067	1.093	241.994	Free Surface	0 - 12:48 hrs	5.356	5.426	0.756	0.963	78.073	21.126	18.113	0	0	0	0	0	0
0203-567-568	7.77	909.854	0.572	241.943	Free Surface	0 - 12:49 hrs	4.072	4.072	0.266	0.662	667.911	21.114	21.788	0	0	0	0	0	0
0203-568-569	6.66	552.088	0.267	249.359	Free Surface	0 - 12:19 hrs	4.107	4.311	0.452	0.693	302.73	21.096	24.162	0	0	0	0	0	0
0203-569-570	5.1	1,171.14	0.51	254.863	Free Surface	0 - 14:00 hrs	1.524	2.139	0.218	0.911	916.278	20.972	83.572	0	0	1.745	0	0	0
0203-570-571	4.54	290.106	1.015	214.768	Backwater	0 - 13:40 hrs	4.764	4.764	0.74	1	75.338	21.064	17.729	1.866	1.866	12.18	0	0	0
0203-571-572	7.53	767.629	0.506	222.013	Backwater	0 - 13:47 hrs	1.994	1.994	0.289	1	545.616	20.799	20.731	1.71	1.71	2.616	0	0	0
0203-572-573	10	155.838	0.002	222.555	Free Surface	0 - 13:48 hrs	1.608	1.612	1.428	0.975	-66.717	20.622	15	0	0	0	1.789	0	0
0203-573-574	8.35	39.275	0	728.332	Exceeds Capacity	0 - 12:21 hrs	4.203	4.203	18.545	1	-689.058	61.643	35.504	2.441	2.485	2.441	12.886	2.441	0
0203-574-575	6.44	19.662	0.001	515.279	Exceeds Capacity	0 - 12:53 hrs	5.494	5.494	26.207	1	-495.617	61.645	18.158	12.156	12.181	12.156	18.551	12.156	0
0203-575-383	4.91	96.731	0.063	128.106	Backwater	0 - 11:49 hrs	2.377	2.377	1.324	1	-31.376	44.415	12.036	12.156	12.156	12.792	12.471	0	0
0203-576-577	13.143	8,486.87	3.432	110.245	Free Surface	0 - 16:14 hrs	4.1	4.103	0.013	0.192	8,376.63	42.941	14.973	0	0	0	0	0	0
0203-577-578	13.143	1,842.63	0.162	110.245	Free Surface	0 - 16:15 hrs	3.261	3.333	0.06	0.226	1,732.39	42.876	16.288	0	0	0	0	0	0
0203-578-579	12.6	3,409.35	0.426	110.245	Free Surface	0 - 16:16 hrs	1.748	1.749	0.032	0.274	3,299.11	42.77	23.258	0	0	0	0	0	0
0203-579-247	16	13,470.77	1.049	110.244	Free Surface	0 - 16:20 hrs	1.132	1.132	0.008	0.243	13,360.53	42.547	25	0	0	0	0	0	0
0203-580-582	9.94	1,281.46	0.17	110.254	Free Surface	0 - 16:19 hrs	2.631	3.039	0.086	0.383	1,171.20	42.183	23.652	0	0	0	0	0	0
0203-581-592	3	67.993	1.039	65.745	Backwater	0 - 12:06 hrs	9.346	9.458	0.967	1	2.248	2.686	2.999	0.408	0.545	0.421	0	0.408	0
0203-582-583	8.81	4,032.92	2.092	112.054	Free Surface	0 - 18:02 hrs	1.835	4	0.028	0.562	3,920.87	42.155	31.492	0	0	0	0	0	0
0203-583-584	11.75	15,533.00	2.768	115.627	Free Surface	0 - 18:22 hrs	0.602	1.018	0.007	0.636	15,417.37	42.098	60.071	0	0	0	0	0	0
0203-584-585	13.35	2,358.24	0.069	533.653	Free Surface	0 - 12:15 hrs	1.754	1.815	0.226	0.628	1,824.59	120.552	53.38	0	0	0	0	0	0
0203-585-586	13.32	3,869.75	0.284	531.18	Free Surface	0 - 12:17 hrs	2.232	2.32	0.137	0.624	3,338.57	120.497	43.223	0	0	0	0	0	0
0203-586-587	14.17	4,356.39	0.461	526.147	Free Surface	0 - 12:18 hrs	2.935	3.27	0.121	0.613	3,830.25	120.417	42.211	0	0	0	0	0	0
0203-587-588	13.84	7,989.37	1.179	522.03	Free Surface	0 - 12:27 hrs	1.761	1.889	0.065	0.715	7,467.34	120.291	46.99	0	0	0	0	0	0
0203-588-589	15.24	7,355.74	0.878	520.965	Free Surface	0 - 12:37 hrs	2.273	2.534	0.071	0.616	6,834.77	120.109	43.188	0	0	0	0	0	0
0203-589-612	16.27	3,369.78	0.088	523.012	Free Surface	0 - 12:37 hrs	2.347	2.966	0.155	0.492	2,846.77	119.953	45.438	0	0	0	0	0	0
0203-590-591	2.03	69.27	1.283	51.187	Free Surface	0 - 16:16 hrs	3.817	3.819	0.739	0.955	18.082	12.129	10.387	0	0	7.141	0	0	0
0203-591-593	2.62	73.4	1.343	50.499	Free Surface	0 - 16:32 hrs	5.635	5.635	0.688	0.726	22.901	12.11	6.305	0	3.034	0	0	0	0
0203-592-611	4	95.093	0.438	64.701	Backwater	0 - 12:07 hrs	5.61	5.713	0.68	1	30.392	2.709	4	0.246	0.246	2.482	0	0	0
0203-593-594	3.6	453.849	1.331	50.499	Free Surface	0 - 16:34 hrs	1.525	1.747	0.111	0.665	403.35	12.104	19.649	0	0	7.426	0	0	0
0203-594-595	2.19	35.906	0.524	44.029	Exceeds Capacity	0 - 18:28 hrs	3.354	3.354	1.226	1	-8.122	12.081	11.638	8.123	8.123	8.293	7.795	7.999	0
0203-595-596	3.06	64.797	0.373	44.029	Free Surface	0 - 18:29 hrs	3.036	3.036	0.679	0.778	20.768	12.07	8.147	0	0	0	0	0	0

Table B-3b. Existing System Analysis - Pipes/Channels
10-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-596-597	2.33	73.112	1.685	44.029	Free Surface	0 - 18:30 hrs	3.822	3.822	0.602	0.905	29.084	12.06	10.101	0	0	8.136	0	0	0
0203-597-598	7.08	393.884	0.474	44.028	Free Surface	0 - 18:31 hrs	3.304	3.304	0.112	0.378	349.855	12.054	8.488	0	0	0	0	0	0
0203-598-599	6.15	520.803	0.782	44.19	Free Surface	0 - 12:21 hrs	1.37	2.411	0.085	0.634	476.612	12.044	14.588	0	0	0	0	0	0
0203-599-679	4.583	13.78	0.012	47.249	Exceeds Capacity	0 - 12:19 hrs	1.65	3.151	3.429	1	-33.469	12.036	6.25	0.341	0.62	0.341	9.456	0.341	0
0203-600-601	6.67	1,189.60	0.758	462.61	Backwater	0 - 12:10 hrs	3.017	5.051	0.389	1	726.989	78.59	38.079	0.507	0.507	0.722	0	0	0
0203-601-557	9.29	10,571.93	4.543	452.283	Free Surface	0 - 12:11 hrs	1.272	4.213	0.043	0.9	10,119.64	78.584	69.774	0	0	0.116	0	0	0
0203-602-532	9	3,094.64	0.323	110.246	Free Surface	0 - 16:22 hrs	1.908	1.908	0.036	0.286	2,984.40	42.3	24	0	0	0	0	0	0
0203-603-604	4.549	95.959	0.384	93.53	Backwater	0 - 13:23 hrs	3.516	3.516	0.975	1	2.429	20.096	7.32	0.523	6.032	0.523	0	0.523	0
0203-604-605	4.539	43.632	0.049	93.528	Free Surface	0 - 13:26 hrs	3.128	3.128	2.144	0.935	-49.896	20.086	7.835	0	0.908	0	6.35	0	0
0203-605-606	4.52	148.955	0.689	93.528	Free Surface	0 - 13:26 hrs	4.45	4.45	0.628	0.728	55.427	20.072	7.206	0	0	0	0	0	0
0203-606-607	3.356	295.43	1.499	93.528	Free Surface	0 - 13:27 hrs	3.71	3.71	0.317	0.687	201.902	20.061	12.89	0	0	0	0	0	0
0203-607-533	3.063	600.121	1.062	93.528	Free Surface	0 - 13:27 hrs	4.653	4.671	0.156	0.655	506.593	20.054	11.424	0	0	0	0	0	0
0203-608-609	6.23	920.531	0.657	93.506	Free Surface	0 - 13:30 hrs	5.242	5.351	0.102	0.463	827.026	20.054	8.352	0	0	0	0	0	0
0203-609-610	8.2	2,600.98	0.173	93.817	Free Surface	0 - 13:21 hrs	1.778	1.894	0.036	0.524	2,507.16	20.036	25.228	0	0	0	0	0	0
0203-610-559	8.04	117.505	0.003	94.205	Free Surface	0 - 12:51 hrs	1.615	2.096	0.802	0.547	23.3	20.024	29.877	0	0	0	0	0	0
0203-611-621	15.12	3,023.71	0.281	696.426	Free Surface	0 - 12:22 hrs	3.901	4.061	0.23	0.642	2,327.28	130.67	32.665	0	0	0	0	0	0
0203-612-611	11.76	7,994.65	1.202	641.464	Free Surface	0 - 12:21 hrs	1.857	1.913	0.08	0.769	7,353.18	128.065	57.903	0	0	0	0	0	0
0203-613-614	13.8	4,726.46	0.449	682.43	Free Surface	0 - 12:23 hrs	2.488	2.664	0.144	0.752	4,044.03	130.492	48.619	0	0	0	0	0	0
0203-614-615	14.09	134.302	0	667.943	Free Surface	0 - 12:23 hrs	2.725	2.918	4.973	0.775	-533.641	130.268	42.3	0	0	0	13.832	0	0
0203-615-616	16.66	3,218.90	0.047	648.032	Free Surface	0 - 12:26 hrs	1.686	1.865	0.201	0.65	2,570.87	129.981	65.619	0	0	0	0	0	0
0203-616-617	12.01	1,156.69	0.039	622.958	Free Surface	0 - 12:33 hrs	1.86	2.213	0.539	0.888	533.733	129.567	57.25	0	0	0	0	0	0
0203-617-618	10.93	4,117.66	0.453	658.653	Free Surface	0 - 12:36 hrs	1.634	1.817	0.16	0.98	3,459.01	136.958	53.579	0	0	0.157	0	0	0
0203-618-619	10.66	2,216.36	0.228	655.462	Backwater	0 - 12:55 hrs	1.712	1.975	0.296	1	1,560.90	136.758	60.711	0.761	0.761	1.198	0	0	0
0203-619-620	11.76	1,212.85	0.102	653.845	Free Surface	0 - 12:56 hrs	2.41	3.451	0.539	0.923	559.004	136.508	40.232	0	0	0	0	0	0
0203-620-622	13.9	5,243.80	0.147	653.858	Free Surface	0 - 13:03 hrs	1.159	1.425	0.125	0.735	4,589.94	136.365	64	0	0	0	0	0	0
0203-621-613	13.58	3,962.39	0.558	693.481	Free Surface	0 - 12:22 hrs	3.563	3.776	0.175	0.701	3,268.91	130.63	37.128	0	0	0	0	0	0
0203-622-623	1.76	230.845	0.512	670.925	Exceeds Capacity	0 - 13:00 hrs	8.702	8.702	2.906	1	-440.08	138.687	64.23	16.59	16.59	17.004	7.639	14.208	0
0203-623-676	7.33	4,490.61	0.149	781.399	Free Surface	0 - 13:00 hrs	3.713	3.718	0.174	0.69	3,709.21	148.394	57.185	0	0	0	0	0	0
0203-624-623	4.01	549.756	2.467	110.499	Backwater	0 - 12:49 hrs	2.066	2.15	0.201	1	439.256	9.785	20.41	1.258	1.258	3.712	0	0	0
0203-625-270	11.2	3,720.17	1.794	120.019	Free Surface	0 - 12:07 hrs	1.523	1.824	0.032	0.653	3,600.15	9.765	25.846	0	0	0	0	0	0
0203-626-657	3.86	270.391	1.937	178.435	Backwater	0 - 12:15 hrs	5.415	5.415	0.66	1	91.956	9.809	13.226	1.464	1.465	1.519	0	0.081	0
0203-627-252	6.45	380.355	0.191	53.554	Free Surface	0 - 12:37 hrs	2.71	2.778	0.141	0.384	326.802	4.4	13.535	0	0	0	0	0	0
0203-628-629	6.99	10,583.69	1.162	797.73	Free Surface	0 - 13:00 hrs	4.929	6.007	0.075	0.629	9,785.96	150.651	49.984	0	0	0	0	0	0
0203-629-630	8.41	10,075.58	0.756	882.267	Free Surface	0 - 12:57 hrs	3.82	4.438	0.088	0.773	9,193.31	160.559	50.342	0	0	0	0	0	0
0203-630-268	12.401	1,060.03	0.014	881.954	Free Surface	0 - 12:59 hrs	2.744	2.745	0.832	0.64	178.076	160.238	63.403	0	0	0	0	0	0
0203-631-632	12.016	1,549.05	0.035	927.812	Free Surface	0 - 13:00 hrs	3.459	3.459	0.599	0.604	621.238	165.898	59.93	0	0	0	0	0	0
0203-632-637	9.93	7,174.33	1.141	927.96	Free Surface	0 - 13:00 hrs	4.025	4.117	0.129	0.568	6,246.37	165.723	57.319	0	0	0	0	0	0
0203-633-634	4.51	102.646	0.306	39.57	Free Surface	0 - 12:33 hrs	2.631	2.631	0.385	0.525	63.077	11.713	7.081	0	0	0	0	0	0
0203-634-255	4.56	151.447	0.923	39.557	Free Surface	0 - 12:33 hrs	3.391	3.391	0.261	0.519	111.89	11.709	6.242	0	0	0	0	0	0
0203-635-636	6.75	673.062	1.181	39.27	Free Surface	0 - 12:34 hrs	1.224	2.066	0.058	0.556	633.792	11.703	12.089	0	0	0	0	0	0
0203-636-637	11.29	4,138.85	0.961	38.715	Free Surface	0 - 12:34 hrs	0.428	1.053	0.009	0.449	4,100.14	11.673	28.356	0	0	0	0	0	0
0203-637-550	10.26	9,217.28	2.911	963.074	Free Surface	0 - 13:00 hrs	3.799	3.917	0.104	0.71	8,254.21	177.356	55.728	0	0	0	0	0	0
0203-638-639	17.23	13,754.19	1.014	975.574	Free Surface	0 - 13:02 hrs	3.065	3.069	0.071	0.549	12,778.62	178.993	47.999	0	0	0	0	0	0
0203-639-640	11.92	1,425.16	0.041	1,032.73	Free Surface	0 - 12:37 hrs	4.041	4.111	0.725	0.609	392.434	187.088	47.385	0	0	0	0	0	0
0203-640-641	13.4	6,157.15	0.482	1,032.59	Free Surface	0 - 12:37 hrs	4.094	4.144	0.168	0.516	5,124.57	186.941	51.785	0	0	0	0	0	0
0203-641-642	7.11	1,605.32	0.414	1,032.65	Backwater	0 - 12:40 hrs	4.224	4.224	0.643	1	572.667	186.725	49.661	0.856	0.973	0.856	0	0.856	0
0203-642-643	17.21	1,925.72	0.009	1,044.57	Free Surface	0 - 12:37 hrs	4.257	4.26	0.542	0.348	881.15	187.877	56.702	0	0	0	0	0	0
0203-643-558	17.29	19,135.11	1.047	1,044.61	Free Surface	0 - 12:38 hrs	5.238	5.256	0.055	0.313	18,090.50	187.691	50.68	0	0	0	0	0	0
0203-644-645	22.03	20,938.12	0.668	1,096.67	Free Surface	0 - 12:33 hrs	4.558	4.591	0.052	0.354	19,841.45	193.825	48.144	0	0	0	0	0	0
0203-645-646	23.07	16,084.02	0.29	1,096.16	Free Surface	0 - 12:36 hrs	3.716	3.717	0.068	0.353	14,987.86	193.552	51.981	0	0	0	0	0	0
0203-646-007	23.07	17,808.79	0.355	1,096.11	Free Surface	0 - 12:36 hrs	6.835	6.835	0.062	0.229	16,712.68	193.424	42.11	0	0	0	0	0	0
0203-647-351	3.6	105.916	0.448	65.925	Free Surface	0 - 12:15 hrs	2.833	2.868	0.622	0.904	39.992	1.973	12.015	0	0	0	0	0	0
0203-648-647	3.6	105.904	0.448	42.943	Free Surface	0 - 12:15 hrs	2.044	2.104	0.405	0.845	62.961	1.253	11.616	0	0	0	0	0	0
0203-649-647	4.97	241.168	0.392	25.315	Free Surface	0 - 12:15 hrs	1.306	1.425	0.105	0.544	215.853	0.723	12.376	0	0	0	0	0	0
0203-650-250	4.04	90.812	0.482	80.407	Backwater	0 - 12:29 hrs	3.446	3.446	0.885	1	10.405	10.991	7.247	1.705	1.705	2.008	0	1.664	0
0203-651-248	4.17	61.813	0.13	33.323	Backwater	0 - 15:48 hrs	1.152	1.218	0.539	1	28.49	10.967	8.005	4.035	4.035	8.136	0	0	0
0203-652-653	3	89.924	1.818	70.428	Backwater	0 - 11:57 hrs	9.964	9.964	0.783	1	19.496	7.9	2.976	2.309	2.309	2.338	0	2.306	0
0203-653-654	3.5	89.147	0.785	68.974	Free Surface	0 - 12:36 hrs	8.339	8.355	0.774	0.817	20.173	7.888	3.498	0	2.293	0	0	0	0
0203-654-656	4	192.782	1.801	69.03	Free Surface	0 - 12:00 hrs	7.989	8.119	0.358	0.671	123.752	7.871	3.998	0	0	0	0	0	0
0203-655-661	6	544.482	0.174	148.059	Backwater	0 - 15:33 hrs	2.056	2.056	0.272	1	396.423	33.575	12	6.295	6.298	6.295	0	6.294	0
0203-656-272	4	136.969	0.538	68.944	Free Surface	0 - 12:45 hrs	7.001	7.024	0.503	0.841	68.026	7.87	3.988	0	0	0	0	0	0
0203-657-625	3.86	140.903	0.526	138.966	Backwater	0 - 12:07 hrs	4.217	4.217	0.986	1	1.936	9.748	13.226	1.519	1.519	1.65	0	0.129	0
0203-658-671	4.5	115.357	1.52	110.528	Backwater	0 - 12:45 hrs	4.912	4.912	0.958	1	4.829	9.794	5	1.578	1.618	1.578	0	1.578	0
0203-659-624	3.98	491.176	1.802	110.503	Backwater	0 - 12:48 hrs	4.862	5.396	0.225	1	380.673	9.791	5.812	0.042	0.042	1.294	0	0	0
0203-660-552	3	65.969	0.978	26.203	Backwater	0 - 13:03 hrs	3.707	3.707	0.397	1	39.767	4.75	3	4.687	4.692	4.687	0	4.687	0
0203-661-331	6	229.475	0.292	147.611	Backwater	0 - 16:25 hrs	2.05	2.05	0.643	1	81.864	33.592	12	6.295	6.295	6.306	0	0.002	0
0203-662-663	3.5	64.069	0.406	57.91	Backwater	0 - 12:03 hrs	6.021	6.021	0.904	1	6.159	4.42	3.498	1.349	1.356	1.351	0	1.347	0
0203-663-664	3.5	155.483	2.388	53.549	Backwater	0 - 12:36 hrs	5.566	5.566	0.344	1	101.934	4.419	3.493	1.351	1.351	1.362	0	1.348	0
0203-664-627	3.5	130.884	1.692	53.549	Free Surface	0 - 12:36 hrs	5.94	6.203	0.409	0.894	77.335	4.419	3.5	0	1.362	0	0	0	0
0203-665-673	6	506.09	0.15	147.674	Backwater	0 - 16:27 hrs	2.425	2.575	0.292	1	358.415	33.545	12	0.809	0.928	0.809	0	0.809	0
0203-666-667	3	55.113	0.683	45.97	Backwater	0 - 12:07 hrs	6.503	6.503	0.834	1	9.143	2.629	2.998	0.961	0.962	1.056	0	0.67	0
0203-667-668	3	70.995	1.133	45.97	Backwater	0 - 12:07 hrs	6.503	6.503	0.648	1	25.025	2.631	3	1.06	1.062	1.093	0	0.664	0
0203-668-669	3	88.178	1.748	36.768	Backwater	0 - 12:42 hrs	5.202	5.202	0.417	1	51.41	2.649	3	1.109	1.109	1.127	0	1.065	0
0203-669-670	3	23.852	0.128	36.768	Exceeds Capacity	0 - 12:42 hrs	5.202	5.202	1.541	1	-12.916	2.65	3	1.066	1.127	1.066	1.1	1.065	0
0203-670-252	3.5	2.598	0.001	36.729	Free Surface	0 - 12:42 hrs	4.695	4.695	14.137	0.758	-34.131	2.651	3.497	0	0.79	0	8.248	0	0
0203-671-672	4.5	224.625	0.609	110.528	Backwater	0 - 12:45 hrs	4.912	4.912	0.492	1	114.097	9.792	5	1.484	1.578	1.484	0	1.484	0
0203-672-659	4.5	193.383	0.451	110.528	Free Surface	0 - 12:45 hrs	5.227	5.413	0.572	0.942	82.854	9.791	5	0	1.484	0	0	0	0
0203-673-677	6	624.338	0.228	147.705	Backwater	0 - 16:25 hrs	2.437	2.634	0.237	1	476.633	32.159	12	0.809	0.809	1.096	0	0	0
0203-674-675	4	103.697	0.521	72.882	Backwater	0 - 12:15 hrs	5.8	5.8	0.703	1	30.815	2.448	3.999	0.157	0.298	0.157	0	0.157	0
0203-675-676	4	75.888	0.279	72.884	Free Surface	0 - 12:15 hrs	6.589	6.589	0.96	0.823	3.005	2.444	4	0	0.157	0	0	0	0
0203-676-628	7.33	4,266.06	0.134	797.637	Free Surface	0 - 12:57 hrs	4.517	4.605	0.187	0.609	3,468.42	150.712	56.976	0	0	0	0	0	0
0203-677-679	6	286.566	0.048	149.48	Backwater	0 - 17:59 hrs	2.634	2.711	0.522	1	137.086	32.118	12	1.006	1.096	1.009	0	0.521	0
0203-678-283	3.5	73.608	0.535	66.364	Backwater	0 - 12:25 hrs	6.898	6.898	0.902	1	7.244	6.21	3.48	1.682	1.682	2.467	0	1.681	0
0203-679-600	7.55	1,792.78	0.744	197.615	Free Surface	0 - 17:59 hrs	2.193	2.453	0.11	0.954	1,595.17	44.125	48.125	0	0	0	0	0	0
0203-680-681	3	36.722	0.303	38.699	Exceeds Capacity	0 - 12:00 hrs	5.475	5.475	1.054	1	-1.977	4.241	2.964	2.61	2.694	2.611	0.101	2.61	0

Table B-3b. Existing System Analysis - Pipes/Channels
10-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-681-682	3	60.903	0.834	38.695	Backwater	0 - 12:00 hrs	5.474	5.474	0.635	1	22.208	4.236	2.968	2.627	2.627	2.683	0	0.129	0
0203-682-683	4	80.161	0.311	38.263	Backwater	0 - 12:00 hrs	3.627	3.698	0.477	1	41.898	4.234	3.975	2.448	2.5	2.448	0	2.448	0
0203-683-684	4	120.044	0.698	37.387	Backwater	0 - 12:00 hrs	3.67	4.25	0.311	1	82.657	4.232	3.999	2.448	2.448	2.557	0	0	1
0203-684-685	4	88.644	0.381	35.469	Backwater	0 - 12:06 hrs	2.823	2.886	0.4	1	53.175	4.233	3.992	2.557	2.557	2.712	0	0	1
0203-685-686	4.5	201.454	1.049	35.432	Backwater	0 - 12:06 hrs	2.228	2.228	0.176	1	166.023	4.23	4.499	2.632	2.632	2.652	0	0	3
0203-686-687	4.5	8.888	0.002	35.416	Exceeds Capacity	0 - 12:06 hrs	2.227	2.227	3.985	1	-26.528	4.229	4.5	2.626	2.652	2.626	3.603	2.626	2
0203-687-269	7.321	16.942	0.011	35.074	Free Surface	0 - 12:06 hrs	1.981	2.322	2.07	0.81	-18.132	4.229	4.793	0	0	0	2.883	0	1
0203-688-689	3	20.487	0.094	42.453	Free Surface	0 - 12:15 hrs	6.353	6.362	2.072	0.897	-21.966	1.341	2.999	0	0.303	0	0.408	0	0
0203-689-631	3.333	69.94	0.627	42.711	Free Surface	0 - 12:15 hrs	6.691	6.867	0.611	0.686	27.23	1.328	3.333	0	0	0	0	0	0
CDT-395	3.75	65.819	0.296	58.774	Free Surface	0 - 12:15 hrs	5.359	5.359	0.893	0.975	7.045	3.852	3.75	0	0.619	0	0	0	0

Table B-4a. Existing System Analysis - Nodes
25-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-001	9.869	276.259	Below Maximum Depth	1.921	0 - 12:52 hrs	0	150.919	0	34.956	0.155	4.033	0.339	1.921	0	0	0	0 - 00:00 hrs
0203-002	9.604	277.964	Surcharged	-0.504	0 - 12:15 hrs	44.743	44.743	1.039	1.04	0	19.245	6.604	0	0.002	0.093	1.459	0 - 12:14 hrs
0203-003	7.421	276.381	Below Link Crown	2.449	0 - 12:52 hrs	0	148.157	0	34.094	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-004	8.485	278.825	Below Maximum Depth	0.145	0 - 12:45 hrs	175.57	175.57	5.922	34.176	0.018	3.855	0.425	0.145	0	0	0	0 - 00:00 hrs
0203-005	7.256	281.606	Surcharged	-3.006	0 - 12:18 hrs	420.713	420.713	11.416	26.073	0.003	13.92	3.086	0	1.208	6.956	144.075	0 - 12:10 hrs
0203-006	6.158	281.108	Surcharged	-1.988	0 - 12:19 hrs	0	88.809	0	15.419	0.002	12.641	1.988	0	0.049	6.32	6.867	0 - 12:03 hrs
0203-007	3.296	284.876	Below Link Crown	0.454	0 - 15:14 hrs	0	89.649	0	13.844	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-008	3.898	285.978	Below Maximum Depth	2.072	0 - 15:14 hrs	0	89.65	0	13.848	0.001	4.321	0.148	2.072	0	0	0	0 - 00:00 hrs
0203-009	5.132	280.732	Surcharged	-0.792	0 - 15:53 hrs	0	66.933	0	14.011	0.001	16.191	1.052	0	0.025	7.57	2.168	0 - 11:55 hrs
0203-010	4.541	286.741	Below Link Crown	0.859	0 - 15:14 hrs	0	89.652	0	13.852	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-011	2.917	292.627	Below Link Crown	1.003	0 - 15:11 hrs	0	89.657	0	13.837	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-012	3.556	293.696	Below Maximum Depth	1.994	0 - 15:11 hrs	0	89.657	0	13.833	0.001	4.714	0.156	1.994	0	0	0	0 - 00:00 hrs
0203-013	4.029	294.789	Below Link Crown	0.011	0 - 15:11 hrs	0	89.66	0	13.83	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-014	6.431	298.041	Below Maximum Depth	0.769	0 - 14:18 hrs	0	104.032	0	13.883	0.001	6.467	0.931	0.769	0	0	0	0 - 00:00 hrs
0203-015	5.444	298.944	Below Link Crown	2.796	0 - 14:11 hrs	0	104.042	0	13.882	-0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-016	7.905	315.385	Below Maximum Depth	4.415	0 - 14:11 hrs	0	62.794	0	6.967	-0.001	5.289	3.975	4.415	0	0	0	0 - 00:00 hrs
0203-017	5.751	297.161	Surcharged	-0.251	0 - 14:37 hrs	0	104.031	0	13.904	0.001	5.002	0.251	0	0.128	2.5	3.403	0 - 13:11 hrs
0203-018	5.145	296.265	Surcharged	-0.765	0 - 15:04 hrs	0	103.238	0	13.915	0.002	7.807	1.11	0	0.6	3.767	21.716	0 - 11:56 hrs
0203-019	6.069	321.989	Surcharged	-0.669	0 - 12:37 hrs	105.723	105.723	3.117	3.118	0	5.223	3.069	0	0.592	2.609	77.984	0 - 12:15 hrs
0203-020	6.835	321.345	Surcharged	-0.485	0 - 13:07 hrs	0	41.886	0	3.127	0.001	5.243	3.835	0	0.083	2.114	6.598	0 - 12:22 hrs
0203-021	6.37	320.81	Surcharged	-0.15	0 - 13:06 hrs	0	41.712	0	3.134	0.001	5.223	3.3	0	0.006	1.17	0.778	0 - 12:37 hrs
0203-022	2.465	271.455	Below Link Crown	8.545	0 - 12:15 hrs	0	184.412	0	36.408	0.019	0	0	0	0	0	0	0 - 00:00 hrs
0203-023	7.584	319.994	Surcharged	-0.794	0 - 12:57 hrs	0	40.954	0	3.172	0	5.267	4.434	0	0.356	2.292	32.507	0 - 12:15 hrs
0203-024	7.86	319.75	Surcharged	-0.58	0 - 12:22 hrs	135.902	135.902	3.834	7.01	0.003	4.735	4.65	0	0.367	1.425	64.209	0 - 12:15 hrs
0203-025	5.74	311.67	Surcharged	-0.8	0 - 13:08 hrs	0	62.794	0	6.956	0.001	5.367	2.24	0	0.099	2.226	5.655	0 - 12:19 hrs
0203-026	4.302	309.782	Below Maximum Depth	0.918	0 - 13:00 hrs	0	61.069	0	6.952	0.001	4.392	0.792	0.918	0	0	0	0 - 00:00 hrs
0203-027	6.077	306.257	Below Maximum Depth	1.453	0 - 12:34 hrs	0	59.798	0	6.942	0.002	4.739	2.077	1.453	0	0	0	0 - 00:00 hrs
0203-028	5.389	305.219	Below Maximum Depth	2.301	0 - 12:34 hrs	0	59.798	0	6.94	0.001	4.456	0.889	2.301	0	0	0	0 - 00:00 hrs
0203-029	7.337	304.227	Surcharged	-0.887	0 - 12:33 hrs	0	95.468	0	7.196	0.003	5.276	2.837	0	0.886	2.307	95.468	0 - 12:15 hrs
0203-030	7.395	304.205	Below Link Crown	0.295	0 - 12:17 hrs	0	79.519	0	7.455	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-031	3.893	272.893	Below Link Crown	4.437	0 - 12:15 hrs	54.798	54.798	1.6	1.6	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-032	6.812	274.942	Surcharged	-0.682	0 - 12:19 hrs	92.146	92.146	2.309	2.31	0	2.256	4.312	0	0.297	0.949	52.392	0 - 12:15 hrs
0203-033	3.187	265.197	Below Link Crown	13.803	0 - 12:18 hrs	0	220.521	0	38.658	0.01	0	0	0	0	0	0	0 - 00:00 hrs
0203-034	4.799	281.169	Surcharged	-0.719	0 - 15:57 hrs	0	98.851	0	13.921	-0.003	16.144	0.719	0	5.235	8.068	98.851	0 - 12:33 hrs
0203-035	2.095	287.285	Below Link Crown	3.296	0 - 15:14 hrs	0	89.656	0	13.849	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-036	3.533	289.953	Below Link Crown	1.807	0 - 15:12 hrs	0	89.655	0	13.848	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-037	8.307	304.247	Surcharged	-0.647	0 - 12:17 hrs	262.966	262.966	6.914	14.117	0.001	1.012	0.647	0	0.261	0.505	63.501	0 - 12:15 hrs
0203-038	5.646	300.316	Surcharged	-0.616	0 - 13:41 hrs	0	162.768	0	13.802	0.003	6.312	0.646	0	1.221	3.156	60.68	0 - 12:15 hrs
0203-039	2.686	290.936	Below Link Crown	1.197	0 - 15:12 hrs	0	89.656	0	13.842	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-040	2.786	283.146	Below Link Crown	1.334	0 - 15:18 hrs	0	89.65	0	13.838	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-041	5.519	279.719	Surcharged	-1.459	0 - 13:18 hrs	0	196.649	0	25.256	0.002	13.168	1.459	0	1.278	6.583	102.577	0 - 12:18 hrs
0203-042	5.689	279.369	Surcharged	-1.529	0 - 13:23 hrs	0	156.221	0	25.522	0.001	13.312	1.529	0	1.707	6.655	156.221	0 - 12:15 hrs
0203-043	7.033	278.903	Below Link Crown	1.597	0 - 12:49 hrs	0	109.844	0	25.779	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-044	7.414	278.894	Below Link Crown	1.256	0 - 12:48 hrs	0	107.532	0	25.791	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-045	7.373	278.883	Below Link Crown	3.547	0 - 12:48 hrs	0	103.524	0	25.826	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-046	8.108	278.878	Below Link Crown	8.822	0 - 12:48 hrs	0	102.755	0	25.915	0.042	0	0	0	0	0	0	0 - 00:00 hrs
0203-047	7.37	278.86	Below Link Crown	9.54	0 - 12:45 hrs	0	105.133	0	26.02	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-048	7.925	278.855	Below Link Crown	1.095	0 - 12:45 hrs	0	118.323	0	28.717	0.018	0	0	0	0	0	0	0 - 00:00 hrs
0203-049	8.455	278.845	Surcharged	-0.395	0 - 12:45 hrs	0	109.64	0	28.282	0.019	3.791	0.395	0	0.065	1.895	33.031	0 - 12:14 hrs
0203-050	8.466	278.836	Surcharged	-0.406	0 - 12:45 hrs	0	110.078	0	28.313	0.022	3.809	0.406	0	0.03	1.905	17.566	0 - 12:15 hrs
0203-051	8.169	276.349	Below Link Crown	1.361	0 - 12:52 hrs	0	145.604	0	34.091	0.024	0	0	0	0	0	0	0 - 00:00 hrs
0203-052	6.762	316.555	Below Maximum Depth	1.245	0 - 12:03 hrs	30.638	30.638	0.896	0.896	0	2.355	3.762	1.245	0	0	0	0 - 00:00 hrs
0203-053	6.745	315.758	Below Maximum Depth	0.942	0 - 12:03 hrs	0	30.629	0	0.896	0	2.359	3.615	0.942	0	0	0	0 - 00:00 hrs
0203-054	6.051	314.951	Below Maximum Depth	0.738	0 - 12:03 hrs	0	30.634	0	0.897	0	2.36	3.051	0.738	0	0	0	0 - 00:00 hrs
0203-055	5.997	313.464	Surcharged	-0.464	0 - 12:23 hrs	0	87.183	0	3.117	0	2.442	2.497	0	0.287	1.176	42.68	0 - 12:15 hrs
0203-056	6.409	312.359	Surcharged	-0.059	0 - 12:32 hrs	0	45.583	0	3.088	0	2.493	2.738	0	0.004	0.469	1.317	0 - 12:21 hrs
0203-057	6.428	311.026	Surcharged	-0.376	0 - 12:30 hrs	0	44.645	0	3.252	0	2.556	2.778	0	0.086	1.215	14.075	0 - 12:15 hrs
0203-058	6.474	310.095	Below Maximum Depth	0.174	0 - 12:15 hrs	0	49.589	0	3.483	0	2.567	2.974	0.174	0	0	0	0 - 00:00 hrs
0203-059	5.338	310.108	Below Maximum Depth	0.492	0 - 12:15 hrs	0	8.721	0	0.33	0	2.466	2.281	0.492	0	0	0	0 - 00:00 hrs
0203-060	3.054	310.964	Below Link Crown	6.517	0 - 12:15 hrs	0	36.347	0	4.741	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-061	3.894	310.262	Below Maximum Depth	4.539	0 - 12:15 hrs	0	36.526	0	4.74	0	0.239	0.394	4.539	0	0	0	0 - 00:00 hrs
0203-062	7.26	308.15	Below Maximum Depth	7.165	0 - 12:14 hrs	0	102.826	0	9.622	0.002	2.096	2.05	7.165	0	0	0	0 - 00:00 hrs
0203-063	7.12	306.385	Below Maximum Depth	16.629	0 - 12:15 hrs	0	102.394	0	9.622	0.007	2.367	1.802	16.629	0	0	0	0 - 00:00 hrs
0203-064	6.221	304.595	Below Maximum Depth	15.985	0 - 12:15 hrs	0	101.791	0	9.613	-0.002	1.219	1.108	15.985	0	0	0	0 - 00:00 hrs
0203-065	6.586	302.617	Below Maximum Depth	7.683	0 - 12:15 hrs	0	101.788	0	9.608	0.002	2.63	1.586	7.683	0	0	0	0 - 00:00 hrs
0203-066	5.498	301.254	Below Maximum Depth	7.287	0 - 12:15 hrs	0	101.788	0	9.608	0.001	1.014	0.498	7.287	0	0	0	0 - 00:00 hrs
0203-067	4.654	299.698	Below Link Crown	4.202	0 - 12:15 hrs	0	101.788	0	9.606	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-068	0.766	304.509	Below Link Crown	2.391	0 - 12:15 hrs	0	24.172	0	0.7	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-069	2.219	306.707	Below Link Crown	0.893	0 - 12:15 hrs	0	25.08	0	0.7	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-070	2.349	295.326	Below Link Crown	10.574	0 - 12:19 hrs	0	223.219	0	27.093	0.05	0	0	0	0	0	0	0 - 00:00 hrs
0203-071	2.316	311.827	Below Link Crown	2.159	0 - 12:15 hrs	0	36.301	0	4.741	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-072	2.83	311.359	Below Link Crown	4.341	0 - 12:06 hrs	13.587	13.587	0.571	0.571	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-073	4.257	311.152	Below Link Crown	4.314	0 - 12:06 hrs	0	19.96	0	0.608	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-074	4.248	311.143	Below Link Crown	2.869	0 - 12:40 hrs	0	27.293	0	0.634	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-075	5.447	311.139	Below Maximum Depth	2.525	0 - 12:40 hrs	0	29.967	0	0.649	0	3.72	0.3	2.525	0	0	0	0 - 00:00 hrs
0203-076	7.823	311.134	Surcharged	-0.524	0 - 12:38 hrs	0	93.81	0	6.585	0	5.369	1.733	0	0.529	2.615	48.456	0 - 12:07 hrs
0203-077	3.58	311.231	Below Link Crown	3.369	0 - 12:06 hrs	0	14.908	0	0.578	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-078	6.87	309.942	Below Maximum Depth	0.13	0 - 12:38 hrs	0	46.419	0	6.566	0	5.668	3.37	0.13	0	0	0	0 - 00:00 hrs
0203-079	7.053	308.442	Below Maximum Depth	1.419	0 - 12:38 hrs	0	46.419	0	6.565	0.001	5.855	3.553	1.419	0	0	0	0 - 00:00 hrs
0203-080	5.994	307.287	Below Maximum Depth	2.036	0 - 12:38 hrs	0	46.419	0	6.565	0	5.696	2.494	2.036	0	0	0	0 - 00:00 hrs
0203-081	6.056	305.756	Below Maximum Depth	1.498	0 - 12:40 hrs	0	46.419	0	6.564	0.001	5.973	2.55	1.498	0	0	0	0 - 00:00 hrs
0203-082	5.07	304.617	Below Maximum Depth	1.806	0 - 12:40 hrs	0	46.419	0	6.563	0	5.748	1.54	1.806	0	0	0	0 - 00:00 hrs
0203-083	3.941	303.488	Below Link Crown	1.012	0 - 12:40 hrs	0	46.419	0	6.563	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-084	4.459	302.712	Below Maximum Depth	4.032	0 - 12:17 hrs	0	46.419	0	6.563	0	5.323	0.333	4.032	0	0	0	0 - 00:00 hrs
0203-085	3.635	301.272	Below Link Crown	5.578	0 - 12:15 hrs	0	46.42	0	6.563	0	0	0	0	0	0	0	0 - 00:00 hrs

Table B-4a. Existing System Analysis - Nodes
25-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-086	3.15	300.228	Below Link Crown	5.007	0 - 12:15 hrs	0	46.42	0	6.561	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-087	3.994	299.477	Below Link Crown	3.123	0 - 12:15 hrs	0	54.912	0	6.816	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-088	3.55	306.662	Below Maximum Depth	2.646	0 - 12:15 hrs	41.509	41.509	1.577	1.578	0	0.04	0.55	2.646	0	0	0	0 - 00:00 hrs
0203-089	4.154	304.442	Below Maximum Depth	3.193	0 - 12:15 hrs	0	41.506	0	1.577	0	0.121	0.669	3.193	0	0	0	0 - 00:00 hrs
0203-090	3.182	302.275	Below Maximum Depth	4.07	0 - 12:15 hrs	0	41.519	0	1.578	0.001	0.026	0.182	4.07	0	0	0	0 - 00:00 hrs
0203-091	2.496	299.576	Below Link Crown	4.761	0 - 12:15 hrs	0	41.556	0	2.042	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-092	3.151	298.54	Below Link Crown	4.66	0 - 12:15 hrs	0	54.813	0	6.351	0.009	0	0	0	0	0	0	0 - 00:00 hrs
0203-093	3.465	297.884	Below Link Crown	2.516	0 - 12:15 hrs	0	31.176	0	1.785	-0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-094	2.486	296.539	Below Link Crown	4.161	0 - 12:18 hrs	0	85.389	0	8.125	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-095	5.33	273.13	Below Maximum Depth	2.17	0 - 13:29 hrs	0	53.755	0	10.632	0.002	10.401	1.83	2.17	0	0	0	0 - 00:00 hrs
0203-096	4.826	271.226	Below Maximum Depth	1.874	0 - 13:29 hrs	0	53.728	0	10.632	0	10.393	1.296	1.874	0	0	0	0 - 00:00 hrs
0203-097	4.66	269.31	Below Maximum Depth	1.99	0 - 13:29 hrs	0	53.729	0	10.627	0.002	10.373	0.66	1.99	0	0	0	0 - 00:00 hrs
0203-098	4.404	268.284	Below Maximum Depth	2.216	0 - 13:30 hrs	0	53.351	0	10.619	0.001	10.316	0.334	2.216	0	0	0	0 - 00:00 hrs
0203-099	3.96	267.28	Below Link Crown	2.32	0 - 13:30 hrs	0	53.351	0	10.613	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-100	4.004	266.104	Below Maximum Depth	2.796	0 - 13:30 hrs	0	53.351	0	10.606	0.003	1.841	0.004	2.796	0	0	0	0 - 00:00 hrs
0203-101	3.501	264.931	Below Link Crown	3.569	0 - 13:30 hrs	0	53.351	0	10.6	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-102	2.891	263.551	Below Link Crown	3.749	0 - 13:32 hrs	0	53.351	0	10.594	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-103	3.102	262.492	Below Link Crown	4.278	0 - 13:34 hrs	0	53.351	0	10.589	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-104	2.813	261.26	Below Link Crown	4.58	0 - 14:17 hrs	0	53.35	0	10.586	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-105	3.561	292.581	Surcharged	-0.681	0 - 12:48 hrs	91.672	91.672	2.313	2.314	0	6.707	1.561	0	0.645	3.314	75.868	0 - 12:15 hrs
0203-106	2.732	291.15	Below Maximum Depth	2.13	0 - 12:30 hrs	0	17.549	0	2.304	0	5.574	0.732	2.13	0	0	0	0 - 00:00 hrs
0203-107	3.817	285.207	Below Maximum Depth	0.383	0 - 12:18 hrs	0	17.556	0	2.32	0	6.548	1.817	0.383	0	0	0	0 - 00:00 hrs
0203-108	4.036	283.406	Below Maximum Depth	1.294	0 - 12:18 hrs	0	17.56	0	2.322	0	3.222	1.536	1.294	0	0	0	0 - 00:00 hrs
0203-109	2.197	245.43	Below Link Crown	18.67	0 - 13:18 hrs	0	338.045	0	48.201	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-110	2.91	247.729	Below Link Crown	17.971	0 - 13:18 hrs	0	338.05	0	48.203	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-111	2.563	249.96	Below Link Crown	14.14	0 - 13:18 hrs	0	338.055	0	48.206	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-112	7.667	262.769	Surcharged	-0.269	0 - 13:48 hrs	0	286.629	0	38.685	0.023	5.381	0.346	0	1.898	2.688	51.543	0 - 12:41 hrs
0203-113	10.34	272.106	Surcharged	-1.506	0 - 12:25 hrs	0	364.501	0	35.357	0.016	3.349	1.876	0	0.232	1.655	62.565	0 - 12:10 hrs
0203-114	5.612	276.019	Below Link Crown	1.418	0 - 12:19 hrs	0	277.875	0	31.304	0.014	0	0	0	0	0	0	0 - 00:00 hrs
0203-115	7.982	283.789	Below Link Crown	1.168	0 - 12:18 hrs	0	263.718	0	29.032	0.028	0	0	0	0	0	0	0 - 00:00 hrs
0203-116	4.955	284.085	Below Link Crown	5.005	0 - 12:18 hrs	0	266.546	0	29.042	0.009	0	0	0	0	0	0	0 - 00:00 hrs
0203-117	5.78	285.846	Below Link Crown	1.165	0 - 12:17 hrs	0	266.978	0	29.046	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-118	6.791	273.454	Below Link Crown	1.812	0 - 15:41 hrs	0	199.181	0	55.777	0.022	0	0	0	0	0	0	0 - 00:00 hrs
0203-119	5.74	285.995	Below Link Crown	1.596	0 - 12:51 hrs	0	102.07	0	28.982	0.028	0	0	0	0	0	0	0 - 00:00 hrs
0203-120	6.853	255.635	Below Link Crown	15.665	0 - 12:26 hrs	0	293.126	0	14.886	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-121	3.828	255.913	Below Link Crown	13.987	0 - 12:26 hrs	0	293.535	0	14.887	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-122	5.192	257.492	Below Link Crown	20.148	0 - 12:25 hrs	0	293.954	0	14.903	0.015	0	0	0	0	0	0	0 - 00:00 hrs
0203-123	5.571	257.971	Below Link Crown	19.669	0 - 12:25 hrs	0	294.261	0	14.917	0.013	0	0	0	0	0	0	0 - 00:00 hrs
0203-124	6.04	259.173	Below Link Crown	1.927	0 - 12:23 hrs	0	295.054	0	14.918	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-125	2.057	266.087	Below Link Crown	4.667	0 - 12:22 hrs	0	117.639	0	3.089	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-126	3.583	268.481	Below Link Crown	2.591	0 - 12:22 hrs	0	117.684	0	3.09	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-127	2.285	270.062	Below Link Crown	2.247	0 - 12:22 hrs	0	117.823	0	3.097	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-128	4.96	272.5	Below Maximum Depth	0	0 - 12:18 hrs	159.162	159.162	5.047	5.361	0	0.22	0.099	0	0.009	0.043	9.942	0 - 12:19 hrs
0203-129	5.074	272.612	Below Maximum Depth	0.388	0 - 12:18 hrs	56.017	95.542	1.848	4.087	0.022	0.263	0.213	0.388	0	0	0	0 - 00:00 hrs
0203-130	5.581	260.067	Below Link Crown	2.355	0 - 12:23 hrs	0	178.095	0	11.832	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-131	5.927	260.863	Below Link Crown	2.237	0 - 12:22 hrs	0	179.725	0	11.841	0.01	0	0	0	0	0	0	0 - 00:00 hrs
0203-132	5.321	263.223	Below Link Crown	2.777	0 - 12:18 hrs	0	179.875	0	11.85	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-133	5.321	265.411	Below Link Crown	1.494	0 - 12:17 hrs	0	180.071	0	11.853	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-134	5.029	269.729	Surcharged	-0.496	0 - 12:32 hrs	0	207.559	0	7.442	0.01	2.095	0.496	0	0.985	1.046	178.192	0 - 12:15 hrs
0203-135	2.426	265.666	Below Link Crown	6.734	0 - 12:37 hrs	0	73.958	0	4.396	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-136	3.388	273.528	Below Link Crown	3.472	0 - 12:34 hrs	0	74.854	0	4.42	0.02	0	0	0	0	0	0	0 - 00:00 hrs
0203-137	3.705	273.845	Below Link Crown	3.155	0 - 12:33 hrs	0	81.606	0	4.459	0.039	0	0	0	0	0	0	0 - 00:00 hrs
0203-138	3.34	274.02	Below Link Crown	2.98	0 - 12:32 hrs	0	90.41	0	4.465	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-139	4.149	276.199	Below Link Crown	4.901	0 - 12:19 hrs	0	22.772	0	0.794	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-140	4.039	276.199	Below Link Crown	5.001	0 - 12:19 hrs	0	20.497	0	0.782	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-141	3.266	276.206	Below Link Crown	5.394	0 - 12:18 hrs	0	24.609	0	0.785	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-142	2.044	276.252	Below Link Crown	6.558	0 - 12:18 hrs	28.305	28.305	0.781	0.782	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-143	1.622	252.892	Below Link Crown	24.72	0 - 13:25 hrs	0	280.669	0	63.066	0.051	0	0	0	0	0	0	0 - 00:00 hrs
0203-144	1.992	253.262	Below Link Crown	24.35	0 - 13:23 hrs	0	280.682	0	63.122	0.051	0	0	0	0	0	0	0 - 00:00 hrs
0203-145	6.667	258.277	Below Link Crown	12.073	0 - 13:22 hrs	0	280.68	0	63.189	0.07	0	0	0	0	0	0	0 - 00:00 hrs
0203-146	6.95	258.56	Below Link Crown	3.26	0 - 13:22 hrs	0	280.683	0	63.225	0.036	0	0	0	0	0	0	0 - 00:00 hrs
0203-147	6.9	258.76	Below Link Crown	8.64	0 - 13:22 hrs	0	280.685	0	63.242	0.017	0	0	0	0	0	0	0 - 00:00 hrs
0203-148	7.376	259.236	Below Link Crown	8.164	0 - 13:22 hrs	0	280.689	0	63.261	0.019	0	0	0	0	0	0	0 - 00:00 hrs
0203-149	7.454	259.464	Below Link Crown	7.64	0 - 13:22 hrs	0	280.694	0	63.282	0.02	0	0	0	0	0	0	0 - 00:00 hrs
0203-150	7.593	259.603	Below Link Crown	0.797	0 - 13:22 hrs	0	280.702	0	63.301	0.018	0	0	0	0	0	0	0 - 00:00 hrs
0203-151	6.948	259.738	Below Link Crown	10.162	0 - 13:22 hrs	0	280.733	0	63.336	0.034	0	0	0	0	0	0	0 - 00:00 hrs
0203-152	7.231	260.481	Below Link Crown	9.606	0 - 13:21 hrs	0	280.765	0	63.369	0.032	0	0	0	0	0	0	0 - 00:00 hrs
0203-153	7.526	260.856	Below Link Crown	0.482	0 - 13:19 hrs	0	280.787	0	63.391	0.021	0	0	0	0	0	0	0 - 00:00 hrs
0203-154	7.822	261.152	Below Link Crown	2.348	0 - 13:19 hrs	0	280.833	0	63.42	0.029	0	0	0	0	0	0	0 - 00:00 hrs
0203-155	8.038	261.368	Below Link Crown	2.232	0 - 13:18 hrs	0	280.886	0	63.447	0.028	0	0	0	0	0	0	0 - 00:00 hrs
0203-156	7.486	261.616	Below Link Crown	3.884	0 - 13:18 hrs	0	280.915	0	63.458	0.012	0	0	0	0	0	0	0 - 00:00 hrs
0203-157	7.846	261.976	Below Link Crown	11.624	0 - 13:18 hrs	0	280.938	0	63.466	0.009	0	0	0	0	0	0	0 - 00:00 hrs
0203-158	8.095	262.225	Below Link Crown	11.375	0 - 13:18 hrs	0	281.03	0	63.491	0.028	0	0	0	0	0	0	0 - 00:00 hrs
0203-159	8.187	262.317	Below Link Crown	1.783	0 - 13:17 hrs	0	281.199	0	63.522	0.035	0	0	0	0	0	0	0 - 00:00 hrs
0203-160	7.195	262.433	Below Link Crown	0.667	0 - 13:17 hrs	0	281.314	0	63.543	0.022	0	0	0	0	0	0	0 - 00:00 hrs
0203-161	3.189	262.787	Below Link Crown	4.713	0 - 13:15 hrs	0	281.553	0	63.572	0.02	0	0	0	0	0	0	0 - 00:00 hrs
0203-162	3.841	267.452	Below Link Crown	8.348	0 - 12:17 hrs	0	281.384	0	63.631	0.058	0	0	0	0	0	0	0 - 00:00 hrs
0203-163	4.722	272.724	Below Link Crown	3.836	0 - 16:07 hrs	0	259.574	0	59.035	0.044	0	0	0	0	0	0	0 - 00:00 hrs
0203-164	4.844	275.346	Below Link Crown	3.226	0 - 16:10 hrs	0	259.575	0	59.062	0.024	0	0	0	0	0	0	0 - 00:00 hrs
0203-165	7.294	278.294	Below Link Crown	4.456	0 - 16:09 hrs	0	259.575	0	59.123	0.05	0	0	0	0	0	0	0 - 00:00 hrs
0203-166	7.488	280.399	Below Link Crown	0.701	0 - 16:08 hrs	0	259.577	0	59.18	0.039	0	0	0	0	0	0	0 - 00:00 hrs
0203-167	8.93	281.93	Surcharged	-0.729	0 - 16:08 hrs	0	259.592	0	59.209	0.028	11.814	0.786	0	0.045	5.886	2.725	0 - 12:27 hrs
0203-168	8.71	283.368	Surcharged	-0.468	0 - 16:07 hrs	0	259.632	0	59.183	0.023	10.87	0.566	0	0.04	5.362	3.225	0 - 12:53 hrs
0203-169	5.58	284.07	Surcharged	-0.348	0 - 16:07 hrs	0	280.566	0	59.285	0.008	11.525	1.044	0	1.422	5.183	26.415	0 - 13:48 hrs
0203-170	5.91	284.559	Below Link Crown	4.441	0 - 15:51 hrs	0	211.548	0	43.212	0.014	0	0	0	0	0	0	0 - 00:00 hrs

Table B-4a. Existing System Analysis - Nodes
25-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-171	6.463	285.613	Below Link Crown	0.487	0 - 15:22 hrs	0	211.706	0	43.238	0.022	0	0	0	0	0	0	0 - 00:00 hrs
0203-172	6.014	285.786	Below Link Crown	0.914	0 - 15:19 hrs	0	211.975	0	43.249	0.036	0	0	0	0	0	0	0 - 00:00 hrs
0203-173	5.808	288.182	Surcharged	-1.282	0 - 14:22 hrs	0	290.317	0	43.394	0.013	11.125	1.311	0	2.707	5.55	98.628	0 - 12:33 hrs
0203-174	5.637	284.13	Surcharged	-1.03	0 - 16:07 hrs	0	106.472	0	16.046	0.004	11.667	1.104	0	0.141	5.791	8.6	0 - 12:40 hrs
0203-175	4.721	284.399	Surcharged	-0.195	0 - 15:21 hrs	0	103.94	0	16.053	0.003	9.951	0.195	0	0.148	4.974	5.254	0 - 13:27 hrs
0203-176	4.7	284.464	Surcharged	-0.195	0 - 14:59 hrs	0	103.273	0	16.047	0	10.235	0.195	0	0.493	5.117	18.474	0 - 13:22 hrs
0203-177	5.729	284.618	Surcharged	-1.218	0 - 14:11 hrs	0	148.243	0	16.09	0.017	13.441	1.245	0	1.574	6.719	85.446	0 - 12:32 hrs
0203-178	4.283	284.809	Below Link Crown	0.201	0 - 13:22 hrs	0	149.785	0	16.092	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-179	3.827	285.503	Below Link Crown	7.697	0 - 12:34 hrs	0	150.428	0	16.102	0.009	0	0	0	0	0	0	0 - 00:00 hrs
0203-180	4.103	285.779	Below Link Crown	7.421	0 - 12:34 hrs	0	151.371	0	16.109	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-181	3.889	286.518	Below Link Crown	4.682	0 - 12:32 hrs	0	155.863	0	16.122	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-182	4.114	286.886	Below Link Crown	4.457	0 - 12:30 hrs	0	157.35	0	16.13	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-183	4.541	287.104	Below Link Crown	4.03	0 - 12:30 hrs	0	158.197	0	16.137	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-184	4.659	288.202	Below Link Crown	2.909	0 - 12:26 hrs	0	158.617	0	16.14	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-185	4.441	288.214	Below Link Crown	2.967	0 - 12:26 hrs	0	20.149	0	1.564	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-186	2.376	288.224	Below Link Crown	4.276	0 - 12:26 hrs	0	19.688	0	1.565	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-187	4.853	290.696	Below Link Crown	4.704	0 - 12:23 hrs	0	149.917	0	14.591	0.009	0	0	0	0	0	0	0 - 00:00 hrs
0203-188	6.706	293.872	Below Link Crown	3.428	0 - 12:18 hrs	0	155.861	0	14.619	0.01	0	0	0	0	0	0	0 - 00:00 hrs
0203-189	6.674	294.24	Below Link Crown	3.46	0 - 12:18 hrs	0	170.878	0	14.68	0.056	0	0	0	0	0	0	0 - 00:00 hrs
0203-190	4.957	294.263	Below Link Crown	6.137	0 - 12:18 hrs	0	24.478	0	1.606	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-191	2.006	300.442	Below Link Crown	9.058	0 - 12:23 hrs	0	24.479	0	1.596	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-192	3.836	295.916	Below Link Crown	2.284	0 - 12:48 hrs	0	37.789	0	1.568	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-193	0.75	298.641	Below Link Crown	3.687	0 - 12:17 hrs	0	18.428	0	0.892	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-194	1.025	302.387	Below Link Crown	2.59	0 - 12:15 hrs	0	18.799	0	0.894	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-195	6.33	290.927	Below Link Crown	3.373	0 - 12:26 hrs	222.177	455.773	9.368	43.479	0.033	0	0	0	0	0	0	0 - 00:00 hrs
0203-196	2.88	298	Below Link Crown	1.98	0 - 12:22 hrs	0	133.469	0	7.436	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-197	1.381	298.763	Below Link Crown	4.037	0 - 12:18 hrs	0	87.387	0	6.023	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-198	3.533	310.138	Surcharged	-0.438	0 - 12:19 hrs	0	72.323	0	3.815	0.001	0.907	0.458	0	0.09	0.453	27.836	0 - 12:15 hrs
0203-199	2.531	303.307	Below Link Crown	4.393	0 - 12:17 hrs	0	87.685	0	6.029	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-200	2.666	303.346	Below Link Crown	4.254	0 - 12:15 hrs	0	17.996	0	0.597	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-201	4.439	312.337	Below Link Crown	9.663	0 - 15:40 hrs	0	20.042	0	3.071	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-202	4.584	310.084	Below Link Crown	9.516	0 - 12:15 hrs	0	20.013	0	3.071	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-203	3.992	310.218	Below Link Crown	1.182	0 - 12:15 hrs	0	39.719	0	3.311	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-204	4.574	310.065	Below Link Crown	0.835	0 - 12:15 hrs	88.694	141.417	3.984	10.364	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-205	4.755	309.855	Below Link Crown	0.825	0 - 12:15 hrs	0	140.192	0	10.364	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-206	3.588	307.258	Below Link Crown	2.241	0 - 15:41 hrs	0	138.828	0	10.359	0.04	0	0	0	0	0	0	0 - 00:00 hrs
0203-207	8.039	307.231	Below Link Crown	0.611	0 - 16:09 hrs	0	136.199	0	10.328	0.334	0	0	0	0	0	0	0 - 00:00 hrs
0203-208	2.136	299.74	Surcharged	-0.24	0 - 12:22 hrs	0	24.36	0	8.777	0.009	2.526	0.359	0	0.006	0.818	1.799	0 - 12:15 hrs
0203-209	8.952	307.23	Surcharged	-0.23	0 - 16:09 hrs	0	129.642	0	12.123	0.198	16.516	0.302	0	1.363	7.92	42.068	0 - 13:45 hrs
0203-210	7.43	307.23	Surcharged	-1.73	0 - 16:15 hrs	0	127.817	0	3.912	0.017	23.8	2.243	0	2.96	11.879	127.817	0 - 12:14 hrs
0203-211	7.278	307.23	Surcharged	-1.33	0 - 16:15 hrs	0	28.087	0	0.989	0.009	23.91	3.342	0	0.662	11.756	23.311	0 - 12:22 hrs
0203-212	2.645	299.095	Below Maximum Depth	4.985	0 - 12:18 hrs	0	24.36	0	8.768	0.018	20.053	0.868	4.985	0	0	0	0 - 00:00 hrs
0203-213	2.803	298.624	Below Link Crown	3.202	0 - 12:18 hrs	0	43.794	0	9.446	0.021	0	0	0	0	0	0	0 - 00:00 hrs
0203-214	2.76	298.66	Below Link Crown	3.287	0 - 12:18 hrs	0	24.162	0	0.701	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-215	0.925	299.522	Below Link Crown	5.178	0 - 12:15 hrs	0	24.18	0	0.7	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-216	1.061	306.761	Below Link Crown	2.006	0 - 12:15 hrs	25.701	25.701	0.701	0.701	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-217	3.037	298.377	Below Link Crown	2.912	0 - 12:18 hrs	0	42.711	0	9.426	0.01	0	0	0	0	0	0	0 - 00:00 hrs
0203-218	5.888	259.818	Below Link Crown	9.977	0 - 13:18 hrs	0	338.077	0	48.223	0.011	0	0	0	0	0	0	0 - 00:00 hrs
0203-219	6.014	259.944	Below Link Crown	9.728	0 - 13:18 hrs	0	100.334	0	9.606	0.035	0	0	0	0	0	0	0 - 00:00 hrs
0203-220	3.274	260.155	Below Link Crown	4.683	0 - 13:11 hrs	0	100.546	0	9.603	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-221	6.939	289.939	Below Maximum Depth	2.681	0 - 12:15 hrs	0	268.648	0	29.067	0.002	0.668	0.739	2.681	0	0	0	0 - 00:00 hrs
0203-222	3.314	287.234	Below Maximum Depth	3.746	0 - 12:19 hrs	0	17.551	0	2.307	0	3.931	1.314	3.746	0	0	0	0 - 00:00 hrs
0203-223	8.739	269.939	Surcharged	-0.809	0 - 12:47 hrs	0	264.059	0	35.345	0.008	3.726	2.739	0	0.009	1.631	3.647	0 - 13:45 hrs
0203-224	7.116	268.196	Surcharged	-0.736	0 - 12:52 hrs	121.9	121.9	3.401	3.403	0	6.106	4.116	0	0.839	2.944	98.725	0 - 12:15 hrs
0203-225	2.49	309.15	Below Link Crown	5.58	0 - 12:15 hrs	19.091	19.091	0.893	0.893	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-226	14.431	318.451	Surcharged	-0.421	0 - 12:18 hrs	118.636	118.636	5.995	5.997	0	5.915	10.931	0	0.165	0.572	42.824	0 - 12:15 hrs
0203-227	11.08	314.7	Surcharged	-0.45	0 - 12:29 hrs	0	76.008	0	5.988	0.002	5.871	7.58	0	0.022	0.596	18.847	0 - 12:40 hrs
0203-228	3.308	311.308	Below Link Crown	5.962	0 - 12:06 hrs	0	13.528	0	0.569	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-229	4.015	330.605	Below Maximum Depth	6.205	0 - 12:00 hrs	0	20.042	0	3.065	0	7.332	1.765	6.205	0	0	0	0 - 00:00 hrs
0203-230	3.636	328.136	Below Maximum Depth	2.014	0 - 12:00 hrs	0	20.042	0	3.072	0	7.297	1.136	2.014	0	0	0	0 - 00:00 hrs
0203-231	1.554	322.934	Below Link Crown	4.906	0 - 13:18 hrs	0	20.042	0	3.075	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-232	1.4	318.26	Below Link Crown	6.87	0 - 13:19 hrs	0	20.042	0	3.074	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-233	1.204	315.704	Below Link Crown	7.586	0 - 13:19 hrs	0	20.042	0	3.073	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-234	3.912	319.662	Below Link Crown	1.678	0 - 13:07 hrs	0	36.302	0	4.738	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-235	3.39	318.64	Below Link Crown	2.42	0 - 13:08 hrs	0	36.302	0	4.738	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-236	1.447	316.447	Below Link Crown	2.913	0 - 13:06 hrs	0	36.302	0	4.738	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-237	2.4	313.4	Below Link Crown	4.61	0 - 13:17 hrs	0	36.302	0	4.739	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-238	7.467	309.467	Below Maximum Depth	6.953	0 - 12:15 hrs	36.75	102.99	1.4	9.623	0.001	2.42	2.467	6.953	0	0	0	0 - 00:00 hrs
0203-239	4.535	298.035	Below Link Crown	6.655	0 - 12:18 hrs	0	141.976	0	19.004	0.011	0	0	0	0	0	0	0 - 00:00 hrs
0203-240	9.44	276.89	Surcharged	-0.03	0 - 13:08 hrs	0	43.589	0	4.108	0.004	2.828	5.44	0	0.001	0.006	28.197	0 - 13:07 hrs
0203-241	5.581	271.581	Below Maximum Depth	5.709	0 - 12:15 hrs	0	37.965	0	1.29	0	1.819	2.551	5.709	0	0	0	0 - 00:00 hrs
0203-242	8.402	265.752	Surcharged	-0.142	0 - 13:00 hrs	0	109.012	0	9.618	0.003	4.596	4.068	0	0.19	1.288	9.166	0 - 12:23 hrs
0203-243	6.322	263.292	Below Maximum Depth	3.028	0 - 13:00 hrs	0	100.595	0	9.597	0.001	4.563	1.989	3.028	0	0	0	0 - 00:00 hrs
0203-244	6.521	289.642	Surcharged	-0.784	0 - 15:37 hrs	0	174.708	0	28.968	-0.005	17.392	0.784	0	7.166	8.69	84.007	0 - 12:00 hrs
0203-245	4.166	297.166	Below Link Crown	6.304	0 - 12:18 hrs	0	141.893	0	18.992	0.013	0	0	0	0	0	0	0 - 00:00 hrs
0203-246	4.536	290.189	Below Link Crown	2.911	0 - 12:25 hrs	0	144.697	0	14.582	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-247	3.422	297.178	Below Link Crown	12.578	0 - 17:10 hrs	0	111.546	0	44.723	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-248	4.574	284.036	Below Maximum Depth	1.554	0 - 14:48 hrs	0	34.106	0	12.821	0.028	20.997	0.404	1.554	0	0	0	0 - 00:00 hrs
0203-249	1.334	303.934	Below Link Crown	2.266	0 - 12:15 hrs	48.783	48.783	1.41	1.41	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-250	4.77	285.52	Surcharged	-0.72	0 - 14:12 hrs	0	80.724	0	13.224	0.039	7.302	0.73	0	0.181	3.55	5.986	0 - 12:04 hrs
0203-251	4.496	284.474	Below Link Crown	2.156	0 - 14:59 hrs	0	34.096	0	12.889	0.018	0	0	0	0	0	0	0 - 00:00 hrs
0203-252	2.035	294.525	Below Link Crown	4.475	0 - 12:17 hrs	0	91.906	0	8.469	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-253	5.375	276.145	Below Maximum Depth	2.985	0 - 12:18 hrs	32.56	39.509	0.897	1.744	0.003	0.348	0.234	2.985	0	0	0	0 - 00:00 hrs
0203-254	4.813	269.2	Below Link Crown	6.62	0 - 12:15 hrs	0	146.609	0	12.579	0.017	0	0	0	0	0	0	0 - 00:00 hrs
0203-255	2.656	278.604	Below Link Crown	7.294	0 - 12:36 hrs	0	39.961	0	13.644	0.013	0	0	0	0	0	0	0 - 00:00 hrs

Table B-4a. Existing System Analysis - Nodes
25-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-256	4.36	301.97	Below Maximum Depth	4.79	0 - 12:17 hrs	0	46.419	0	6.563	0.001	5.398	0.36	4.79	0	0	0	0 - 00:00 hrs
0203-257	2.423	280.653	Below Link Crown	2.022	0 - 13:37 hrs	0	29.578	0	4.788	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-258	3.608	281.838	Below Maximum Depth	4.182	0 - 12:02 hrs	0	29.578	0	4.791	0.003	7.493	0.608	4.182	0	0	0	0 - 00:00 hrs
0203-259	4.834	284.314	Below Maximum Depth	1.196	0 - 12:02 hrs	0	29.827	0	4.792	0.002	7.371	1.834	1.196	0	0	0	0 - 00:00 hrs
0203-260	4.636	285.186	Below Maximum Depth	1.644	0 - 12:02 hrs	0	31.676	0	4.798	0.003	7.366	1.636	1.644	0	0	0	0 - 00:00 hrs
0203-261	4.592	286.092	Below Maximum Depth	1.688	0 - 12:02 hrs	0	31.894	0	4.801	0.002	7.408	1.592	1.688	0	0	0	0 - 00:00 hrs
0203-262	6.446	289.666	Surcharged	-0.656	0 - 13:36 hrs	0	33.029	0	4.816	0.003	7.469	3.446	0	0.055	3.697	2.294	0 - 12:23 hrs
0203-263	6.845	291.235	Surcharged	-0.615	0 - 13:15 hrs	97.717	97.717	4.801	4.804	0	7.434	3.845	0	0.862	3.691	67.096	0 - 12:15 hrs
0203-264	3.116	290.116	Surcharged	-0.516	0 - 12:21 hrs	32.872	32.872	0.908	0.909	0	1.302	1.116	0	0.069	0.649	15.236	0 - 12:15 hrs
0203-265	3.35	284.57	Below Maximum Depth	1.83	0 - 12:23 hrs	0	18.343	0	0.899	-0.001	1.288	0.35	1.83	0	0	0	0 - 00:00 hrs
0203-266	3.221	284.121	Below Maximum Depth	1.799	0 - 12:26 hrs	0	17.782	0	0.905	0.003	1.256	0.161	1.799	0	0	0	0 - 00:00 hrs
0203-267	3.038	283.818	Below Maximum Depth	2.132	0 - 12:30 hrs	0	17.78	0	0.903	0.006	0.902	0.038	2.132	0	0	0	0 - 00:00 hrs
0203-268	7.826	280.84	Below Link Crown	4.65	0 - 12:53 hrs	0	954.169	0	191.431	0.298	0	0	0	0	0	0	0 - 00:00 hrs
0203-269	5.892	286.056	Below Link Crown	1.444	0 - 13:48 hrs	0	35.017	0	5.087	0.011	0	0	0	0	0	0	0 - 00:00 hrs
0203-270	8.045	290.565	Below Link Crown	4.135	0 - 13:00 hrs	0	120.324	0	11.793	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-271	5.966	308.556	Surcharged	-0.406	0 - 12:25 hrs	148.183	148.183	5.298	5.301	0	1.446	3.076	0	0.243	0.701	57.893	0 - 12:15 hrs
0203-272	3.591	294.721	Below Link Crown	5.299	0 - 12:10 hrs	0	69.54	0	9.504	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-273	4.276	291.146	Below Link Crown	6.654	0 - 12:52 hrs	0	71.159	0	9.486	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-274	5.731	291.591	Below Maximum Depth	0.819	0 - 12:00 hrs	0	74.51	0	9.631	0.005	6.18	1.711	0.819	0	0	0	0 - 00:00 hrs
0203-275	3.031	287.211	Below Link Crown	6.169	0 - 13:14 hrs	0	74.51	0	9.628	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-276	3.326	286.596	Below Link Crown	6.784	0 - 13:14 hrs	0	74.503	0	9.628	0.009	0	0	0	0	0	0	0 - 00:00 hrs
0203-277	1.757	284.677	Below Link Crown	2.523	0 - 13:14 hrs	0	74.496	0	9.619	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-278	5.867	291.867	Below Maximum Depth	0.613	0 - 12:00 hrs	0	29.889	0	2.173	0.003	5.727	1.867	0.613	0	0	0	0 - 00:00 hrs
0203-279	5.196	292.756	Below Maximum Depth	0.124	0 - 12:00 hrs	0	29.889	0	2.17	0	2.447	1.696	0.124	0	0	0	0 - 00:00 hrs
0203-280	4.71	292.85	Surcharged	0	0 - 12:00 hrs	0	29.963	0	2.165	0.001	2.43	1.21	0	0	0.002	5.231	0 - 12:00 hrs
0203-281	4.766	293.806	Below Maximum Depth	0.884	0 - 12:00 hrs	0	30.074	0	2.165	-0.001	2.436	1.516	0.884	0	0	0	0 - 00:00 hrs
0203-282	5.129	294.779	Surcharged	-0.609	0 - 12:27 hrs	73.37	73.37	2.179	2.18	0	2.45	2.129	0	0.259	1.214	44.074	0 - 12:15 hrs
0203-283	5.727	293.307	Surcharged	-0.857	0 - 14:14 hrs	0	66.948	0	7.457	0.001	6.324	2.227	0	0.897	3.148	23.679	0 - 12:19 hrs
0203-284	10.137	335.847	Surcharged	-0.427	0 - 12:29 hrs	162.991	162.991	6.594	6.597	0	6.912	6.637	0	0.332	0.866	67.211	0 - 12:15 hrs
0203-285	2.992	307.492	Below Link Crown	2.508	0 - 12:44 hrs	0	20.707	0	6.584	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-286	1.941	307.941	Below Link Crown	2.899	0 - 12:44 hrs	0	20.606	0	6.584	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-287	1.675	309.375	Below Link Crown	1.715	0 - 15:25 hrs	0	20.606	0	6.585	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-288	2.252	310.592	Below Link Crown	1.858	0 - 15:25 hrs	0	20.606	0	6.587	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-289	2.43	311.43	Below Link Crown	3.11	0 - 15:25 hrs	0	20.607	0	6.589	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-290	2.707	314.707	Below Maximum Depth	5.823	0 - 15:22 hrs	0	20.607	0	6.592	0.001	18.897	0.207	5.823	0	0	0	0 - 00:00 hrs
0203-291	3.499	316.799	Below Maximum Depth	2.621	0 - 15:22 hrs	0	20.607	0	6.585	0	18.989	0.999	2.621	0	0	0	0 - 00:00 hrs
0203-292	3.934	321.744	Below Maximum Depth	4.136	0 - 11:49 hrs	0	22.139	0	6.587	0.001	18.921	1.934	4.136	0	0	0	0 - 00:00 hrs
0203-293	4.511	324.251	Below Maximum Depth	0.279	0 - 15:22 hrs	0	21.987	0	6.588	0	18.959	1.781	0.279	0	0	0	0 - 00:00 hrs
0203-294	3.04	326.27	Below Link Crown	1.02	0 - 15:19 hrs	0	44.777	0	6.597	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-295	3.55	327.55	Below Maximum Depth	6.49	0 - 13:14 hrs	0	44.777	0	6.602	0.001	2.602	0.05	6.49	0	0	0	0 - 00:00 hrs
0203-296	4.645	328.695	Below Maximum Depth	4.645	0 - 13:03 hrs	0	44.777	0	6.605	0.001	6.905	1.145	4.645	0	0	0	0 - 00:00 hrs
0203-297	4.14	329.85	Surcharged	-0.64	0 - 13:00 hrs	0	96.544	0	6.585	0	6.786	0.64	0	1.287	3.392	53.999	0 - 12:18 hrs
0203-298	6.69	316.22	Surcharged	0	0 - 11:52 hrs	0	111.002	0	17.611	-0.006	7.146	2.19	0	0	0.001	18.579	0 - 11:52 hrs
0203-299	6.379	320.219	Surcharged	-0.649	0 - 12:36 hrs	188.115	188.115	5.069	5.072	0	4.834	3.379	0	1.053	2.413	141.577	0 - 12:15 hrs
0203-300	5.896	320.876	Surcharged	-0.666	0 - 13:02 hrs	312.889	312.889	9.471	9.476	0	9.358	2.896	0	2.502	4.606	260.444	0 - 12:15 hrs
0203-301	9.384	309.384	Surcharged	-0.924	0 - 16:25 hrs	0	131.027	0	27.051	0.014	14.804	4.384	0	0.862	5.967	47.779	0 - 17:51 hrs
0203-302	10.785	305.975	Surcharged	-0.855	0 - 15:52 hrs	288.595	433.438	8.743	40.546	0.047	16.705	5.705	0	3.727	7.395	277.452	0 - 12:15 hrs
0203-303	6.491	307.241	Surcharged	-0.671	0 - 12:53 hrs	166.598	166.598	4.648	4.655	0	14.879	3.491	0	1.222	4.714	137.592	0 - 12:15 hrs
0203-304	1.452	312.802	Below Link Crown	1.738	0 - 15:23 hrs	0	20.607	0	6.59	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-305	3.369	315.699	Surcharged	-0.139	0 - 15:22 hrs	0	20.607	0	6.593	0.001	19.108	0.869	0	0	8.933	0.053	0 - 11:51 hrs
0203-306	4.817	325.147	Surcharged	-0.707	0 - 15:22 hrs	0	44.747	0	6.592	0.001	18.904	1.317	0	2.098	9.436	24.563	0 - 12:57 hrs
0203-307	3.931	318.131	Below Maximum Depth	2.099	0 - 13:18 hrs	0	52.712	0	9.498	0	8.513	0.431	2.099	0	0	0	0 - 00:00 hrs
0203-308	3.879	316.379	Below Maximum Depth	4.471	0 - 13:47 hrs	0	52.709	0	9.495	0.002	8.402	0.379	4.471	0	0	0	0 - 00:00 hrs
0203-309	3.879	314.549	Below Maximum Depth	3.301	0 - 14:37 hrs	0	52.703	0	9.485	0	7.943	0.279	3.301	0	0	0	0 - 00:00 hrs
0203-310	3.775	312.915	Below Maximum Depth	4.745	0 - 15:17 hrs	0	52.694	0	9.477	0.006	6.79	0.205	4.745	0	0	0	0 - 00:00 hrs
0203-311	7.35	312.91	Surcharged	0	0 - 11:52 hrs	0	53.916	0	9.458	-0.001	9.187	3.35	0	0	0.001	9.483	0 - 11:52 hrs
0203-312	8.394	310.394	Surcharged	-0.794	0 - 15:29 hrs	0	100.562	0	17.633	0.008	12.134	3.394	0	1.699	5.945	33.265	0 - 17:47 hrs
0203-313	7.589	311.839	Surcharged	-0.029	0 - 14:18 hrs	0	100.566	0	17.657	0.002	11.869	2.589	0	0.004	0.344	12.773	0 - 11:52 hrs
0203-314	7.806	313.296	Surcharged	-0.196	0 - 14:18 hrs	0	101.71	0	17.657	0.004	9.986	2.806	0	0.042	1.374	15.316	0 - 11:52 hrs
0203-315	5.798	320.428	Below Maximum Depth	0.622	0 - 11:51 hrs	0	73.099	0	12.566	-0.004	9.895	2.158	0.622	0	0	0	0 - 00:00 hrs
0203-316	7.091	323.141	Surcharged	-0.671	0 - 13:11 hrs	398.063	398.063	12.583	12.589	0	10.012	3.591	0	3.484	4.945	335.049	0 - 12:15 hrs
0203-317	8.982	307.102	Surcharged	-0.572	0 - 16:35 hrs	0	123.71	0	27.143	0.005	14.906	3.902	0	1.312	6.067	43.799	0 - 18:17 hrs
0203-318	4.203	283.342	Below Maximum Depth	2.248	0 - 12:42 hrs	0	39.984	0	13.688	0.012	24.666	1.203	2.248	0	0	0	0 - 00:00 hrs
0203-319	6.129	273.829	Below Maximum Depth	9.651	0 - 12:15 hrs	0	67.58	0	5.926	0.005	0.519	2.129	9.651	0	0	0	0 - 00:00 hrs
0203-320	1.698	279.69	Below Link Crown	4.551	0 - 13:41 hrs	0	29.577	0	4.779	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-321	2.27	280.562	Below Link Crown	6.04	0 - 13:37 hrs	0	29.578	0	4.786	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-322	4.672	274.807	Below Maximum Depth	1.193	0 - 13:15 hrs	0	26.605	0	5.707	0.01	12.203	0.672	1.193	0	0	0	0 - 00:00 hrs
0203-323	5.47	274.579	Below Link Crown	28.041	0 - 13:15 hrs	0	26.605	0	5.697	0.048	0	0	0	0	0	0	0 - 00:00 hrs
0203-324	1.47	274.385	Below Link Crown	28.235	0 - 13:15 hrs	0	26.605	0	5.649	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-325	6.833	292.977	Below Link Crown	7.783	0 - 12:26 hrs	0	222.096	0	27.045	0.221	0	0	0	0	0	0	0 - 00:00 hrs
0203-326	2.447	273.395	Below Link Crown	4.405	0 - 12:15 hrs	160.427	160.427	4.439	4.441	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-327	3.494	270.594	Below Link Crown	6.506	0 - 12:15 hrs	0	159.239	0	4.441	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-328	6.222	269.426	Below Link Crown	3.874	0 - 12:15 hrs	0	205.392	0	11.879	0.01	0	0	0	0	0	0	0 - 00:00 hrs
0203-329	6.623	292.049	Below Link Crown	4.311	0 - 12:27 hrs	0	211.868	0	26.825	0.143	0	0	0	0	0	0	0 - 00:00 hrs
0203-330	3.353	308.215	Below Link Crown	0.485	0 - 12:18 hrs	0	75.413	0	5.446	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-331	7.437	301.437	Surcharged	-0.087	0 - 17:19 hrs	0	149.351	0	40.375	0.04	15.642	1.437	0	0.003	4.742	0.083	0 - 14:30 hrs
0203-332	5.531	299.031	Below Link Crown	0.569	0 - 12:48 hrs	0	149.344	0	40.313	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-333	7.425	302.425	Surcharged	-1.145	0 - 17:00 hrs	0	164.543	0	40.389	0.032	15.602	1.425	0	0.76	7.799	33.66	0 - 12:06 hrs
0203-334	6.78	306.42	Surcharged	-0.04	0 - 13:25 hrs	0	35.327	0	4.66	0	14.888	3.25	0	0.001	1.679	4.322	0 - 16:32 hrs
0203-335	3.862	268.249	Below Link Crown	10.851	0 - 12:40 hrs	0	145.835	0	12.558	-0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-336	3.052	289.262	Below Maximum Depth	5.298	0 - 12:25 hrs	0	17.55	0	2.302	0	6.073	1.052	5.298	0	0	0	0 - 00:00 hrs
0203-337	2.227	303.117	Below Link Crown	4.883	0 - 12:08 hrs	0	61.712	0	15.884	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-338	2.449	296.079	Below Link Crown	2.198	0 - 12:18 hrs	0	83.815	0	8.126	0.01	0	0	0	0	0	0	0 - 00:00 hrs
0203-339	1.252	296.302	Below Link Crown	7.798	0 - 12:15 hrs	78.326	150.407	3.84	13.077	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-340	6.895	317.025	Surcharged	-0.875	0 - 14:18 hrs	0	69.517	0	12.551	0	9.951	2.895	0	0.45	3.571	16.454	0 - 11:52 hrs

Table B-4a. Existing System Analysis - Nodes
25-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-341	3.291	260.313	Below Link Crown	8.187	0 - 17:05 hrs	0	254.026	0	69.594	0.013	0	0	0	0	0	0	0 - 00:00 hrs
0203-342	6.877	272.605	Surcharged	-2.005	0 - 12:18 hrs	0	65.048	0	9.206	0.003	5.971	2.016	0	0.063	2.956	15.789	0 - 12:07 hrs
0203-343	13.635	314.921	Surcharged	-0.011	0 - 11:57 hrs	192.534	192.534	7.254	7.257	0	14.992	7.635	0	0	0.001	9.617	0 - 11:57 hrs
0203-344	9.694	308.805	Surcharged	-0.605	0 - 14:26 hrs	0	192.528	0	7.293	0.003	15.118	3.549	0	2.185	7.5	164.789	0 - 12:15 hrs
0203-345	2.547	256.584	Below Link Crown	8.245	0 - 15:47 hrs	0	298.092	0	78.712	0.037	0	0	0	0	0	0	0 - 00:00 hrs
0203-346	1.281	258.234	Below Link Crown	6.565	0 - 12:33 hrs	0	47.463	0	9.136	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-347	6.197	264.893	Below Link Crown	1.068	0 - 12:33 hrs	0	47.759	0	9.143	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-348	4.458	264.972	Below Link Crown	2.828	0 - 12:33 hrs	0	49.222	0	9.147	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-349	7.642	269.037	Below Maximum Depth	0	0 - 12:18 hrs	0	51.599	0	9.165	0.008	1.418	0.451	0	0.007	0.213	2.42	0 - 12:18 hrs
0203-350	6.477	269.092	Below Link Crown	0.714	0 - 12:18 hrs	0	51.169	0	9.164	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-351	4.188	279.668	Below Link Crown	3.092	0 - 12:18 hrs	0	74.035	0	2.365	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-352	6.075	288.208	Below Link Crown	0.87	0 - 12:15 hrs	0	268.625	0	29.062	0.011	0	0	0	0	0	0	0 - 00:00 hrs
0203-353	6.095	282.66	Below Link Crown	0.935	0 - 12:18 hrs	0	278.089	0	31.324	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-354	3.181	278.898	Below Link Crown	3.849	0 - 12:19 hrs	0	278.042	0	31.314	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-355	6.291	274.81	Below Link Crown	0.663	0 - 12:19 hrs	0	277.777	0	31.287	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-356	6.005	273.759	Below Link Crown	2.541	0 - 12:18 hrs	108.43	360.709	3.015	34.3	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-357	9.448	270.862	Surcharged	-0.732	0 - 12:45 hrs	0	342.804	0	35.322	0.011	3.257	0.984	0	0.78	1.594	88.732	0 - 12:18 hrs
0203-358	7.988	269.02	Surcharged	-0.62	0 - 12:48 hrs	0	263.974	0	35.333	0.011	3.274	0.667	0	0.032	1.627	7.456	0 - 12:10 hrs
0203-359	6.369	266.119	Below Link Crown	0.981	0 - 12:56 hrs	0	286.717	0	38.695	0.012	0	0	0	0	0	0	0 - 00:00 hrs
0203-360	2.277	253.084	Below Link Crown	14.416	0 - 13:18 hrs	0	338.058	0	48.217	0.013	0	0	0	0	0	0	0 - 00:00 hrs
0203-361	3.915	260.774	Below Link Crown	5.856	0 - 13:02 hrs	0	100.595	0	9.598	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-362	3.704	279.024	Below Link Crown	4.239	0 - 16:09 hrs	0	259.577	0	59.139	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-363	6.608	287.068	Below Link Crown	0.337	0 - 12:17 hrs	0	267.744	0	29.056	0.011	0	0	0	0	0	0	0 - 00:00 hrs
0203-364	3.071	277.037	Below Link Crown	4.999	0 - 16:09 hrs	0	259.575	0	59.07	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-365	9.012	295.412	Below Maximum Depth	0.188	0 - 13:51 hrs	0	177.808	0	28.946	0	7.546	3.512	0.188	0	0	0	0 - 00:00 hrs
0203-366	12.474	285.758	Surcharged	-0.558	0 - 12:48 hrs	0	267.774	0	29.955	0.004	6.077	0.573	0	2.236	3.038	267.774	0 - 12:15 hrs
0203-367	15.026	287.475	Surcharged	-4.463	0 - 12:15 hrs	442.247	497.427	13.228	56.833	0.019	6.991	5.811	0	0.186	3.281	42.362	0 - 12:03 hrs
0203-368	10.525	277.186	Surcharged	-0.869	0 - 15:17 hrs	0	298.767	0	55.797	0.006	15.766	2.604	0	4.725	7.718	107.778	0 - 12:15 hrs
0203-369	6.603	284.264	Below Maximum Depth	1.055	0 - 15:55 hrs	0	105.418	0	16.055	0.003	12.091	1.255	1.055	0	0	0	0 - 00:00 hrs
0203-370	8.423	275.32	Surcharged	-0.199	0 - 15:59 hrs	0	205.161	0	55.799	0	10.854	0.202	0	0.535	5.414	12.042	0 - 15:07 hrs
0203-371	0	270.605	Below Link Invert	4.595	0 - 00:00 hrs	0	0	0	0	0	48	0	4.595	0	0	0	0 - 00:00 hrs
0203-372	8.716	273.01	Surcharged	0	0 - 15:15 hrs	0	217.713	0	59.119	0.018	7.799	0.153	0	0.027	0.428	4.04	0 - 15:41 hrs
0203-373	15.059	272.622	Surcharged	-2.103	0 - 15:41 hrs	0	217.316	0	59.083	0.004	16.9	2.103	0	0.05	8.45	14.405	0 - 11:56 hrs
0203-374	13.281	270.773	Surcharged	-0.773	0 - 17:32 hrs	0	214.414	0	59.058	0.032	18.398	5.331	0	1.451	8.105	19.744	0 - 13:03 hrs
0203-375	6.258	265.624	Below Link Crown	5.076	0 - 17:46 hrs	0	201.799	0	59.04	0.025	0	0	0	0	0	0	0 - 00:00 hrs
0203-376	5.55	264.933	Below Link Crown	6.482	0 - 17:57 hrs	0	201.798	0	59.021	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-377	14.184	271.68	Surcharged	-1.68	0 - 15:41 hrs	0	217.039	0	59.13	0.015	20.598	7.184	0	0.404	8.472	26.122	0 - 12:00 hrs
0203-378	10.831	271.731	Surcharged	-0.518	0 - 12:45 hrs	201.672	201.672	6.547	6.551	0	4.59	7.831	0	1.205	2.163	144.166	0 - 12:15 hrs
0203-379	8.748	267.22	Below Maximum Depth	3.993	0 - 13:00 hrs	0	67.224	0	6.53	0.001	4.576	4.748	3.993	0	0	0	0 - 00:00 hrs
0203-380	5.938	292.938	Below Link Crown	4.362	0 - 12:19 hrs	0	152.35	0	14.606	0.015	0	0	0	0	0	0	0 - 00:00 hrs
0203-381	2.979	272.467	Below Link Crown	1.133	0 - 12:15 hrs	210.593	210.593	7.436	7.44	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-382	1.712	299.712	Below Link Crown	8.488	0 - 17:21 hrs	0	29.336	0	7.252	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-383	5.945	317.015	Below Maximum Depth	0.685	0 - 16:53 hrs	0	119.198	0	46.625	0	24.863	1.035	0.685	0	0	0	0 - 00:00 hrs
0203-384	5.917	314.917	Below Maximum Depth	1.453	0 - 16:53 hrs	0	111.547	0	45.989	0.753	24.958	1.007	1.453	0	0	0	0 - 00:00 hrs
0203-385	4.952	310.55	Below Maximum Depth	0	0 - 12:02 hrs	0	4.903	0	0.295	0	2.876	3.452	0	0.055	1.198	2.473	0 - 12:30 hrs
0203-386	3.892	310.49	Below Maximum Depth	0	0 - 12:02 hrs	9.175	11.464	0.287	0.364	0	2.666	2.642	0	0.195	1.223	11.462	0 - 12:15 hrs
0203-387	4.619	310.39	Surcharged	0	0 - 12:11 hrs	0	8.733	0	0.331	0	2.614	3.119	0	0.001	0.082	0.692	0 - 12:15 hrs
0203-388	3.839	310.61	Below Maximum Depth	0	0 - 12:02 hrs	16.546	16.546	0.402	0.402	0	2.516	2.589	0	0.069	0.371	12.249	0 - 12:15 hrs
0203-389	9.807	272.573	Below Maximum Depth	0.187	0 - 12:25 hrs	0	14.556	0	1.073	0.001	19.605	8.057	0.187	0	0	0	0 - 00:00 hrs
0203-390	9.71	272.91	Surcharged	0	0 - 11:55 hrs	50.493	50.493	1.48	1.481	0	20.421	8.46	0	0.408	1.17	43.588	0 - 12:15 hrs
0203-391	6.163	258.648	Below Link Crown	4.66	0 - 12:23 hrs	0	294.451	0	14.916	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-392	4.643	256.926	Below Link Crown	13.174	0 - 12:25 hrs	0	293.705	0	14.889	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-393	2.644	313.522	Below Link Crown	11.478	0 - 13:21 hrs	0	20.042	0	3.071	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-394	5.372	309.609	Below Link Crown	0.301	0 - 12:15 hrs	0	138.972	0	10.364	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-395	3.734	307.864	Below Link Crown	3.342	0 - 12:15 hrs	0	138.835	0	10.365	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-396	3.033	307.23	Below Maximum Depth	2.87	0 - 16:15 hrs	28.084	28.084	0.686	0.686	0	23.756	1.226	2.87	0	0	0	0 - 00:00 hrs
0203-397	3.642	298.275	Below Link Crown	3.014	0 - 12:18 hrs	0	42.584	0	9.417	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-398	3.514	298.147	Below Link Crown	2.848	0 - 12:18 hrs	0	42.631	0	9.409	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-399	2.116	310.759	Below Link Crown	2.088	0 - 12:15 hrs	32.632	32.632	1.623	1.624	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-400	3.571	308.979	Below Link Crown	0.251	0 - 12:15 hrs	0	31.792	0	1.622	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-401	4.741	296.955	Below Maximum Depth	2.445	0 - 12:18 hrs	0	137.073	0	7.436	0.007	0.658	0.741	2.445	0	0	0	0 - 00:00 hrs
0203-402	6.059	288.556	Surcharged	-1.556	0 - 14:03 hrs	0	425.083	0	43.461	0.047	11.384	1.562	0	3.24	5.692	193.147	0 - 12:15 hrs
0203-403	5.67	287.771	Below Maximum Depth	0.704	0 - 14:25 hrs	0	215.198	0	43.388	0.013	11.185	1.256	0.704	0	0	0	0 - 00:00 hrs
0203-404	5.331	287.432	Below Link Crown	1.568	0 - 14:29 hrs	0	215.198	0	43.371	0.012	0	0	0	0	0	0	0 - 00:00 hrs
0203-405	5.412	287.044	Below Link Crown	1.456	0 - 14:37 hrs	0	215.182	0	43.355	0.009	0	0	0	0	0	0	0 - 00:00 hrs
0203-406	5.328	286.735	Below Link Crown	1.165	0 - 14:47 hrs	0	215.157	0	43.342	0.013	0	0	0	0	0	0	0 - 00:00 hrs
0203-407	6.342	286.499	Below Link Crown	0.021	0 - 14:57 hrs	0	215.123	0	43.323	0.023	0	0	0	0	0	0	0 - 00:00 hrs
0203-408	6.133	286.198	Surcharged	-0.055	0 - 15:12 hrs	0	215.087	0	43.296	0.012	4.605	0.055	0	0.116	2.301	4.459	0 - 14:18 hrs
0203-409	6.042	286.042	Below Link Crown	0.058	0 - 15:15 hrs	0	212.184	0	43.289	0.036	0	0	0	0	0	0	0 - 00:00 hrs
0203-410	6.636	285.486	Below Link Crown	1.414	0 - 15:26 hrs	0	211.587	0	43.22	0.012	0	0	0	0	0	0	0 - 00:00 hrs
0203-411	4.643	312.251	Surcharged	-0.001	0 - 12:15 hrs	45.486	45.486	1.987	1.989	0	0.273	1.643	0	0	0.011	0.314	0 - 12:15 hrs
0203-412	4.253	310.064	Below Maximum Depth	2.636	0 - 12:14 hrs	0	45.186	0	1.988	0	0.351	1.253	2.636	0	0	0	0 - 00:00 hrs
0203-413	3.165	307.948	Below Maximum Depth	4.652	0 - 12:14 hrs	0	45.186	0	1.99	0	0.048	0.165	4.652	0	0	0	0 - 00:00 hrs
0203-414	2.163	304.367	Below Link Crown	1.923	0 - 12:15 hrs	0	45.201	0	1.99	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-415	6.17	309.775	Surcharged	-0.475	0 - 12:22 hrs	43.091	43.091	1.602	1.603	0	3.116	4.17	0	0.082	1.02	18.959	0 - 12:15 hrs
0203-416	1.433	304.188	Below Link Crown	3.512	0 - 12:22 hrs	0	24.479	0	1.591	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-417	5.465	290.035	Below Link Crown	1.974	0 - 12:25 hrs	0	141.74	0	14.579	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-418	5.033	288.397	Below Link Crown	3.434	0 - 12:26 hrs	0	141.109	0	14.579	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-419	5.974	295.898	Below Link Crown	0.202	0 - 12:48 hrs	0	27.883	0	1.568	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-420	0.753	288.474	Below Link Crown	5.837	0 - 12:48 hrs	0	19.688	0	1.565	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-421	1.379	301.521	Below Link Crown	4.479	0 - 12:15 hrs	0	20.472	0	0.675	-0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-422	2.325	308.075	Below Link Crown	1.125	0 - 12:15 hrs	0	18.963	0	0.894	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-423	1.939	307.345	Below Link Crown	5.255	0 - 12:15 hrs	0	18.871	0	0.894	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-424	3.472	286.101	Below Link Crown	4.299	0 - 12:33 hrs	0	154.304	0	16.116	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-425	3.539	285.878	Below Link Crown	7.622	0 - 12:33 hrs	0	153.05	0	16.114	0.006	0	0	0	0	0	0	0 - 00:00 hrs

Table B-4a. Existing System Analysis - Nodes
25-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-426	5.233	284.317	Below Maximum Depth	2.683	0 - 15:42 hrs	0	104.599	0	16.06	0.004	11.169	0.707	2.683	0	0	0	0 - 00:00 hrs
0203-427	5.283	284.212	Below Maximum Depth	2.688	0 - 16:02 hrs	0	105.649	0	16.052	0.004	11.123	0.75	2.688	0	0	0	0 - 00:00 hrs
0203-428	5.961	270.607	Below Link Crown	7.882	0 - 13:07 hrs	0	259.583	0	58.995	0.046	0	0	0	0	0	0	0 - 00:00 hrs
0203-429	5.494	269.961	Below Link Crown	6.654	0 - 13:07 hrs	0	281.401	0	63.677	0.048	0	0	0	0	0	0	0 - 00:00 hrs
0203-430	6.914	276.81	Surcharged	-0.36	0 - 12:52 hrs	0	36.427	0	4.054	0.002	5.215	3.914	0	0.083	1.107	8.64	0 - 11:56 hrs
0203-431	4.587	335.367	Surcharged	-0.427	0 - 13:17 hrs	60.431	60.431	3.075	3.075	0	7.387	2.587	0	0.323	3.642	40.596	0 - 12:15 hrs
0203-432	4.957	276.197	Below Link Crown	1.483	0 - 12:19 hrs	0	24.418	0	0.823	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-433	5.227	276.157	Below Maximum Depth	2.713	0 - 12:18 hrs	0	25.293	0	0.883	0.003	0.33	0.227	2.713	0	0	0	0 - 00:00 hrs
0203-434	5.373	276.143	Below Maximum Depth	2.917	0 - 12:18 hrs	69.099	91.529	2.798	4.468	0.002	0.342	0.232	2.917	0	0	0	0 - 00:00 hrs
0203-435	3.049	274.079	Below Link Crown	5.441	0 - 12:30 hrs	0	91.395	0	4.465	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-436	0	269.45	Below Link Invert	3.53	0 - 00:00 hrs	0	0	0	0	0	48	0	3.53	0	0	0	0 - 00:00 hrs
0203-437	2.136	272.276	Below Link Crown	3.824	0 - 12:36 hrs	0	74.112	0	4.4	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-438	2.005	266.955	Below Link Crown	7.245	0 - 12:37 hrs	0	73.95	0	4.397	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-439	5.108	330.553	Surcharged	-0.635	0 - 12:52 hrs	253.263	253.263	8.182	8.186	0	6.335	1.97	0	1.723	3.151	192.314	0 - 12:15 hrs
0203-440	4.768	324.904	Surcharged	-0.746	0 - 15:03 hrs	0	62.022	0	8.153	-0.002	15.373	1.471	0	2.553	7.682	32.638	0 - 12:32 hrs
0203-441	4.976	323.776	Surcharged	-0.316	0 - 15:14 hrs	0	31.626	0	8.174	0.003	15.647	1.976	0	0.027	4.832	0.562	0 - 13:47 hrs
0203-442	3.509	322.154	Below Maximum Depth	0.246	0 - 15:14 hrs	0	31.17	0	8.175	0.003	15.365	0.509	0.246	0	0	0	0 - 00:00 hrs
0203-443	3.055	321.008	Below Link Crown	0.792	0 - 15:12 hrs	0	31.17	0	8.177	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-444	1.639	319.03	Below Link Crown	2.67	0 - 13:04 hrs	0	31.17	0	8.178	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-445	1.487	312.817	Below Link Crown	3.049	0 - 14:53 hrs	0	31.269	0	8.178	-0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-446	3.486	311.026	Below Maximum Depth	0.654	0 - 14:52 hrs	0	31.172	0	8.181	0.002	15.358	0.449	0.654	0	0	0	0 - 00:00 hrs
0203-447	2.191	309.513	Below Link Crown	2.728	0 - 14:08 hrs	0	31.173	0	8.181	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-448	4.658	308.469	Below Maximum Depth	3.281	0 - 14:07 hrs	0	72.766	0	13.601	0.002	5.259	0.658	3.281	0	0	0	0 - 00:00 hrs
0203-449	5.706	318.424	Surcharged	-0.624	0 - 12:37 hrs	194.582	194.582	5.424	5.427	0	4.502	2.706	0	1.049	2.187	141.617	0 - 12:15 hrs
0203-450	7.132	318	Below Maximum Depth	0	0 - 11:56 hrs	0	53.432	0	5.407	0.001	4.378	4.12	0	0	0	3.258	0 - 11:56 hrs
0203-451	5.653	309.584	Surcharged	-0.684	0 - 14:07 hrs	0	53.432	0	5.402	0.001	6.07	2.153	0	0.566	2.954	10.449	0 - 12:40 hrs
0203-452	4.509	306.779	Below Maximum Depth	4.473	0 - 14:08 hrs	0	72.766	0	13.595	0.002	3.821	0.366	4.473	0	0	0	0 - 00:00 hrs
0203-453	5.02	304.73	Below Maximum Depth	0.67	0 - 14:08 hrs	0	76.067	0	13.587	0	5.864	0.95	0.67	0	0	0	0 - 00:00 hrs
0203-454	7.277	302.472	Surcharged	-0.872	0 - 14:14 hrs	0	72.766	0	13.593	0.002	7.007	2.777	0	0.137	3.237	17.445	0 - 11:55 hrs
0203-455	7.757	301.327	Surcharged	-0.617	0 - 14:11 hrs	0	93.972	0	15.759	0.001	7.048	3.158	0	0.482	3.458	17.402	0 - 12:25 hrs
0203-456	3.81	302.943	Surcharged	-0.675	0 - 12:52 hrs	86.931	86.931	2.17	2.172	0	7.437	1.81	0	0.617	3.712	71.652	0 - 12:15 hrs
0203-457	8.144	299.789	Surcharged	-0.658	0 - 12:41 hrs	259.388	330.909	8.239	24.081	0.002	7.012	2.644	0	1.429	3.336	184.41	0 - 12:15 hrs
0203-458	10.384	296.893	Surcharged	-0.915	0 - 13:51 hrs	0	148.909	0	23.997	0.016	7.608	4.884	0	0.948	3.653	34.45	0 - 15:33 hrs
0203-459	7.391	299.121	Surcharged	-0.601	0 - 12:33 hrs	174.325	174.325	4.995	4.997	0	4.079	3.891	0	0.8	1.856	118.937	0 - 12:15 hrs
0203-460	7.355	297.489	Below Maximum Depth	0.608	0 - 13:52 hrs	0	56.067	0	5.01	0.002	5.953	2.928	0.608	0	0	0	0 - 00:00 hrs
0203-461	9.294	292.47	Surcharged	-0.52	0 - 13:51 hrs	0	177.807	0	28.941	0.006	17.268	3.557	0	0.157	3.582	4.408	0 - 12:33 hrs
0203-462	6.01	288.582	Below Maximum Depth	1.088	0 - 15:37 hrs	0	102.093	0	29.004	0.009	8.181	0.273	1.088	0	0	0	0 - 00:00 hrs
0203-463	4.972	297.199	Below Maximum Depth	2.301	0 - 13:32 hrs	0	62.832	0	13.683	0.001	11.948	1.472	2.301	0	0	0	0 - 00:00 hrs
0203-464	8.103	303.631	Surcharged	-0.667	0 - 13:32 hrs	354.407	354.407	13.653	13.66	0	11.95	5.103	0	3.886	5.923	293.207	0 - 12:15 hrs
0203-465	2.853	294.478	Below Link Crown	4.547	0 - 13:33 hrs	0	62.832	0	13.676	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-466	3.023	289.631	Below Link Crown	3.821	0 - 12:17 hrs	0	62.831	0	13.648	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-467	5.236	280.646	Surcharged	-1.146	0 - 12:36 hrs	0	90.375	0	14.497	0.002	14.937	1.156	0	0.957	7.467	90.374	0 - 12:07 hrs
0203-468	5.009	275.917	Surcharged	-0.717	0 - 12:59 hrs	106.711	106.711	3.385	3.386	0	7.531	2.009	0	0.792	3.763	83.542	0 - 12:15 hrs
0203-469	5.059	275.41	Below Maximum Depth	0.69	0 - 13:07 hrs	0	25.15	0	3.391	0.001	7.532	2.059	0.69	0	0	0	0 - 00:00 hrs
0203-470	5.777	274.546	Below Maximum Depth	3.698	0 - 13:32 hrs	0	25.149	0	3.385	0.001	15.639	2.777	3.698	0	0	0	0 - 00:00 hrs
0203-471	5.76	273.906	Below Maximum Depth	1.194	0 - 14:10 hrs	0	25.147	0	3.385	0	16.172	2.76	1.194	0	0	0	0 - 00:00 hrs
0203-472	4.481	295.442	Surcharged	-0.446	0 - 15:11 hrs	0	95.417	0	13.843	0.003	7.626	0.446	0	0.668	3.813	10.858	0 - 12:47 hrs
0203-473	5.963	273.47	Below Maximum Depth	1.43	0 - 15:15 hrs	0	25.147	0	3.385	0.001	17.062	2.963	1.43	0	0	0	0 - 00:00 hrs
0203-474	10.08	269.056	Surcharged	-0.456	0 - 12:23 hrs	113.44	113.44	3.054	3.056	0	4.615	7.08	0	0.344	1.013	63.546	0 - 12:15 hrs
0203-475	7.033	267.337	Surcharged	-0.037	0 - 13:10 hrs	0	32.771	0	3.391	0	6.114	3.889	0	0.009	1.051	0.851	0 - 12:47 hrs
0203-476	6.842	266.804	Below Maximum Depth	0.796	0 - 13:00 hrs	0	32.772	0	3.384	0.001	6.132	3.712	0.796	0	0	0	0 - 00:00 hrs
0203-477	7.346	279.387	Surcharged	-0.687	0 - 13:02 hrs	178.049	178.049	5.488	5.491	0	7.726	4.346	0	1.39	3.862	143.459	0 - 12:15 hrs
0203-478	7.972	277.356	Surcharged	-0.608	0 - 12:59 hrs	0	38.393	0	5.496	-0.002	7.759	4.881	0	0.027	3.249	4.815	0 - 11:52 hrs
0203-479	9.084	274.827	Below Maximum Depth	0	0 - 12:18 hrs	0	38.392	0	5.501	0.004	8.782	5.925	0	0.017	0.626	1.855	0 - 12:37 hrs
0203-480	7.705	273.44	Surcharged	0	0 - 12:12 hrs	0	38.385	0	5.483	0.003	8.791	4.705	0	0.042	0.415	7.807	0 - 12:18 hrs
0203-481	8.184	329.217	Surcharged	-0.709	0 - 13:25 hrs	624.544	624.544	15.908	15.917	0	14.37	5.184	0	6.165	7.183	563.5	0 - 12:15 hrs
0203-482	7.033	322.698	Below Maximum Depth	0	0 - 11:45 hrs	0	61.712	0	15.912	0.01	14.561	4.033	0	0	0.001	0.445	0 - 11:45 hrs
0203-483	2.56	314.333	Below Link Crown	3.819	0 - 11:47 hrs	0	61.712	0	15.891	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-484	2.621	307.74	Below Link Crown	3.7	0 - 13:26 hrs	0	61.712	0	15.876	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-485	5.527	280.707	Surcharged	-0.887	0 - 12:29 hrs	0	84.943	0	15.197	0.001	14.978	1.587	0	0.214	5.108	34.535	0 - 12:15 hrs
0203-486	2.713	298.992	Below Link Crown	6.082	0 - 13:27 hrs	0	61.742	0	15.887	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-487	3.86	297.363	Below Link Crown	5.825	0 - 12:08 hrs	0	62.933	0	15.891	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-488	8.57	296.591	Surcharged	0	0 - 12:07 hrs	308.984	369.714	11.114	28.214	0.013	3.044	2.57	0	0.407	0.262	112.602	0 - 12:15 hrs
0203-489	4.704	295.283	Surcharged	-0.183	0 - 12:37 hrs	0	76.877	0	1.179	0	3.148	1.204	0	0.81	1.553	76.876	0 - 12:15 hrs
0203-490	3.882	295.545	Below Maximum Depth	1.515	0 - 12:15 hrs	24.923	24.923	0.562	0.563	0	2.642	0.382	1.515	0	0	0	0 - 00:00 hrs
0203-491	6.023	293.1	Surcharged	0	0 - 12:11 hrs	0	216.261	0	27.16	0.01	0.249	0.023	0	0.007	0.104	3.856	0 - 12:15 hrs
0203-492	6.508	292.506	Surcharged	-0.564	0 - 12:15 hrs	69.645	69.645	1.934	1.935	0	0.84	3.008	0	0.004	0.117	2.849	0 - 12:15 hrs
0203-493	2.077	302.995	Below Link Crown	13.605	0 - 12:15 hrs	20.542	20.542	0.675	0.675	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-494	10.477	276.55	Surcharged	-0.54	0 - 12:30 hrs	197.483	206.639	7.222	11.324	0.006	4.194	6.477	0	0.538	1.086	97.961	0 - 12:15 hrs
0203-495	8.881	275.819	Below Maximum Depth	0.313	0 - 12:15 hrs	37.971	37.971	1.289	1.29	0	1.545	6.381	0.313	0	0	0	0 - 00:00 hrs
0203-496	2.472	307.719	Below Link Crown	1.731	0 - 12:15 hrs	18.409	18.409	0.597	0.597	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-497	2.892	307.306	Below Link Crown	0.994	0 - 12:15 hrs	0	18.279	0	0.597	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-498	2.517	306.889	Below Link Crown	5.011	0 - 12:15 hrs	0	18.188	0	0.598	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-499	2.107	306.276	Below Link Crown	4.324	0 - 12:15 hrs	0	18.132	0	0.597	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-500	0.734	303.924	Below Link Crown	6.176	0 - 12:15 hrs	0	18.02	0	0.597	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-501	0.535	303.886	Below Link Crown	3.414	0 - 12:15 hrs	0	18.811	0	0.894	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-502	5.713	318.072	Below Maximum Depth	0.128	0 - 12:15 hrs	67.659	67.659	3.573	3.574	0	0.434	2.213	0.128	0	0	0	0 - 00:00 hrs
0203-503	3.633	314.918	Below Maximum Depth	4.997	0 - 12:15 hrs	0	67.649	0	3.577	0.001	0.018	0.133	4.997	0	0	0	0 - 00:00 hrs
0203-504	2.506	310.302	Below Link Crown	1.541	0 - 12:17 hrs	0	74.116	0	3.822	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-505	1.752	310.354	Below Link Crown	5.668	0 - 12:15 hrs	7.067	7.067	0.247	0.247	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-506	6.22	277.484	Surcharged	-0.667	0 - 13:15 hrs	122.982	122.982	4.078	4.08	0	7.269	3.72	0	1.371	3.54	110.003	0 - 12:15 hrs
0203-507	5.839	270.339	Below Link Crown	6.276	0 - 13:07 hrs	106.91	281.41	4.748	63.7	0.02	0	0	0	0	0	0	0 - 00:00 hrs
0203-508	6.91	279.15	Below Link Crown	0.43	0 - 12:15 hrs	120.302	120.302	3.093	3.095	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-509	7.765	279.065	Below Maximum Depth	0.175	0 - 12:15 hrs	0	119.254	0	3.092	0.003	0.114	0.105	0.175	0	0	0	0 - 00:00 hrs
0203-510	5.123	275.916	Surcharged	-0.657	0 - 13:29 hrs	253.747	253.747	10.599	10.604	0	10.399	2.123	0	2.789	5.189	201.395	0 - 12:15 hrs

Table B-4a. Existing System Analysis - Nodes
25-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-511	3.946	329.3	Below Maximum Depth	0	0 - 12:00 hrs	0	20.042	0	3.069	0	7.277	1.446	0	0	0	0.237	0 - 12:00 hrs
0203-512	1.523	325.682	Below Link Crown	4.569	0 - 13:17 hrs	0	20.042	0	3.073	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-513	3.63	332.71	Surcharged	0	0 - 12:00 hrs	0	20.042	0	3.068	0	7.286	1.63	0	0	0	0.08	0 - 12:00 hrs
0203-514	2.22	321.837	Below Link Crown	0.863	0 - 13:18 hrs	0	20.042	0	3.076	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-515	1.581	320.232	Below Link Crown	3.36	0 - 13:18 hrs	0	20.042	0	3.074	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-516	1.817	313.885	Below Link Crown	5.095	0 - 13:21 hrs	0	20.042	0	3.072	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-517	8.247	278.857	Below Link Crown	0.673	0 - 12:45 hrs	0	118.738	0	3.091	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-518	4.056	320.367	Surcharged	-0.567	0 - 12:32 hrs	90.365	90.365	3.318	3.319	0	3.784	1.656	0	0.308	1.774	52.008	0 - 12:15 hrs
0203-519	3.202	318.613	Below Link Crown	1.987	0 - 12:44 hrs	0	39.744	0	3.312	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-520	3.724	263.674	Below Link Crown	10.186	0 - 12:18 hrs	0	220.306	0	38.642	0.014	0	0	0	0	0	0	0 - 00:00 hrs
0203-521	4.537	322.337	Below Maximum Depth	1.807	0 - 13:07 hrs	0	36.302	0	4.737	0	6.673	1.037	1.807	0	0	0	0 - 00:00 hrs
0203-522	5.212	323.212	Below Maximum Depth	1.461	0 - 13:07 hrs	0	36.302	0	4.737	0.001	6.708	1.712	1.461	0	0	0	0 - 00:00 hrs
0203-523	6.235	324.735	Surcharged	-0.535	0 - 13:00 hrs	136.675	136.675	4.742	4.744	0	6.741	2.735	0	0.812	3.304	101.007	0 - 12:15 hrs
0203-524	5.749	323.999	Surcharged	-0.099	0 - 13:07 hrs	0	36.968	0	4.737	0	6.727	2.249	0	0.01	1.686	0.869	0 - 12:30 hrs
0203-525	3.194	267.504	Below Link Crown	13.796	0 - 12:17 hrs	0	182.57	0	36.38	0.019	0	0	0	0	0	0	0 - 00:00 hrs
0203-526	4.084	321.63	Below Maximum Depth	1.37	0 - 13:07 hrs	0	36.302	0	4.738	0	6.632	0.584	1.37	0	0	0	0 - 00:00 hrs
0203-527	3.392	320.883	Below Link Crown	1.888	0 - 13:07 hrs	0	36.302	0	4.738	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-528	3.527	320.113	Below Link Crown	2.184	0 - 13:07 hrs	0	36.302	0	4.738	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-529	3.656	319.156	Below Link Crown	1.532	0 - 13:07 hrs	0	36.302	0	4.737	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-530	9.45	276.31	Below Link Crown	0.55	0 - 12:52 hrs	0	135.838	0	34.063	0.15	0	0	0	0	0	0	0 - 00:00 hrs
0203-531	12.075	324.809	Surcharged	-0.198	0 - 12:15 hrs	68.677	68.677	2.214	2.215	0	1.266	9.575	0	0.026	0.222	12.121	0 - 12:15 hrs
0203-532	2.706	295.536	Below Link Crown	7.314	0 - 12:40 hrs	0	111.549	0	44.481	0.036	0	0	0	0	0	0	0 - 00:00 hrs
0203-533	2.082	302.672	Below Link Crown	2.768	0 - 13:38 hrs	0	96.326	0	24.137	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-534	3.575	307.046	Below Maximum Depth	2.161	0 - 12:42 hrs	0	22.199	0	6.584	0.001	4.056	0.575	2.161	0	0	0	0 - 00:00 hrs
0203-535	3.353	306.651	Below Maximum Depth	2.317	0 - 12:41 hrs	0	23.17	0	6.584	0	2.927	0.353	2.317	0	0	0	0 - 00:00 hrs
0203-536	8.686	305.857	Surcharged	-0.625	0 - 12:41 hrs	204.518	224.294	6.673	13.274	0.004	5.257	5.186	0	1.121	2.143	144.191	0 - 12:15 hrs
0203-537	4.904	302.075	Below Maximum Depth	3.748	0 - 12:41 hrs	0	81.853	0	13.248	0.003	4.281	0.904	3.748	0	0	0	0 - 00:00 hrs
0203-538	1.479	301.319	Below Link Crown	4.961	0 - 13:25 hrs	0	96.326	0	24.139	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-539	4.803	299.463	Below Maximum Depth	1.137	0 - 12:00 hrs	0	81.294	0	13.248	0.002	4.274	0.803	1.137	0	0	0	0 - 00:00 hrs
0203-540	5.267	296.257	Below Maximum Depth	1.293	0 - 12:00 hrs	0	81.295	0	13.259	0.002	4.509	1.227	1.293	0	0	0	0 - 00:00 hrs
0203-541	3.003	293.143	Below Link Crown	3.297	0 - 13:22 hrs	0	81.295	0	13.251	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-542	5.268	306.15	Below Maximum Depth	1.356	0 - 12:41 hrs	0	31.09	0	6.58	0.001	4.32	1.768	1.356	0	0	0	0 - 00:00 hrs
0203-543	5.819	290.279	Below Maximum Depth	0.861	0 - 14:07 hrs	0	81.266	0	13.251	0.002	4.449	1.819	0.861	0	0	0	0 - 00:00 hrs
0203-544	4.986	288.086	Below Maximum Depth	5.764	0 - 14:07 hrs	0	81.266	0	13.245	0.002	4.503	0.946	5.764	0	0	0	0 - 00:00 hrs
0203-545	4.655	284.633	Surcharged	-0.733	0 - 15:03 hrs	0	76.431	0	13.189	0.033	24.322	0.745	0	3.229	12.159	53.899	0 - 12:29 hrs
0203-546	4.467	284.417	Below Link Crown	2.653	0 - 14:56 hrs	0	34.101	0	12.871	0.011	0	0	0	0	0	0	0 - 00:00 hrs
0203-547	4.589	299.299	Below Link Crown	3.501	0 - 12:15 hrs	0	101.859	0	24.113	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-548	4.385	284.305	Below Maximum Depth	2.975	0 - 14:52 hrs	0	34.104	0	12.859	0.01	21.931	0.495	2.975	0	0	0	0 - 00:00 hrs
0203-549	2.888	281.728	Below Link Crown	3.862	0 - 12:42 hrs	0	39.984	0	13.676	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-550	10.441	277.356	Surcharged	-0.156	0 - 12:32 hrs	0	1,024.96	0	208.958	0.167	1.463	0.181	0	0.049	0.685	21.413	0 - 12:21 hrs
0203-551	4.019	279.469	Below Link Crown	3.031	0 - 12:18 hrs	0	66.979	0	2.364	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-552	5.933	278.993	Below Maximum Depth	1.857	0 - 13:14 hrs	0	26.605	0	5.721	0.002	11.717	2.923	1.857	0	0	0	0 - 00:00 hrs
0203-553	4.048	275.068	Below Maximum Depth	5.632	0 - 13:15 hrs	0	26.605	0	5.716	0.007	6.564	0.048	5.632	0	0	0	0 - 00:00 hrs
0203-554	4.239	276.059	Surcharged	-0.019	0 - 12:15 hrs	39.453	39.453	1.146	1.147	0	0.228	1.239	0	0	0.024	0.403	0 - 12:15 hrs
0203-555	6.426	274.496	Below Maximum Depth	1.014	0 - 12:15 hrs	0	39.249	0	1.146	0	0.353	1.776	1.014	0	0	0	0 - 00:00 hrs
0203-556	1.786	268.636	Below Link Crown	7.564	0 - 12:17 hrs	0	67.593	0	5.921	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-557	9.639	298.659	Below Link Crown	4.441	0 - 12:15 hrs	0	465.256	0	93.955	0.02	0	0	0	0	0	0	0 - 00:00 hrs
0203-558	6.483	267.885	Below Link Crown	13.245	0 - 12:30 hrs	69.369	1,219.21	1.687	226.659	0.086	0	0	0	0	0	0	0 - 00:00 hrs
0203-559	4.648	299.358	Below Link Crown	3.442	0 - 12:15 hrs	0	99.543	0	24.115	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-560	5.912	351.132	Surcharged	-0.482	0 - 12:29 hrs	705.753	705.753	25.631	25.644	0	1.961	1.332	0	1.768	0.974	337.809	0 - 12:15 hrs
0203-561	6.86	342.52	Below Maximum Depth	0	0 - 12:03 hrs	0	245.258	0	25.563	0.015	3.907	1.86	0	0	0.004	8.561	0 - 12:03 hrs
0203-562	6.829	332.829	Surcharged	-1.129	0 - 17:28 hrs	0	78.333	0	14.556	0.004	16.887	1.159	0	2.706	8.433	33.023	0 - 12:29 hrs
0203-563	6.704	334.773	Surcharged	-0.694	0 - 13:04 hrs	488.183	488.183	14.551	14.559	0	11.462	1.034	0	4.067	5.721	412.082	0 - 12:15 hrs
0203-564	5.326	346.426	Surcharged	-0.726	0 - 13:02 hrs	0	371.307	0	25.612	0.017	3.833	0.746	0	3.201	1.916	133.139	0 - 12:19 hrs
0203-565	1.882	335.262	Below Link Crown	4.248	0 - 13:03 hrs	0	245.258	0	25.599	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-566	4.646	334.006	Below Link Crown	3.134	0 - 13:03 hrs	0	245.234	0	25.601	0.054	0	0	0	0	0	0	0 - 00:00 hrs
0203-567	4.826	329.236	Below Link Crown	2.954	0 - 13:06 hrs	0	245.16	0	25.557	0.015	0	0	0	0	0	0	0 - 00:00 hrs
0203-568	5.557	327.227	Below Link Crown	2.713	0 - 12:11 hrs	0	245.104	0	25.536	0.022	0	0	0	0	0	0	0 - 00:00 hrs
0203-569	4.361	324.641	Below Link Crown	2.359	0 - 14:00 hrs	0	250.152	0	25.514	0.022	0	0	0	0	0	0	0 - 00:00 hrs
0203-570	6.492	324.452	Surcharged	-0.452	0 - 14:03 hrs	0	254.015	0	25.455	0.036	4.812	1.392	0	1.785	2.286	62.131	0 - 12:22 hrs
0203-571	8.412	321.072	Surcharged	-0.872	0 - 12:36 hrs	0	216.046	0	25.45	0.201	4.937	0.882	0	0.467	2.468	122.567	0 - 12:15 hrs
0203-572	10.211	320.821	Surcharged	-0.121	0 - 12:33 hrs	0	223.684	0	25.33	0.166	1.315	0.211	0	0.082	0.548	34.142	0 - 12:19 hrs
0203-573	10.141	320.751	Surcharged	-0.051	0 - 12:30 hrs	777.596	852.868	49.263	74.508	0.117	1.1	0.141	0	0.065	0.388	23.445	0 - 12:21 hrs
0203-574	9.047	319.657	Surcharged	-0.657	0 - 13:21 hrs	0	837.762	0	74.447	0.166	6.429	0.697	0	5.859	3.214	338.857	0 - 12:17 hrs
0203-575	7.216	317.826	Surcharged	-0.726	0 - 16:53 hrs	0	538.43	0	74.045	0.259	24.776	0.776	0	36.454	12.378	430.723	0 - 13:00 hrs
0203-576	1.659	310.149	Below Link Crown	11.551	0 - 16:55 hrs	0	111.547	0	45.237	0.109	0	0	0	0	0	0	0 - 00:00 hrs
0203-577	3.433	298.492	Below Link Crown	9.711	0 - 16:59 hrs	0	111.547	0	45.127	0.066	0	0	0	0	0	0	0 - 00:00 hrs
0203-578	2.556	297.686	Below Link Crown	10.587	0 - 17:05 hrs	0	111.547	0	45.061	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-579	4.404	297.252	Below Link Crown	12.468	0 - 17:09 hrs	0	111.547	0	44.953	0.225	0	0	0	0	0	0	0 - 00:00 hrs
0203-580	4.323	295.133	Below Link Crown	7.187	0 - 12:37 hrs	0	111.551	0	44.443	0.082	0	0	0	0	0	0	0 - 00:00 hrs
0203-581	7.203	299.853	Surcharged	-0.533	0 - 12:21 hrs	117.749	117.749	3.25	3.252	0	1.536	4.203	0	0.256	0.73	56.963	0 - 12:15 hrs
0203-582	3.56	294.82	Below Link Crown	6.38	0 - 12:36 hrs	0	111.561	0	44.361	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-583	6.66	294.78	Below Link Crown	5.12	0 - 12:36 hrs	0	113.241	0	44.335	0.059	0	0	0	0	0	0	0 - 00:00 hrs
0203-584	8.596	294.776	Below Link Crown	5.424	0 - 12:36 hrs	0	551.998	0	138.213	0.116	0	0	0	0	0	0	0 - 00:00 hrs
0203-585	8.505	294.645	Below Link Crown	4.855	0 - 12:37 hrs	0	547.196	0	138.092	0.057	0	0	0	0	0	0	0 - 00:00 hrs
0203-586	8.481	294.431	Below Link Crown	5.769	0 - 12:38 hrs	0	544.865	0	138.035	0.083	0	0	0	0	0	0	0 - 00:00 hrs
0203-587	9.325	293.945	Below Link Crown	4.855	0 - 12:44 hrs	0	540.059	0	137.954	0.128	0	0	0	0	0	0	0 - 00:00 hrs
0203-588	10.983	293.813	Below Link Crown	4.257	0 - 12:45 hrs	0	533.78	0	137.829	0.185	0	0	0	0	0	0	0 - 00:00 hrs
0203-589	8.368	293.428	Below Link Crown	7.972	0 - 12:47 hrs	0	529.181	0	137.642	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-590	1.962	327.892	Below Link Crown	2.508	0 - 17:31 hrs	0	53.257	0	14.565	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-591	3.089	324.139	Surcharged	-0.469	0 - 17:44 hrs	0	53.239	0	14.553	0.01	10.1	0.469	0	0.083	5.048	1.164	0 - 15:52 hrs
0203-592	4.605	295.135	Below Maximum Depth	1.695	0 - 12:33 hrs	0	65.826	0	3.25	0.002	1.066	0.605	1.695	0	0	0	0 - 00:00 hrs
0203-593	1.212	317.392	Below Link Crown	2.408	0 - 17:45 hrs	0	52.641	0	14.536	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-594	3.972	312.902	Surcharged	-0.302	0 - 19:44 hrs	0	52.641	0	14.533	0.03	18.644	0.372	0	1.21	9.299	8.437	0 - 17:38 hrs
0203-595	2.905	310.895	Below Link Crown	0.205	0 - 19:45 hrs	0	44.822	0	14.504	0.009	0	0	0	0	0	0	0 - 00:00 hrs

Table B-4a. Existing System Analysis - Nodes
25-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-596	1.899	308.259	Below Link Crown	1.241	0 - 19:46 hrs	0	44.821	0	14.496	0.01	0	0	0	0	0	0	0 - 00:00 hrs
0203-597	2.916	300.446	Below Link Crown	4.254	0 - 19:47 hrs	0	44.821	0	14.487	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-598	2.794	299.704	Below Link Crown	4.296	0 - 12:17 hrs	0	44.821	0	14.478	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-599	5.533	299.563	Below Link Crown	3.727	0 - 12:17 hrs	0	45.783	0	14.476	0.011	0	0	0	0	0	0	0 - 00:00 hrs
0203-600	7.549	299.249	Below Link Crown	1.611	0 - 12:15 hrs	531.183	599.272	17.479	94.525	0.024	0	0	0	0	0	0	0 - 00:00 hrs
0203-601	7.702	298.722	Below Link Crown	2.628	0 - 12:15 hrs	0	470.389	0	93.954	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-602	2.58	295.67	Below Link Crown	9.83	0 - 12:41 hrs	0	111.545	0	44.573	0.093	0	0	0	0	0	0	0 - 00:00 hrs
0203-603	5.26	310	Surcharged	-0.7	0 - 13:36 hrs	644.385	644.385	24.16	24.172	0	14.812	0.711	0	7.563	7.405	557.604	0 - 12:15 hrs
0203-604	4.649	308.694	Surcharged	-0.095	0 - 13:37 hrs	0	96.328	0	24.168	0.002	6.083	0.095	0	0.002	3.041	0.24	0 - 12:37 hrs
0203-605	4.024	308.054	Below Link Crown	0.546	0 - 13:37 hrs	0	96.326	0	24.159	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-606	2.681	304.681	Below Link Crown	1.919	0 - 13:37 hrs	0	96.326	0	24.146	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-607	2.03	303.78	Below Link Crown	1.42	0 - 13:37 hrs	0	96.326	0	24.139	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-608	1.819	299.959	Below Link Crown	4.411	0 - 12:17 hrs	0	96.332	0	24.148	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-609	4.441	299.471	Below Link Crown	3.759	0 - 12:15 hrs	0	96.308	0	24.139	0.019	0	0	0	0	0	0	0 - 00:00 hrs
0203-610	4.701	299.411	Below Link Crown	3.589	0 - 12:15 hrs	0	96.575	0	24.124	0.011	0	0	0	0	0	0	0 - 00:00 hrs
0203-611	10.563	292.913	Below Link Crown	4.587	0 - 12:45 hrs	0	746.442	0	150.496	0.11	0	0	0	0	0	0	0 - 00:00 hrs
0203-612	8.364	293.034	Below Link Crown	7.966	0 - 12:45 hrs	209.445	699.424	9.889	147.377	0.123	0	0	0	0	0	0	0 - 00:00 hrs
0203-613	10.175	291.915	Below Link Crown	3.685	0 - 12:53 hrs	0	737.741	0	150.345	0.143	0	0	0	0	0	0	0 - 00:00 hrs
0203-614	11.559	291.699	Below Link Crown	2.531	0 - 12:53 hrs	0	724.872	0	150.202	0.229	0	0	0	0	0	0	0 - 00:00 hrs
0203-615	11.306	291.446	Below Link Crown	5.354	0 - 12:53 hrs	0	708.136	0	149.972	0.292	0	0	0	0	0	0	0 - 00:00 hrs
0203-616	11.369	291.329	Below Link Crown	5.371	0 - 12:53 hrs	0	683.86	0	149.68	0.422	0	0	0	0	0	0	0 - 00:00 hrs
0203-617	11.01	291.14	Below Link Crown	1.06	0 - 12:53 hrs	0	716.694	0	158.742	0.513	0	0	0	0	0	0	0 - 00:00 hrs
0203-618	11.457	291.007	Surcharged	-0.507	0 - 12:53 hrs	0	697.695	0	158.227	0.206	2.26	0.527	0	0.145	1.115	32.685	0 - 12:36 hrs
0203-619	11.8	290.8	Below Maximum Depth	0	0 - 12:51 hrs	0	693.203	0	158.042	0.256	0.729	0.04	0	0.056	0.195	16.931	0 - 12:53 hrs
0203-620	10.944	290.374	Below Link Crown	3.456	0 - 12:52 hrs	0	679.833	0	157.735	0.147	0	0	0	0	0	0	0 - 00:00 hrs
0203-621	9.842	292.342	Below Link Crown	5.278	0 - 12:45 hrs	0	741.133	0	150.387	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-622	10.582	290.302	Below Link Crown	3.528	0 - 12:52 hrs	76.97	699.662	2.9	160.484	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-623	5.371	284.921	Below Link Crown	1.979	0 - 12:52 hrs	0	810.455	0	172.125	0.083	0	0	0	0	0	0	0 - 00:00 hrs
0203-624	4.482	285.172	Below Maximum Depth	4.848	0 - 12:52 hrs	0	111.979	0	11.759	0.005	3.612	0.472	4.848	0	0	0	0 - 00:00 hrs
0203-625	6.947	290.607	Below Link Crown	4.293	0 - 13:00 hrs	0	139.861	0	11.819	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-626	6.757	294.427	Surcharged	-0.227	0 - 12:17 hrs	112.881	197.935	3.319	11.789	0.002	0.388	0.307	0	0.021	0.184	13.1	0 - 12:15 hrs
0203-627	3.215	296.545	Below Link Crown	3.235	0 - 13:37 hrs	0	54.575	0	5.292	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-628	4.226	282.946	Below Link Crown	3.154	0 - 12:53 hrs	0	831.322	0	174.832	0.06	0	0	0	0	0	0	0 - 00:00 hrs
0203-629	4.948	281.963	Below Link Crown	3.467	0 - 12:53 hrs	91.09	919.843	2.347	186.738	0.069	0	0	0	0	0	0	0 - 00:00 hrs
0203-630	8.445	281.521	Below Link Crown	3.979	0 - 12:55 hrs	0	919.653	0	186.681	0.33	0	0	0	0	0	0	0 - 00:00 hrs
0203-631	8.032	280.107	Below Link Crown	4.393	0 - 12:51 hrs	29.217	969.975	0.87	193.599	0.346	0	0	0	0	0	0	0 - 00:00 hrs
0203-632	6.948	278.838	Below Link Crown	5.162	0 - 12:45 hrs	0	970.499	0	193.256	0.188	0	0	0	0	0	0	0 - 00:00 hrs
0203-633	2.576	281.486	Below Link Crown	2.014	0 - 12:42 hrs	0	39.982	0	13.672	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-634	2.167	280.527	Below Link Crown	2.393	0 - 12:42 hrs	0	39.976	0	13.66	0.016	0	0	0	0	0	0	0 - 00:00 hrs
0203-635	2.369	277.889	Below Link Crown	4.691	0 - 12:34 hrs	0	39.976	0	13.631	0.012	0	0	0	0	0	0	0 - 00:00 hrs
0203-636	5.963	277.793	Below Link Crown	5.327	0 - 12:33 hrs	0	40.094	0	13.617	0.039	0	0	0	0	0	0	0 - 00:00 hrs
0203-637	5.013	277.783	Below Link Crown	6.317	0 - 12:33 hrs	0	1,007.25	0	206.647	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-638	11.379	277.099	Below Link Crown	5.901	0 - 12:30 hrs	0	1,029.06	0	208.853	0.197	0	0	0	0	0	0	0 - 00:00 hrs
0203-639	8.496	276.456	Below Link Crown	8.744	0 - 12:27 hrs	326.175	1,148.55	9.841	218.49	0.165	0	0	0	0	0	0	0 - 00:00 hrs
0203-640	7.082	275.162	Below Link Crown	6.318	0 - 12:29 hrs	0	1,142.31	0	218.27	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-641	7.941	273.841	Below Link Crown	5.459	0 - 12:30 hrs	0	1,137.81	0	218.103	0.242	0	0	0	0	0	0	0 - 00:00 hrs
0203-642	7.551	272.211	Below Link Crown	9.659	0 - 12:30 hrs	64.663	1,157.03	1.732	219.605	0.335	0	0	0	0	0	0	0 - 00:00 hrs
0203-643	5.157	269.867	Below Link Crown	12.133	0 - 12:30 hrs	0	1,156.50	0	219.264	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-644	7.14	266.86	Below Link Crown	14.89	0 - 12:30 hrs	0	1,218.46	0	226.571	0.158	0	0	0	0	0	0	0 - 00:00 hrs
0203-645	9.369	265.009	Below Link Crown	13.791	0 - 12:32 hrs	0	1,217.59	0	226.408	0.306	0	0	0	0	0	0	0 - 00:00 hrs
0203-646	7.751	263.961	Below Link Crown	15.339	0 - 12:33 hrs	0	1,216.75	0	226.102	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-647	3.558	280.572	Below Link Crown	1.412	0 - 12:17 hrs	0	80.569	0	2.37	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-648	3.269	280.839	Below Link Crown	1.761	0 - 12:15 hrs	52.07	52.07	1.502	1.503	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-649	2.584	280.734	Below Link Crown	3.416	0 - 12:15 hrs	31.479	31.479	0.866	0.867	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-650	4.838	287.258	Surcharged	-0.368	0 - 14:08 hrs	0	81.266	0	13.241	0.011	4.494	0.798	0	0.08	1.883	2.087	0 - 12:53 hrs
0203-651	4.401	284.201	Below Maximum Depth	1.939	0 - 14:49 hrs	0	34.104	0	12.849	0.029	15.063	0.231	1.939	0	0	0	0 - 00:00 hrs
0203-652	7.174	315.402	Surcharged	-0.648	0 - 12:51 hrs	277.862	277.862	9.496	9.5	0	5.996	4.174	0	1.884	2.978	209.073	0 - 12:15 hrs
0203-653	6.29	308.94	Surcharged	0	0 - 11:55 hrs	0	71.226	0	9.451	0.002	5.976	2.79	0	0	0.001	6.478	0 - 11:55 hrs
0203-654	2.233	300.953	Below Link Crown	1.847	0 - 11:56 hrs	0	69.524	0	9.501	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-655	7.538	302.028	Surcharged	-0.748	0 - 17:14 hrs	0	150.388	0	40.365	0.018	15.624	1.538	0	0.409	7.514	13.988	0 - 12:19 hrs
0203-656	3.323	297.143	Below Link Crown	2.937	0 - 12:41 hrs	0	69.521	0	9.514	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-657	6.77	292.37	Surcharged	-0.67	0 - 12:56 hrs	0	185.34	0	11.751	0.008	4.017	2.91	0	0.624	1.915	71.574	0 - 12:15 hrs
0203-658	7.475	290.535	Below Link Crown	5.015	0 - 13:00 hrs	0	111.966	0	11.772	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-659	4.147	286.377	Below Link Crown	7.713	0 - 12:53 hrs	0	111.972	0	11.76	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-660	6.407	279.687	Surcharged	-0.687	0 - 13:14 hrs	190.615	190.615	5.723	5.726	0	11.725	3.407	0	1.727	5.828	164.808	0 - 12:15 hrs
0203-661	7.384	301.824	Surcharged	-0.474	0 - 17:17 hrs	0	149.671	0	40.396	0.018	15.617	1.384	0	0.239	7.087	7.77	0 - 12:40 hrs
0203-662	5.541	302.731	Surcharged	-0.651	0 - 12:47 hrs	0	90.796	0	5.308	0.004	3.574	2.041	0	0.7	1.783	38.03	0 - 12:18 hrs
0203-663	5.89	301.66	Surcharged	0	0 - 12:02 hrs	0	57.455	0	5.286	0	3.564	2.39	0	0	0	5.16	0 - 12:02 hrs
0203-664	6.189	300.489	Below Maximum Depth	0.481	0 - 12:02 hrs	0	54.689	0	5.293	0	3.587	2.689	0.481	0	0	0	0 - 00:00 hrs
0203-665	6.404	298.864	Below Maximum Depth	0.006	0 - 12:48 hrs	0	149.398	0	40.296	0.014	2.442	0.404	0.006	0	0	0	0 - 00:00 hrs
0203-666	7.977	304.607	Surcharged	-0.447	0 - 12:30 hrs	81.608	81.608	3.181	3.183	0	2.562	4.977	0	0.181	0.924	35.351	0 - 12:15 hrs
0203-667	7.71	302.95	Surcharged	0	0 - 13:00 hrs	0	46.606	0	3.198	0	2.869	4.44	0	0	0	1.579	0 - 13:00 hrs
0203-668	6.001	299.441	Surcharged	-0.711	0 - 13:00 hrs	0	46.605	0	3.206	0	2.933	2.821	0	0.232	1.433	11.142	0 - 12:04 hrs
0203-669	5.302	297.982	Below Maximum Depth	0.188	0 - 13:00 hrs	0	37.636	0	3.178	0.001	3.039	2.302	0.188	0	0	0	0 - 00:00 hrs
0203-670	3.698	296.188	Surcharged	-0.188	0 - 13:00 hrs	0	37.636	0	3.177	0.001	2.257	0.198	0	0.001	1.099	0.198	0 - 12:22 hrs
0203-671	6.349	288.949	Below Maximum Depth	6.601	0 - 12:59 hrs	0	111.971	0	11.761	0.001	4.118	1.849	6.601	0	0	0	0 - 00:00 hrs
0203-672	5.383	287.733	Below Maximum Depth	6.357	0 - 12:56 hrs	0	111.972	0	11.761	0.001	3.938	0.883	6.357	0	0	0	0 - 00:00 hrs
0203-673	6.31	298.71	Below Maximum Depth	0	0 - 12:04 hrs	0	280.499	0	41.148	0.015	2.114	0.31	0	2.286	0.729	280.499	0 - 12:15 hrs
0203-674	6.879	289.479	Surcharged	-0.239	0 - 12:17 hrs	88.6	88.6	2.933	2.935	0	0.79	2.879	0	0.026	0.222	14.427	0 - 12:15 hrs
0203-675	5.282	287.762	Below Maximum Depth	1.008	0 - 12:17 hrs	0	74.882	0	2.926	0.01	0.55	1.282	1.008	0	0	0	0 - 00:00 hrs
0203-676	4.999	284.179	Below Link Crown	3.351	0 - 12:52 hrs	0	831.536	0	174.959	0.127	0	0	0	0	0	0	0 - 00:00 hrs
0203-677	7.036	298.966	Below Maximum Depth	0.014	0 - 12:15 hrs	0	157.513	0	39.67	0.034	2.876	1.036	0.014	0	0	0	0 - 00:00 hrs
0203-678	6.316	300.636	Surcharged	-0.606	0 - 12:45 hrs	207.649	207.649	7.463	7.467	0	4.436	2.816	0	1.166	2.217	141.252	0 - 12:15 hrs
0203-679	7.434	299.234	Below Link Crown	0.786	0 - 12:15 hrs	0	198.145	0	53.802	0.028	0	0	0	0	0	0	0 - 00:00 hrs
0203-680	5.415	291.298	Surcharged	-0.564	0 - 12:53 hrs	154.117	154.117	5.1	5.103	0	6.878	2.415	0	1.097	3.368	120.238	0 - 12:15 hrs

Table B-4a. Existing System Analysis - Nodes
25-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-681	4.717	289.527	Below Maximum Depth	2.923	0 - 12:45 hrs	0	38.75	0	5.087	-0.003	6.758	1.387	2.923	0	0	0	0 - 00:00 hrs
0203-682	4.899	287.899	Below Maximum Depth	0.421	0 - 13:44 hrs	0	38.743	0	5.092	0.001	6.505	0.899	0.421	0	0	0	0 - 00:00 hrs
0203-683	4.656	287.546	Below Maximum Depth	0.704	0 - 13:45 hrs	0	38.415	0	5.093	0.001	6.399	0.656	0.704	0	0	0	0 - 00:00 hrs
0203-684	5.291	287.131	Below Maximum Depth	0.839	0 - 13:45 hrs	0	37.557	0	5.093	0.001	6.62	1.291	0.839	0	0	0	0 - 00:00 hrs
0203-685	6.157	286.597	Below Maximum Depth	0.914	0 - 13:47 hrs	0	35.431	0	5.09	0.002	6.769	1.657	0.914	0	0	0	0 - 00:00 hrs
0203-686	6.218	286.382	Below Maximum Depth	0.713	0 - 13:48 hrs	0	35.392	0	5.089	0.001	6.808	1.718	0.713	0	0	0	0 - 00:00 hrs
0203-687	5.997	286.161	Below Link Crown	1.324	0 - 13:48 hrs	0	35.363	0	5.088	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-688	4.899	285.97	Surcharged	-0.302	0 - 12:17 hrs	52.197	52.197	1.612	1.613	0	0.76	1.899	0	0.015	0.211	7.65	0 - 12:15 hrs
0203-689	2.401	283.434	Below Link Crown	2.229	0 - 12:10 hrs	0	45.173	0	1.612	0.009	0	0	0	0	0	0	0 - 00:00 hrs

Table B-4b. Existing System Analysis - Pipes/Channels
25-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-001-022	3.883	345.652	0.807	136.827	Free Surface	0 - 12:44 hrs	7.746	7.754	0.396	0.817	208.824	34.798	6.648	0	0	13.366	0	0	0
0203-002-001	3	68.703	1.061	43.348	Backwater	0 - 12:15 hrs	6.133	6.133	0.631	1	25.355	1.034	3	9.622	9.622	20.346	0	0.182	1
0203-003-051	7.47	1,836.26	1.173	145.604	Free Surface	0 - 12:11 hrs	1.028	4.168	0.079	0.997	1,690.66	34.091	31.255	0	0	3.484	0	0	0
0203-004-003	3.5	70.599	0.717	148.157	Exceeds Capacity	0 - 12:11 hrs	7.055	7.066	2.099	1	-77.559	34.094	6	7.411	8.448	7.411	8.528	7.411	0
0203-005-041	4	336.322	0.564	196.649	Backwater	0 - 12:17 hrs	7.68	7.68	0.585	1	139.673	25.256	7.413	6.635	7.081	6.635	0	6.635	0
0203-006-005	4.17	340.431	0.535	88.809	Backwater	0 - 12:15 hrs	3.341	3.341	0.261	1	251.622	13.853	7.017	6.32	6.32	6.96	0	0	0
0203-007-040	3.06	227.444	0.761	89.65	Free Surface	0 - 15:15 hrs	5.522	5.851	0.394	0.955	137.794	13.838	6.366	0	3.272	0	0	0	0
0203-008-007	3.75	289.554	0.703	89.649	Free Surface	0 - 15:14 hrs	4.499	4.499	0.31	0.94	199.904	13.844	6.185	0	2.16	0	0	0	0
0203-009-467	4.08	204.974	0.478	67.454	Backwater	0 - 19:22 hrs	3.601	3.635	0.329	1	137.52	13.84	5.474	7.468	8.095	7.468	0	5.825	0
0203-010-008	3.5	155.722	0.302	89.65	Backwater	0 - 15:14 hrs	3.941	3.941	0.576	1	66.072	13.848	6.5	3.966	4.025	3.966	0	3.966	0
0203-011-039	3.82	361.971	0.957	89.656	Free Surface	0 - 15:11 hrs	5.482	5.633	0.248	0.733	272.315	13.842	6.19	0	0	0	0	0	0
0203-012-011	3.4	179.651	0.437	89.657	Free Surface	0 - 15:11 hrs	4.367	4.367	0.499	0.929	89.994	13.837	6.5	0	2.355	0	0	0	0
0203-013-012	3	215.243	0.901	89.657	Backwater	0 - 15:11 hrs	4.598	4.598	0.417	1	125.586	13.833	6.5	4.006	4.014	4.008	0	4.004	0
0203-014-017	5.5	200.833	0.358	104.031	Backwater	0 - 13:02 hrs	4.379	4.379	0.518	1	96.802	13.904	5.499	2.468	3.234	2.501	0	2.442	0
0203-015-014	5.5	584.361	3.028	104.032	Free Surface	0 - 13:02 hrs	4.393	4.416	0.178	0.995	480.329	13.883	5.499	0	0	3.234	0	0	0
0203-016-025	3.5	86.614	0.741	62.794	Backwater	0 - 12:17 hrs	6.527	6.527	0.725	1	23.82	6.956	3.499	2.667	2.667	2.683	0	2.629	0
0203-017-018	4.035	221.445	0.332	103.238	Backwater	0 - 12:40 hrs	4.532	4.532	0.466	1	118.207	13.915	6.73	3.784	3.799	3.904	0	3.297	0
0203-018-472	4.035	202.107	0.276	95.417	Backwater	0 - 14:19 hrs	4.189	4.189	0.472	1	106.69	13.843	6.73	3.702	3.904	3.813	0	3.584	0
0203-019-020	3	95.745	2.061	41.886	Backwater	0 - 14:15 hrs	5.926	5.926	0.437	1	53.859	3.127	2.919	2.611	2.611	2.621	0	0.258	0
0203-020-021	3	3.682	0.003	41.712	Exceeds Capacity	0 - 14:15 hrs	5.901	5.901	11.328	1	-38.029	3.134	2.958	2.611	2.621	2.611	6.25	2.611	0
0203-021-023	3	55.487	0.692	40.954	Backwater	0 - 14:11 hrs	5.794	5.794	0.738	1	14.533	3.132	2.935	2.611	2.614	2.634	0	0.31	0
0203-022-525	10.92	4,890.27	0.824	182.57	Free Surface	0 - 12:15 hrs	3.727	3.741	0.037	0.259	4,707.70	36.38	25.969	0	0	0	0	0	0
0203-023-024	3	58.562	0.771	49.506	Backwater	0 - 14:11 hrs	7.004	7.004	0.845	1	9.056	3.134	2.997	2.367	2.642	2.367	0	1.675	0
0203-024-016	3	80.465	1.455	62.794	Backwater	0 - 12:17 hrs	8.884	8.884	0.78	1	17.671	6.967	2.998	2.389	2.389	2.645	0	2.359	0
0203-025-026	3.5	111.064	1.219	61.069	Backwater	0 - 11:59 hrs	6.507	7.322	0.55	1	49.995	6.952	3.485	2.196	2.683	2.196	0	2.196	0
0203-026-027	3.5	99.78	0.984	59.798	Backwater	0 - 13:26 hrs	6.215	6.788	0.599	1	39.982	6.942	3.499	2.198	2.198	2.551	0	0	0
0203-027-028	4	133.8	0.868	59.798	Backwater	0 - 13:26 hrs	4.759	5.435	0.447	1	74.002	6.94	3.998	2.329	2.37	2.329	0	2.329	0
0203-028-029	4.5	158.864	0.653	61.148	Backwater	0 - 14:17 hrs	3.996	4.411	0.385	1	97.716	6.935	4.499	2.228	2.228	2.638	0	0	0
0203-029-030	4.5	85.729	0.19	79.519	Backwater	0 - 13:25 hrs	5	5	0.928	1	6.21	6.929	4.481	2.426	2.638	2.426	0	2.073	0
0203-030-037	7.66	386.522	0.309	79.637	Free Surface	0 - 13:25 hrs	2.642	2.885	0.206	0.983	306.884	6.934	5.331	0	0	0.506	0	0	0
0203-031-022	4.5	22.455	0.013	54.704	Free Surface	0 - 12:15 hrs	4.563	4.563	2.436	0.705	-32.249	1.6	4.5	0	0	0	0.418	0	0
0203-032-033	2.5	83.636	4.158	40.295	Free Surface	0 - 12:19 hrs	10.28	10.28	0.482	0.745	43.341	2.3	2.5	0	1.128	0	0	0	0
0203-033-520	8.14	2,355.24	0.771	220.306	Free Surface	0 - 12:18 hrs	3.621	3.627	0.094	0.424	2,134.93	38.642	29.879	0	0	0	0	0	0
0203-034-009	4.08	269.154	0.824	66.933	Backwater	0 - 19:29 hrs	3.517	3.517	0.249	1	202.221	13.823	5.474	8.072	8.072	8.095	0	0	0
0203-035-010	5.391	1,184.67	3.322	89.652	Free Surface	0 - 15:14 hrs	4.599	5.33	0.076	0.616	1,095.01	13.852	6.454	0	0	0	0	0	0
0203-036-035	5.33	290.679	2.466	89.656	Free Surface	0 - 15:12 hrs	5.648	5.957	0.308	0.527	201.023	13.849	6.143	0	0	0	0	0	0
0203-037-038	3.923	268.973	0.973	162.768	Backwater	0 - 12:15 hrs	9.094	9.094	0.605	1	106.205	13.802	5.364	3.143	3.143	3.215	0	2.414	0
0203-038-015	5	322.127	1.53	104.042	Backwater	0 - 13:02 hrs	5.299	5.814	0.323	1	218.085	13.882	4.987	2.581	3.156	2.581	0	2.581	0
0203-039-036	3.883	682.362	3.144	89.655	Free Surface	0 - 15:12 hrs	4.999	4.999	0.131	0.8	592.706	13.848	6.453	0	0	0	0	0	0
0203-040-034	3.98	279.318	0.963	89.61	Free Surface	0 - 15:15 hrs	6.067	6.191	0.321	0.85	189.708	13.828	5.889	0	0	8.077	0	0	0
0203-041-042	4.06	499.996	0.664	111.095	Backwater	0 - 11:59 hrs	3.511	4.408	0.222	1	388.901	25.266	10.421	6.55	6.584	6.691	0	0.018	0
0203-042-043	4.16	563.61	1.528	109.844	Backwater	0 - 12:00 hrs	4.315	4.555	0.195	1	453.766	25.258	6.861	6.656	6.656	7.834	0	0	0
0203-043-044	8.63	2,960.15	2.046	107.532	Free Surface	0 - 12:00 hrs	1.337	1.689	0.036	0.837	2,852.61	25.251	36.865	0	0	0	0	0	0
0203-044-045	8.63	367.618	0.032	103.524	Free Surface	0 - 12:00 hrs	1.243	1.616	0.282	0.857	264.095	25.24	37.616	0	0	0	0	0	0
0203-045-046	10.92	3,308.14	0.377	102.755	Free Surface	0 - 15:59 hrs	0.554	0.9	0.031	0.709	3,205.38	25.221	50.42	0	0	0	0	0	0
0203-046-047	16.9	4,107.02	0.223	103.663	Free Surface	0 - 15:55 hrs	0.921	1.374	0.025	0.458	4,003.36	25.172	32.43	0	0	0	0	0	0
0203-047-048	8.14	1,396.26	0.271	105.133	Free Surface	0 - 12:14 hrs	0.494	1.166	0.075	0.939	1,291.13	25.164	51.282	0	0	0	0	0	0
0203-048-049	7.17	1,567.97	0.556	109.64	Backwater	0 - 15:00 hrs	0.537	0.722	0.07	1	1,458.33	28.257	40.93	2.755	2.755	4.15	0	0	0
0203-049-050	8.06	304.652	0.023	110.078	Backwater	0 - 14:07 hrs	0.561	0.886	0.361	1	194.574	28.221	38.362	1.895	1.895	1.905	0	0	0
0203-050-004	8.06	279.054	0.019	110.617	Backwater	0 - 14:56 hrs	0.606	0.903	0.396	1	168.437	28.184	38.362	1.905	1.905	1.927	0	0	0
0203-051-530	9.53	1,383.85	0.423	135.838	Free Surface	0 - 12:18 hrs	0.858	1.434	0.098	0.924	1,248.01	34.063	26.89	0	0	0	0	0	0
0203-052-053	3	63.59	0.909	30.629	Backwater	0 - 12:15 hrs	4.333	4.333	0.482	1	32.96	0.896	2.993	1.178	1.178	1.18	0	0.166	0
0203-053-054	3	48.022	0.518	30.634	Backwater	0 - 12:15 hrs	4.334	4.334	0.638	1	17.388	0.897	2.925	1.179	1.182	1.179	0	0.541	0
0203-054-055	3	84.505	1.605	30.639	Backwater	0 - 12:15 hrs	4.335	4.335	0.363	1	53.866	0.897	2.984	1.179	1.179	1.235	0	0.001	0
0203-055-056	3.5	168.299	2.798	45.583	Backwater	0 - 12:21 hrs	4.738	5.211	0.271	1	122.716	3.088	3.496	1.221	1.221	1.246	0	0.001	0
0203-056-057	3.5	83.517	0.689	44.645	Backwater	0 - 12:18 hrs	4.64	4.64	0.535	1	38.871	3.089	3.499	1.252	1.253	1.278	0	1.178	0
0203-057-058	3	74.237	1.239	44.37	Backwater	0 - 13:12 hrs	6.277	6.277	0.598	1	29.867	3.152	2.999	1.34	1.34	1.355	0	1.183	0
0203-058-238	3.5	90.882	0.816	49.573	Backwater	0 - 12:03 hrs	5.153	5.153	0.545	1	41.309	3.482	3.495	1.284	1.284	1.528	0	0.013	0
0203-059-058	3	54.649	0.671	8.897	Backwater	0 - 12:02 hrs	1.259	3.156	0.163	1	45.752	0.33	3	1.233	1.233	1.285	0	0	0
0203-060-061	3.5	142.302	2.001	36.526	Free Surface	0 - 12:18 hrs	4.035	6.903	0.257	0.936	105.776	4.74	3.498	0	0	0.12	0	0	0
0203-061-238	3.5	172.123	2.927	38.042	Backwater	0 - 13:15 hrs	5.158	6.53	0.221	1	134.081	4.741	3.49	0.12	0.12	1.528	0	0	0
0203-062-063	5	162.88	0.391	102.394	Backwater	0 - 12:03 hrs	5.229	5.23	0.629	1	60.486	9.622	4.991	1.183	1.205	1.183	0	1.183	0
0203-063-064	5	130.257	0.25	101.791	Backwater	0 - 12:15 hrs	5.184	5.281	0.781	1	28.467	9.613	4.998	0.609	1.213	0.609	0	0.609	0
0203-064-065	5	183.236	0.495	101.788	Backwater	0 - 12:15 hrs	5.184	5.184	0.556	1	81.448	9.608	4.999	0.837	0.837	1.315	0	0	0
0203-065-066	5	159.984	0.377	101.788	Backwater	0 - 12:15 hrs	5.184	5.184	0.636	1	58.196	9.608	4.996	0.507	1.315	0.507	0	0.507	0
0203-066-067	5	161.359	0.384	101.788	Free Surface	0 - 12:15 hrs	5.243	5.243	0.631	0.965	59.572	9.606	4.998	0	0.507	0	0	0	0
0203-067-239	5	206.753	0.63	101.562	Free Surface	0 - 12:15 hrs	5.413	5.637	0.491	0.914	105.191	9.602	4.997	0	0	0	0	0	0
0203-068-215	3.066	1,149.61	20.197	24.18	Free Surface	0 - 12:15 hrs	6.284	6.288	0.021	0.276	1,125.43	0.7	9.033	0	0	0	0	0	0
0203-069-068	2	25.455	1.266	24.172	Free Surface	0 - 12:15 hrs	5.215	5.215	0.475	0.692	1.283	0.7	2	0	0.09	0	0	0	0
0203-070-325	12.854	4,967.02	0.992	222.096	Free Surface	0 - 12:19 hrs	2.513	2.554	0.045	0.355	4,744.92	27.045	24.668	0	0	0	0	0	0
0203-071-060	3.5	187.895	3.488	36.347	Free Surface	0 - 13:15 hrs	5.351	5.62	0.193	0.753	151.548	4.741	3.498	0	0	0	0	0	0
0203-072-228	4.5	186.529	0.9	13.528	Free Surface	0 - 12:15 hrs	1.319	2.888	0.073	0.682	173.002	0.564	4.493	0	0	0	0	0	0
0203-073-074	4.5	4.183	0	20.579	Free Surface	0 - 12:06 hrs	1.382	2.009	4.92	0.945	-16.396	0.532	4.461	0	0	0	0.877	0	0
0203-074-075	4.5	221.385	1.267	27.293	Free Surface	0 - 12:03 hrs	2.058	3.545	0.123	0.972	194.092	0.531	4.273	0	0	1.86	0	0	0
0203-075-076	4.5	325.803	2.745	29.967	Backwater	0 - 12:03 hrs	1.889	3.476	0.092	1	295.836	0.535	4.475	2.629	2.629	2.685	0	0.001	0
0203-076-078	3.5	68.953	0.47	46.419	Backwater	0 - 12:38 hrs	4.825	4.825	0.673	1	22.533	6.566	3.5	2.834	2.883	2.834	0	2.834	0
0203-077-073	4.5	160.442	0.666	17.682	Free Surface	0 - 12:06 hrs	1.265	2.381	0.11	0.871	142.76	0.542	4.5	0	0	0	0	0	0
0203-078-079	3.5	93.392	0.862	46.419	Backwater	0 - 12:38 hrs	4.825	4.825	0.497	1	46.973	6.565	3.5	2.834	2.834	2.928	0	0	0
0203-079-080	3.5	54.172	0.29	46.419	Backwater	0 - 12:38 hrs	4.825	4.825	0.857	1	7.753	6.565	3.5	2.848	2.928	2.848	0	2.848	0
0203-080-081	3.5	87.521	0.757	46.419	Backwater	0 - 12:38 hrs	4.825	4.825	0.53	1	41.102	6.564	3.499	2.848	2.848	2.986	0	0	0
0203-081-082	3.5	69.53	0.478	46.419	Backwater	0 - 12:38 hrs	4.825	4.825	0.668	1	23.111	6.563	3.5	2.874	2.989	2.874	0	2.874	0
0203-082-083	3.5	6.926	0.005	46.419	Exceeds Capacity	0 - 12:38 hrs	4.825	4.825	6.702	1	-39.493	6.563	3.5	2.662	2.882	2.662	8.149	2.662	0

Table B-4b. Existing System Analysis - Pipes/Channels
25-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-083-084	4	131.346	0.836	46.419	Free Surface	0 - 12:45 hrs	3.701	4.024	0.353	0.993	84.926	6.563	3.999	0	0	2.662	0	0	0
0203-084-256	4	101.062	0.495	46.419	Backwater	0 - 12:45 hrs	3.694	3.694	0.459	1	54.643	6.563	4	2.695	2.697	2.699	0	2.684	0
0203-085-086	4	70.749	0.243	46.42	Free Surface	0 - 12:45 hrs	4.392	4.418	0.656	0.834	24.329	6.561	3.999	0	0	0	0	0	0
0203-086-087	4	154.972	1.164	46.43	Free Surface	0 - 12:48 hrs	4.626	4.772	0.3	0.867	108.542	6.561	4	0	0	0	0	0	0
0203-087-092	4.5	84.096	0.183	54.813	Free Surface	0 - 12:15 hrs	4.054	4.055	0.652	0.793	29.283	6.351	4.499	0	0	0	0	0	0
0203-088-089	3	82.098	1.515	41.506	Backwater	0 - 12:15 hrs	5.872	6.274	0.506	1	40.592	1.577	3	0.02	0.02	0.06	0	0	0
0203-089-090	3	60.036	0.81	41.519	Backwater	0 - 12:15 hrs	5.874	5.874	0.692	1	18.517	1.578	2.999	0.013	0.135	0.013	0	0.013	0
0203-090-091	3	65.069	0.952	41.556	Free Surface	0 - 12:15 hrs	6.169	6.169	0.639	0.909	23.512	1.577	2.999	0	0.013	0	0	0	0
0203-091-087	3	88.207	1.749	9.829	Free Surface	0 - 12:15 hrs	1.449	2.851	0.111	0.916	78.378	0.209	3	0	0	0.248	0	0	0
0203-091-093	3	49.976	0.561	31.176	Free Surface	0 - 12:15 hrs	4.817	5.071	0.624	0.861	18.8	1.785	2.996	0	0	0	0	0	0
0203-092-094	5	130.84	0.252	54.499	Free Surface	0 - 12:15 hrs	4.953	4.993	0.417	0.548	76.34	6.34	4.999	0	0	0	0	0	0
0203-093-094	3	32.421	0.236	30.919	Free Surface	0 - 12:15 hrs	4.579	4.58	0.954	0.914	1.503	1.785	2.999	0	0.218	0	0	0	0
0203-094-338	2.97	136.306	0.132	83.815	Free Surface	0 - 12:17 hrs	1.702	1.791	0.615	0.83	52.491	8.126	29.208	0	0	0	0	0	0
0203-095-096	3.5	90.975	0.818	53.728	Backwater	0 - 11:52 hrs	5.584	5.584	0.591	1	37.247	10.632	3.499	5.195	5.199	5.197	0	5.194	1
0203-096-097	3.5	101.427	1.016	53.729	Backwater	0 - 11:52 hrs	5.584	5.584	0.53	1	47.698	10.627	3.499	5.198	5.198	5.217	0	5.193	1
0203-097-098	4	103.324	0.517	53.351	Backwater	0 - 13:29 hrs	4.246	4.269	0.516	1	49.973	10.619	3.999	5.158	5.187	5.158	0	5.158	0
0203-098-099	4	97.211	0.458	53.351	Free Surface	0 - 13:29 hrs	4.252	4.373	0.549	0.994	43.859	10.613	4	0	5.171	0	0	0	0
0203-099-100	4	100.312	0.488	53.351	Free Surface	0 - 13:30 hrs	4.251	4.285	0.532	0.995	46.961	10.606	4	0	0	0.906	0	0	0
0203-100-101	4	83.923	0.341	53.351	Free Surface	0 - 13:30 hrs	4.363	4.363	0.636	0.936	30.572	10.6	3.999	0	0.906	0	0	0	0
0203-101-102	5	90.752	1.15	53.351	Free Surface	0 - 13:30 hrs	4.049	4.088	0.588	0.636	37.401	10.594	4.947	0	0	0	0	0	0
0203-102-103	5	185.211	0.506	53.351	Free Surface	0 - 13:30 hrs	4.344	4.489	0.288	0.599	131.86	10.589	4.998	0	0	0	0	0	0
0203-103-104	5	159.475	0.375	53.35	Free Surface	0 - 13:32 hrs	4.416	4.524	0.335	0.591	106.124	10.586	4.996	0	0	0	0	0	0
0203-104-341	5.5	207.433	0.382	53.346	Free Surface	0 - 13:32 hrs	4.215	4.328	0.257	0.535	154.087	10.58	5.499	0	0	0	0	0	0
0203-105-106	2	30.06	1.766	17.549	Backwater	0 - 13:52 hrs	5.586	5.621	0.584	1	12.511	2.304	2	2.787	3.354	2.787	0	2.787	0
0203-106-336	2	28.691	1.609	17.55	Backwater	0 - 13:52 hrs	5.586	5.723	0.612	1	11.142	2.302	1.986	2.772	2.787	3.035	0	1.089	0
0203-107-108	2	28.341	1.57	17.56	Backwater	0 - 13:52 hrs	5.665	6.33	0.62	1	10.782	2.322	1.965	1.798	3.274	1.798	0	0.837	0
0203-108-353	2.5	51.358	1.568	17.647	Backwater	0 - 13:49 hrs	3.849	4.208	0.344	1	33.711	2.322	2.499	1.611	1.611	7.47	0	0	0
0203-109-001	13.779	15,450.54	0.802	338.039	Free Surface	0 - 13:18 hrs	3.523	3.523	0.022	0.142	15,112.50	48.198	59.743	0	0	0	0	0	0
0203-110-109	16.67	43,091.18	5.225	338.045	Free Surface	0 - 13:18 hrs	5.975	5.975	0.008	0.153	42,753.14	48.201	38.012	0	0	0	0	0	0
0203-111-110	16.67	32,295.05	2.935	338.05	Free Surface	0 - 13:18 hrs	5.314	5.314	0.01	0.164	31,957.00	48.203	38.987	0	0	0	0	0	0
0203-112-218	7.321	243.809	0.423	243.286	Free Surface	0 - 13:48 hrs	5.202	5.464	0.998	0.902	0.522	38.654	8.106	0	2.69	0	0	0	0
0203-113-357	8.464	406.283	0.082	342.804	Backwater	0 - 12:18 hrs	5.52	5.52	0.844	1	63.48	35.322	8.717	1.628	1.674	1.628	0	1.628	0
0203-114-355	6.954	1,349.50	0.794	277.777	Free Surface	0 - 12:19 hrs	5.064	5.638	0.206	0.856	1,071.72	31.287	10.041	0	0	0	0	0	0
0203-115-353	7.03	1,566.16	1.225	262.32	Free Surface	0 - 12:18 hrs	4.598	4.598	0.167	0.934	1,303.84	29	9.594	0	0	0.591	0	0	0
0203-116-115	9.15	3,747.00	0.711	263.718	Free Surface	0 - 12:18 hrs	3.121	3.588	0.07	0.707	3,483.28	29.03	19.416	0	0	0	0	0	0
0203-117-116	6.945	921.659	0.399	266.546	Free Surface	0 - 12:15 hrs	5.58	5.927	0.289	0.772	655.113	29.042	9.606	0	0	0	0	0	0
0203-118-372	8.563	803.823	0.95	200.327	Free Surface	0 - 15:42 hrs	2.586	4.373	0.249	0.897	603.496	55.736	17.839	0	0	3.896	0	0	0
0203-119-366	7.336	447.07	0.386	119.651	Free Surface	0 - 15:07 hrs	1.946	3.691	0.268	0.891	327.419	28.892	21.976	0	0	3.039	0	0	0
0203-120-003	22.5	12,809.94	0.912	292.984	Free Surface	0 - 12:26 hrs	5.714	5.714	0.023	0.256	12,516.95	14.881	17.785	0	0	0	0	0	0
0203-121-120	17.772	22,770.23	2.632	293.126	Free Surface	0 - 12:26 hrs	2.688	2.709	0.013	0.301	22,477.11	14.886	34.192	0	0	0	0	0	0
0203-122-392	17.772	3,239.21	0.053	293.705	Free Surface	0 - 12:25 hrs	3.093	3.103	0.091	0.277	2,945.51	14.889	32.469	0	0	0	0	0	0
0203-123-122	20	2,602.91	0.05	293.954	Free Surface	0 - 12:23 hrs	3.036	3.037	0.113	0.269	2,308.95	14.903	18	0	0	0	0	0	0
0203-124-391	6.887	1,318.52	1.785	294.451	Free Surface	0 - 12:23 hrs	3.212	3.259	0.223	0.886	1,024.07	14.916	27.781	0	0	0	0	0	0
0203-125-124	6.724	2,774.56	11.136	117.634	Free Surface	0 - 12:22 hrs	3.08	3.097	0.042	0.602	2,656.93	3.088	18.883	0	0	0	0	0	0
0203-126-125	6.174	1,373.44	3.659	117.639	Free Surface	0 - 12:22 hrs	5.908	5.908	0.086	0.457	1,255.80	3.089	14.067	0	0	0	0	0	0
0203-127-126	4.532	720.569	2.378	117.684	Free Surface	0 - 12:22 hrs	3.699	3.705	0.163	0.647	602.885	3.09	21.528	0	0	0	0	0	0
0203-128-127	2.699	140.425	0.406	117.823	Free Surface	0 - 12:22 hrs	3.024	3.026	0.839	0.923	22.602	3.097	27.314	0	0.155	0	0	0	0
0203-128-129	4.861	7.073	0	50.26	Backwater	0 - 12:07 hrs	0.971	1.16	7.105	1	-43.186	1.927	24.715	0.11	0.11	0.131	2.584	0.041	0
0203-129-342	4.861	498.481	0.673	38.919	Backwater	0 - 12:18 hrs	0.499	1.88	0.078	1	459.562	3.769	24.715	0.131	0.131	2.983	0	0	0
0203-130-124	7.936	627.086	0.675	177.423	Free Surface	0 - 12:22 hrs	3.251	4.018	0.283	0.732	449.663	11.83	16.297	0	0	0	0	0	0
0203-131-130	7.259	399.334	0.298	178.095	Free Surface	0 - 12:21 hrs	3.118	3.383	0.446	0.793	221.24	11.832	19.966	0	0	0	0	0	0
0203-132-131	8.018	540.547	0.563	179.725	Free Surface	0 - 12:18 hrs	3.859	3.921	0.332	0.7	360.822	11.841	15.108	0	0	0	0	0	0
0203-133-132	6.815	448.438	0.712	179.875	Free Surface	0 - 12:17 hrs	4.203	4.228	0.401	0.781	268.563	11.85	16.077	0	0	0	0	0	0
0203-134-328	4.533	193.541	0.93	128.331	Backwater	0 - 13:10 hrs	3.783	3.783	0.663	1	65.21	7.44	13.642	1.048	1.048	1.1	0	0	0
0203-135-005	9.15	3,341.27	2.172	73.902	Free Surface	0 - 12:37 hrs	7.576	9.591	0.022	0.199	3,267.37	4.401	10.756	0	0	0	0	0	0
0203-136-437	5.947	17.321	0	74.112	Free Surface	0 - 12:34 hrs	2.366	2.377	4.279	0.464	-56.791	4.4	20.027	0	0	0	2.084	0	0
0203-137-136	6.797	23.695	0	74.854	Free Surface	0 - 12:32 hrs	1.263	1.272	3.159	0.522	-51.16	4.42	30.112	0	0	0	1.571	0	0
0203-138-137	6.268	600.479	0.087	81.606	Free Surface	0 - 12:22 hrs	1.037	1.163	0.136	0.562	518.873	4.459	43.076	0	0	0	0	0	0
0203-139-432	4.941	1,402.11	2.904	24.418	Free Surface	0 - 12:25 hrs	0.286	1.072	0.017	0.92	1,377.69	0.779	29.52	0	0	0.03	0	0	0
0203-140-139	9.026	1,769.19	0.482	22.772	Free Surface	0 - 12:25 hrs	0.394	1.783	0.013	0.454	1,746.42	0.783	28.076	0	0	0	0	0	0
0203-141-140	8.612	1,878.86	0.563	20.497	Free Surface	0 - 12:25 hrs	0.396	1.134	0.011	0.424	1,858.36	0.782	27.589	0	0	0	0	0	0
0203-142-141	6.92	832.122	0.288	24.609	Free Surface	0 - 12:11 hrs	1.245	1.592	0.03	0.384	807.514	0.785	21.565	0	0	0	0	0	0
0203-143-004	17.323	21,642.13	0.992	280.665	Free Surface	0 - 13:25 hrs	3.428	3.428	0.013	0.084	21,361.46	63.017	63.832	0	0	0	0	0	0
0203-144-143	19	992.533	0	280.669	Free Surface	0 - 13:23 hrs	2.389	2.389	0.283	0.095	711.864	63.066	65	0	0	0	0	0	0
0203-145-144	18.74	4,051.12	0.094	280.682	Free Surface	0 - 13:22 hrs	4.851	4.851	0.069	0.231	3,770.44	63.122	26.724	0	0	0	0	0	0
0203-146-145	10.21	90.41	0.001	280.68	Free Surface	0 - 13:22 hrs	2.032	2.032	3.105	0.667	-190.27	63.189	37.711	0	0	0	8.119	0	0
0203-147-146	9.691	2,334.74	0.658	280.683	Free Surface	0 - 13:22 hrs	1.988	1.988	0.12	0.715	2,054.06	63.225	33.324	0	0	0	0	0	0
0203-148-147	15.381	252.174	0.002	280.685	Free Surface	0 - 13:21 hrs	2.874	2.874	1.113	0.464	-28.512	63.242	25.266	0	0	0	5.867	0	0
0203-149-148	14.554	2,720.41	0.165	280.689	Free Surface	0 - 13:21 hrs	1.981	1.981	0.103	0.509	2,439.72	63.261	34.043	0	0	0	0	0	0
0203-150-149	7.733	78.841	0.002	280.694	Free Surface	0 - 13:21 hrs	1.61	1.61	3.56	0.973	-201.853	63.282	45.133	0	0	0	8.539	0	0
0203-151-150	8.225	2,435.01	1.458	280.702	Free Surface	0 - 13:19 hrs	1.683	1.683	0.115	0.884	2,154.31	63.301	44.382	0	0	0	0	0	0
0203-152-151	16.837	2,557.95	0.144	280.733	Free Surface	0 - 13:18 hrs	2.751	2.752	0.11	0.421	2,277.22	63.336	28.111	0	0	0	0	0	0
0203-153-152	8.005	344.331	0.082	280.765	Free Surface	0 - 13:18 hrs	2.434	2.449	0.815	0.922	63.566	63.369	30.908	0	0	0	0	0	0
0203-154-153	7.008	33.026	0.001	280.787	Exceeds Capacity	0 - 13:17 hrs	2.188	2.188	8.502	1	-247.762	63.391	35.833	6.073	6.219	6.073	13.729	6.073	0
0203-155-154	10.079	70.597	0.001	280.833	Free Surface	0 - 13:15 hrs	1.805	1.905	3.978	0.787	-210.235	63.42	39.25	0	0	0	8.815	0	0
0203-156-155	9.089	2,711.45	2.503	280.886	Free Surface	0 - 13:15 hrs	2.323	2.371	0.104	0.854	2,430.56	63.447	24.246	0	0	0	0	0	0
0203-157-156	11.338	119.826	0.002	280.915	Free Surface	0 - 13:14 hrs	2.57	2.697	2.344	0.676	-161.089	63.458	23.824	0	0	0	7.325	0	0
0203-158-157	19.416	423.315	0.002	280.938	Free Surface	0 - 13:12 hrs	2.157	2.224	0.664	0.41	142.377	63.466	26.84	0	0	0	0	0	0
0203-159-158	9.951	100.399	0.001	281.03	Free Surface	0 - 13:11 hrs	1.216	1.33	2.799	0.818	-180.631	63.491	53.688	0	0	0	7.61	0	0
0203-160-159	7.221	2,619.35	2.339	281.199	Free Surface	0 - 13:10 hrs	1.493	1.541	0.107	0.998	2,338.15	63.522	48.174	0	0	6.262	0	0	0
0203-161-160	7.818	3,015.45	4.818	281.314	Free Surface	0 - 13:08 hrs	3.263	3.809	0.093	0.664	2,734.14	63.543	19.118	0	0	0	0	0	0
0203-162-161	7.818	1,242.62	0.818	281.553	Free Surface	0 - 13:07 hrs	5.261	5.647	0.227	0.439	961.066	63.572	18.206	0	0	0	0	0	0

Table B-4b. Existing System Analysis - Pipes/Channels
25-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-163-428	7.946	723.967	0.687	259.583	Free Surface	0 - 16:12 hrs	4.213	4.226	0.359	0.668	464.384	58.992	13.492	0	0	0	0	0	0
0203-164-163	8.07	714.158	0.628	259.574	Free Surface	0 - 16:10 hrs	4.746	4.746	0.363	0.593	454.584	59.035	13.412	0	0	0	0	0	0
0203-165-364	8.07	2,155.64	5.723	259.575	Free Surface	0 - 16:09 hrs	4.32	4.32	0.12	0.642	1,896.07	59.07	13.561	0	0	0	0	0	0
0203-166-362	7.943	1,142.03	1.468	259.577	Free Surface	0 - 16:08 hrs	3.64	3.64	0.227	0.705	882.449	59.139	14.204	0	0	0	0	0	0
0203-167-166	8.144	114.204	0.071	259.577	Free Surface	0 - 16:08 hrs	4.524	4.524	2.273	0.96	-145.373	59.18	7.867	0	5.907	0	7.177	0	0
0203-168-167	8.144	444.795	1.081	259.592	Backwater	0 - 16:07 hrs	4.33	4.33	0.584	1	185.203	59.209	7.867	5.435	5.435	5.907	0	0	0
0203-169-168	4.473	1,222.99	4.319	259.632	Backwater	0 - 16:06 hrs	3.371	3.371	0.212	1	963.359	59.183	18.555	5.811	5.811	7.342	0	0	0
0203-170-169	4.473	203.446	0.12	211.478	Exceeds Capacity	0 - 13:48 hrs	2.746	3.337	1.039	1	-8.031	43.19	18.555	5.803	5.88	5.811	2.866	5.498	0
0203-171-410	6.907	1,099.60	0.666	211.587	Free Surface	0 - 13:48 hrs	1.63	1.768	0.192	0.948	888.017	43.22	21.17	0	0	0	0	0	0
0203-172-171	6.907	848.777	0.397	211.706	Free Surface	0 - 13:48 hrs	1.715	1.944	0.249	0.903	637.071	43.238	21.11	0	0	0	0	0	0
0203-173-403	4.414	349.406	0.283	215.198	Backwater	0 - 14:12 hrs	2.573	2.585	0.616	1	134.208	43.388	21.335	5.586	5.614	5.592	0	5.028	0
0203-174-169	4.533	21.186	0.003	130.166	Exceeds Capacity	0 - 18:08 hrs	2.389	2.99	6.144	1	-108.981	16.094	14.018	5.763	5.833	5.763	8.224	5.763	0
0203-175-426	4.526	264.171	0.399	104.599	Backwater	0 - 18:22 hrs	2.044	2.157	0.396	1	159.572	16.06	13.596	4.975	4.975	5.584	0	0	0
0203-176-175	4.505	162.954	0.141	103.94	Backwater	0 - 18:22 hrs	2.007	2.1	0.638	1	59.014	16.053	14.298	5.106	5.117	5.115	0	0.818	0
0203-177-176	4.26	265.263	0.478	103.273	Backwater	0 - 18:22 hrs	1.966	1.977	0.389	1	161.99	16.047	14.066	5.429	5.429	6.747	0	0	0
0203-178-177	4.484	537.161	2.016	148.243	Free Surface	0 - 12:33 hrs	3.065	3.074	0.276	0.978	388.918	16.09	13.3	0	0	6.72	0	0	0
0203-179-178	4.423	225.92	0.285	149.785	Free Surface	0 - 12:33 hrs	2.984	3.009	0.663	0.898	76.135	16.092	13.887	0	0	0	0	0	0
0203-180-179	11.458	179.059	0.002	150.428	Free Surface	0 - 12:32 hrs	2.196	2.222	0.84	0.346	28.632	16.102	22.475	0	0	0	0	0	0
0203-181-424	7.728	54.713	0.001	154.304	Free Surface	0 - 12:29 hrs	2.414	2.616	2.82	0.476	-99.592	16.116	22.95	0	0	0	3.511	0	0
0203-182-181	8.53	826.671	0.097	155.863	Free Surface	0 - 12:27 hrs	2.145	2.319	0.189	0.469	670.808	16.122	30.398	0	0	0	0	0	0
0203-183-182	8.571	1,197.10	0.206	157.35	Free Surface	0 - 12:26 hrs	1.826	1.878	0.131	0.505	1,039.75	16.13	28.989	0	0	0	0	0	0
0203-184-183	7.568	1,253.86	3.236	158.197	Free Surface	0 - 12:26 hrs	4.497	4.587	0.126	0.607	1,095.66	16.137	12.3	0	0	0	0	0	0
0203-185-184	7.408	864.065	1.475	20.66	Free Surface	0 - 12:40 hrs	0.602	1.271	0.024	0.614	843.406	1.565	13.577	0	0	0	0	0	0
0203-186-185	6.59	1,544.80	3.044	20.149	Free Surface	0 - 12:41 hrs	0.586	1.038	0.013	0.517	1,524.65	1.564	15.873	0	0	0	0	0	0
0203-187-246	7.439	443.039	0.112	144.697	Free Surface	0 - 12:22 hrs	2.444	3.004	0.327	0.631	298.341	14.582	26.016	0	0	0	0	0	0
0203-188-380	9.535	234.929	0.033	152.35	Free Surface	0 - 12:18 hrs	2.449	2.471	0.648	0.663	82.579	14.606	19.804	0	0	0	0	0	0
0203-189-188	10.121	1,440.98	1.382	155.861	Free Surface	0 - 12:17 hrs	2.748	2.784	0.108	0.661	1,285.12	14.619	17.104	0	0	0	0	0	0
0203-190-189	9.496	1,159.96	1.946	25.561	Free Surface	0 - 12:22 hrs	0.735	2.748	0.022	0.612	1,134.40	1.608	12.565	0	0	0	0	0	0
0203-191-190	11.035	1,486.19	4.607	24.478	Free Surface	0 - 12:23 hrs	2.194	3.401	0.016	0.315	1,461.71	1.606	6.628	0	0	0	0	0	0
0203-192-419	6.08	388.922	0.56	27.883	Free Surface	0 - 12:11 hrs	1.625	1.938	0.072	0.807	361.039	1.568	14.216	0	0	0	0	0	0
0203-193-192	4.437	919.169	2.701	18.236	Free Surface	0 - 12:17 hrs	1.622	3.047	0.02	0.423	900.933	0.891	18.45	0	0	0	0	0	0
0203-194-193	3.615	209.313	0.967	18.428	Free Surface	0 - 12:15 hrs	2.873	2.873	0.088	0.245	190.885	0.892	8.231	0	0	0	0	0	0
0203-195-402	4.497	425.77	0.454	425.083	Backwater	0 - 12:18 hrs	5.223	5.223	0.998	1	0.688	43.461	18.833	2.815	2.815	5.692	0	0.711	0
0203-196-401	3.568	232.948	0.404	137.073	Free Surface	0 - 12:14 hrs	3.145	3.347	0.588	0.904	95.875	7.436	20.359	0	0	0.464	0	0	0
0203-197-196	3.568	505.968	1.907	87.285	Free Surface	0 - 12:18 hrs	3.321	3.345	0.173	0.591	418.683	6.024	16.517	0	0	0	0	0	0
0203-198-330	2.169	48.278	0.68	48.856	Exceeds Capacity	0 - 12:08 hrs	3.459	3.459	1.012	1	-0.578	3.823	10.228	0.547	0.591	0.562	0.023	0.528	0
0203-199-197	5.362	628.759	0.855	87.387	Free Surface	0 - 12:17 hrs	4.345	4.346	0.139	0.365	541.372	6.023	15.215	0	0	0	0	0	0
0203-200-199	6.864	525.155	0.561	17.866	Free Surface	0 - 12:15 hrs	0.885	0.885	0.034	0.379	507.289	0.595	10.332	0	0	0	0	0	0
0203-201-202	14.057	1,337.49	0.537	20.013	Free Surface	0 - 13:15 hrs	2.559	2.864	0.015	0.296	1,317.48	3.07	5.407	0	0	0	0	0	0
0203-202-204	4.551	38.21	0.033	23.297	Backwater	0 - 12:19 hrs	0.775	1.514	0.61	1	14.914	3.071	10.685	0.03	0.035	0.03	0	0.03	0
0203-203-204	4.685	59.632	0.106	44.183	Free Surface	0 - 12:19 hrs	2.186	2.789	0.741	0.838	15.448	3.309	10.367	0	0	0	0	0	0
0203-204-205	4.769	902.174	3.745	140.192	Free Surface	0 - 12:15 hrs	2.168	2.545	0.155	0.978	761.982	10.364	24.308	0	0	0	0	0	1
0203-205-394	4.769	274.159	0.346	138.972	Free Surface	0 - 12:15 hrs	2.119	2.66	0.507	0.983	135.187	10.364	24.737	0	0	0	0	0	3
0203-206-207	5.829	866.55	1.228	136.199	Free Surface	0 - 12:15 hrs	2.239	2.573	0.157	0.808	730.351	10.328	35.046	0	0	11.899	0	0	0
0203-207-209	8.65	1,034.29	0.319	129.642	Free Surface	0 - 12:17 hrs	0.917	1.039	0.125	0.965	904.643	10.01	39.555	0	0	8.257	0	0	0
0203-208-212	1.777	31.788	0.523	24.36	Backwater	0 - 16:12 hrs	2.032	2.032	0.766	1	7.429	8.768	14.184	1.263	1.263	10.021	0	0	0
0203-209-208	1.163	9.217	1.556	24.36	Exceeds Capacity	0 - 16:09 hrs	8.386	8.386	2.643	1	-15.142	8.777	4.297	12.2	13.398	12.2	12.729	12.2	0
0203-210-209	5.187	692.46	5.419	104.502	Backwater	0 - 12:18 hrs	2.423	2.76	0.151	1	587.958	1.039	14.214	11.9	11.9	11.98	0	0	0
0203-211-210	3.936	59.684	0.584	27.735	Backwater	0 - 12:14 hrs	1.857	1.857	0.465	1	31.949	0.454	6.01	11.955	11.955	11.962	0	0.078	0
0203-212-213	1.777	27.411	0.389	24.359	Backwater	0 - 16:13 hrs	1.915	1.925	0.889	1	3.051	8.75	14.184	2.722	10.021	2.777	0	1.471	0
0203-213-217	5.579	277.504	0.202	42.711	Free Surface	0 - 12:18 hrs	1.43	2.092	0.154	0.523	234.793	9.426	14.703	0	0	0	0	0	0
0203-214-213	6.004	529.609	0.526	23.692	Free Surface	0 - 12:15 hrs	0.918	1.011	0.045	0.463	505.917	0.696	14.527	0	0	0	0	0	0
0203-215-214	6.004	1,441.56	3.896	24.162	Free Surface	0 - 12:15 hrs	1.748	1.816	0.017	0.306	1,417.40	0.701	11.323	0	0	0	0	0	0
0203-216-069	3.066	755.983	8.734	25.08	Free Surface	0 - 12:15 hrs	1.788	3.085	0.033	0.535	730.903	0.7	17.306	0	0	0	0	0	0
0203-217-397	4	240.254	2.091	42.584	Free Surface	0 - 12:18 hrs	1.417	1.86	0.177	0.835	197.67	9.417	9	0	0	0	0	0	0
0203-218-360	8	616.736	0.931	338.058	Free Surface	0 - 13:18 hrs	6.9	6.9	0.548	0.51	278.678	48.217	12	0	0	0	0	0	0
0203-219-218	15.742	3,098.77	0.197	100.124	Free Surface	0 - 13:03 hrs	1.446	1.594	0.032	0.374	2,998.65	9.57	23.829	0	0	0	0	0	0
0203-220-219	7.957	1,410.25	0.559	100.334	Free Surface	0 - 13:02 hrs	1.326	1.786	0.071	0.584	1,309.92	9.606	26.868	0	0	0	0	0	0
0203-221-352	6	472.126	0.361	268.625	Backwater	0 - 12:15 hrs	5.596	5.656	0.569	1	203.501	29.062	8	0.097	0.394	0.097	0	0.097	0
0203-222-107	2	27.207	1.446	17.556	Backwater	0 - 13:53 hrs	5.588	5.666	0.645	1	9.651	2.32	1.991	1.965	1.965	3.274	0	0	0
0203-223-358	6	781.339	0.561	263.974	Backwater	0 - 12:42 hrs	4.4	4.4	0.338	1	517.365	35.333	10	1.823	1.863	1.823	0	1.823	0
0203-224-475	3	31.878	0.228	32.771	Exceeds Capacity	0 - 14:52 hrs	4.636	4.636	1.028	1	-0.893	3.391	3	3.053	3.053	3.057	0.078	3.052	0
0203-225-422	2.5	28.674	0.489	18.963	Free Surface	0 - 12:15 hrs	3.912	3.912	0.661	0.962	9.71	0.894	2.5	0	0	0	0	0	0
0203-226-227	3.5	48.818	0.235	76.008	Exceeds Capacity	0 - 12:15 hrs	7.9	7.9	1.557	1	-27.189	5.988	3.5	2.933	2.957	2.935	0.609	2.924	0
0203-227-076	3.5	40.108	0.159	75.176	Exceeds Capacity	0 - 12:03 hrs	7.814	7.814	1.874	1	-35.068	5.99	3.5	2.883	2.935	2.883	0.837	2.876	0
0203-228-077	4.5	123.55	0.395	14.908	Free Surface	0 - 12:07 hrs	1.238	3.035	0.121	0.765	108.642	0.552	4.489	0	0	0	0	0	0
0203-229-511	2.25	27.334	0.779	20.042	Backwater	0 - 13:17 hrs	5.041	5.041	0.733	1	7.292	3.069	2.25	3.649	3.666	3.65	0	3.644	1
0203-230-512	2.5	22.565	0.303	20.042	Free Surface	0 - 13:17 hrs	4.735	4.826	0.888	0.805	2.523	3.073	2.5	0	3.648	0	0	0	0
0203-231-514	3	56.333	0.713	20.042	Free Surface	0 - 13:18 hrs	4.282	4.421	0.356	0.629	36.291	3.076	2.991	0	0	0	0	0	0
0203-232-233	3.5	113.931	1.282	20.042	Free Surface	0 - 13:19 hrs	6.147	6.147	0.176	0.372	93.889	3.073	3.383	0	0	0	0	0	0
0203-233-516	3.5	100.268	0.993	20.042	Free Surface	0 - 13:19 hrs	5.043	5.333	0.2	0.431	80.225	3.072	3.466	0	0	0	0	0	0
0203-234-529	4	56.772	0.156	36.302	Free Surface	0 - 13:07 hrs	2.951	2.951	0.639	0.946	20.47	4.737	3.998	0	0	0	0	0	0
0203-235-236	3.5	54.672	0.295	36.302	Free Surface	0 - 13:07 hrs	5.119	5.119	0.664	0.691	18.37	4.738	3.444	0	0	0	0	0	0
0203-236-237	3.5	140.904	1.961	36.302	Free Surface	0 - 13:08 hrs	6.703	6.706	0.258	0.549	104.602	4.739	3.498	0	0	0	0	0	0
0203-237-071	3.5	113.012	1.262	36.301	Free Surface	0 - 13:08 hrs	5.335	5.411	0.321	0.666	76.711	4.741	3.5	0	0	0	0	0	0
0203-238-062	5	380.356	2.133	102.826	Backwater	0 - 12:03 hrs	5.237	5.257	0.27	1	277.53	9.622	4.993	1.048	1.21	1.048	0	1.048	0
0203-239-245	5	163.665	0.393	141.893	Free Surface	0 - 12:18 hrs	3.273	3.274	0.867	0.867	21.772	18.992	10	0	0	0	0	0	0
0203-240-494	4	124.539	0.752	57.402	Backwater	0 - 13:07 hrs	4.568	4.568	0.461	1	67.137	4.099	3.988	1.41	1.413	2.096	0	0.003	0
0203-241-254	3	38.818	0.339	37.979	Backwater	0 - 12:15 hrs	5.373	5.373	0.978	1	0.839	1.291	3	0.97	0.97	2.642	0	0.253	0
0203-242-243	4.333	114.727	0.416	100.595	Backwater	0 - 13:00 hrs	6.821	6.821	0.877	1	14.132	9.597	4.332	2.281	2.298	2.281	0	2.281	0
0203-243-361	4.333	74.203	0.174	100.595	Free Surface	0 - 13:00 hrs	6.946	7.05	1.356	0.952	-26.392	9.598	4.332	0	2.281	0	2.249	0	0
0203-244-462	5.737	112.706	0.521	102.093	Backwater	0 - 15:07 hrs	3.71	3.71	0.906	1	10.613	29.004	6.184	4.09	8.696	4.09	0	4.09	0

Table B-4b. Existing System Analysis - Pipes/Channels
25-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-245-070	5	39.928	0.023	141.864	Free Surface	0 - 12:18 hrs	4.364	4.372	3.553	0.651	-101.935	18.978	10	0	0	0	4.632	0	0
0203-246-417	7.439	3,676.70	7.719	141.74	Free Surface	0 - 12:22 hrs	2.064	4.376	0.039	0.672	3,534.96	14.579	27.713	0	0	0	0	0	0
0203-247-602	12.356	1,517.96	0.118	111.545	Free Surface	0 - 17:02 hrs	2.723	2.724	0.073	0.24	1,406.41	44.573	19.073	0	0	0	0	0	0
0203-248-318	3	67.56	1.026	34.107	Backwater	0 - 16:07 hrs	4.825	4.825	0.505	1	33.453	12.791	3	12.333	12.507	12.333	0	12.333	0
0203-249-196	2.151	129.724	3.804	48.585	Free Surface	0 - 12:15 hrs	4.338	4.338	0.375	0.81	81.139	1.411	9.18	0	0	0.608	0	0	0
0203-250-545	3.91	89.055	0.375	76.431	Backwater	0 - 12:37 hrs	2.97	2.97	0.858	1	12.624	13.189	7.382	6.157	6.157	12.161	0	2.331	0
0203-251-546	5.09	136.033	0.361	34.101	Free Surface	0 - 16:06 hrs	1.093	1.254	0.251	0.88	101.932	12.871	7.758	0	0	0	0	0	0
0203-252-626	6.45	1,853.34	4.54	92.297	Free Surface	0 - 12:22 hrs	1.946	4.166	0.05	0.658	1,761.05	8.468	20.456	0	0	0.194	0	0	0
0203-253-434	5.141	97.055	0.011	40.29	Backwater	0 - 12:26 hrs	0.311	0.33	0.415	1	56.765	1.668	45.615	0.171	0.174	0.171	0	0.166	0
0203-254-335	10.591	74.207	0	145.835	Free Surface	0 - 12:15 hrs	2.957	3.257	1.965	0.4	-71.628	12.558	24.691	0	0	0	1.476	0	2
0203-255-635	4.56	164.413	1.087	39.976	Free Surface	0 - 12:44 hrs	3.201	3.971	0.243	0.551	124.438	13.631	6.35	0	0	0	0	0	0
0203-256-085	4	33.719	0.055	46.42	Free Surface	0 - 12:45 hrs	3.776	3.776	1.377	0.954	-12.701	6.563	4	0	0	2.699	2.904	0	0
0203-257-321	4.392	206.69	0.099	29.578	Free Surface	0 - 13:36 hrs	1.01	1.14	0.143	0.534	177.113	4.786	24.957	0	0	0	0	0	0
0203-258-257	3	2.934	0.002	29.578	Free Surface	0 - 13:36 hrs	4.401	4.416	10.082	0.904	-26.644	4.788	3	0	3.746	0	13.813	0	0
0203-259-258	3	44.007	0.435	29.578	Backwater	0 - 13:36 hrs	4.184	4.184	0.672	1	14.429	4.791	2.999	3.685	3.685	3.746	0	3.67	0
0203-260-259	3	40.111	0.214	29.827	Backwater	0 - 12:02 hrs	4.22	4.22	0.744	1	10.285	4.792	2.99	3.677	3.683	3.685	0	3.671	0
0203-261-260	3	38.498	0.333	31.676	Backwater	0 - 12:00 hrs	4.579	4.58	0.823	1	6.822	4.798	2.999	3.68	3.704	3.683	0	3.676	0
0203-262-261	2.5	26.97	0.432	31.894	Exceeds Capacity	0 - 12:00 hrs	6.497	6.497	1.183	1	-4.924	4.801	2.5	3.732	3.772	3.747	3.724	3.727	0
0203-263-262	3	37.42	0.315	33.029	Backwater	0 - 12:00 hrs	4.673	4.673	0.883	1	4.391	4.816	2.999	3.716	3.716	3.735	0	3.704	0
0203-264-265	2	19.5	0.743	18.343	Backwater	0 - 12:03 hrs	5.86	5.861	0.941	1	1.157	0.899	2	0.643	0.651	0.659	0	0.642	0
0203-265-266	3	22.859	0.117	17.782	Backwater	0 - 12:19 hrs	2.516	2.516	0.778	1	5.077	0.905	3	0.628	0.644	0.628	0	0.628	0
0203-266-267	3	53.494	0.643	17.78	Backwater	0 - 12:19 hrs	2.515	2.515	0.332	1	35.713	0.903	2.998	0.451	0.642	0.451	0	0.451	0
0203-267-318	3	49.041	0.541	17.777	Backwater	0 - 12:19 hrs	2.515	2.515	0.362	1	31.265	0.897	3	0.451	0.451	12.333	0	0	0
0203-268-631	12.401	4,258.40	0.223	954.473	Free Surface	0 - 12:56 hrs	2.979	2.987	0.224	0.639	3,303.93	191.128	63.326	0	0	0	0	0	0
0203-269-268	3.496	26.348	0.192	34.589	Free Surface	0 - 12:52 hrs	3.547	3.616	1.313	0.743	-8.24	5.081	4.257	0	3.511	0	3.421	0	0
0203-270-658	12.11	5,684.14	1.865	111.966	Free Surface	0 - 13:00 hrs	0.744	1.466	0.02	0.641	5,572.17	11.772	32.54	0	0	0	0	0	0
0203-271-662	2.89	97.449	1.376	90.796	Backwater	0 - 12:19 hrs	5.663	5.663	0.932	1	6.653	5.308	6.37	0.723	0.723	1.841	0	0.712	0
0203-272-273	4	127.985	0.794	71.159	Free Surface	0 - 12:11 hrs	8.633	8.679	0.556	0.839	56.826	9.486	3.994	0	0	0.788	0	0	0
0203-273-617	10.9	5,582.39	1.231	74.197	Free Surface	0 - 13:41 hrs	0.367	1.327	0.013	0.696	5,508.19	9.487	39.523	0	0	0.497	0	0	0
0203-274-275	3.92	107.358	0.572	74.51	Free Surface	0 - 13:14 hrs	7.366	7.451	0.694	0.887	32.849	9.628	3.177	0	3.156	0	0	0	0
0203-275-276	4	208.467	0.182	74.503	Free Surface	0 - 13:14 hrs	3.349	3.363	0.357	0.795	133.964	9.628	7	0	0	0	0	0	0
0203-276-277	4.1	200.517	0.198	74.496	Free Surface	0 - 13:14 hrs	4.959	4.959	0.372	0.62	126.021	9.619	6.748	0	0	0	0	0	0
0203-277-629	4.23	291.179	3.455	74.495	Free Surface	0 - 13:14 hrs	4.036	4.889	0.256	0.708	216.684	9.617	6.973	0	0	2.048	0	0	0
0203-278-274	4	56.829	0.054	29.889	Backwater	0 - 12:25 hrs	1.494	1.494	0.526	1	26.94	2.171	5	2.863	2.863	3.09	0	0.993	0
0203-279-278	3.5	88.814	0.779	29.889	Backwater	0 - 12:25 hrs	3.107	3.107	0.337	1	58.925	2.173	3.475	1.224	1.224	3.189	0	0	0
0203-280-279	3.5	56.3	0.313	29.889	Backwater	0 - 12:25 hrs	3.107	3.73	0.531	1	26.41	2.17	3.499	1.215	1.215	1.224	0	0.536	0
0203-281-280	3	43.759	0.43	29.963	Backwater	0 - 12:00 hrs	4.239	4.239	0.685	1	13.795	2.165	3	1.224	1.224	1.238	0	1.215	0
0203-282-281	3	33.701	0.255	30.074	Backwater	0 - 12:00 hrs	4.255	4.255	0.892	1	3.627	2.165	3	1.217	1.225	1.218	0	1.216	0
0203-283-274	3.5	66.952	0.443	58.261	Backwater	0 - 14:14 hrs	6.055	6.055	0.87	1	8.691	7.46	3.499	3.162	3.162	3.205	0	2.611	0
0203-284-297	3.5	2.371	0.001	96.544	Exceeds Capacity	0 - 12:22 hrs	10.035	10.035	40.713	1	-94.172	6.585	3.497	3.393	3.456	3.393	19.393	3.391	0
0203-285-534	3	77.681	1.356	22.199	Free Surface	0 - 14:08 hrs	3.501	3.577	0.286	0.999	55.482	6.584	3	0	0	2.028	0	0	0
0203-286-285	3	90.715	1.85	20.707	Free Surface	0 - 14:08 hrs	4.45	4.925	0.228	0.822	70.008	6.584	2.998	0	0	0	0	0	0
0203-287-286	3	68.923	1.068	20.606	Free Surface	0 - 15:25 hrs	5.312	5.337	0.299	0.578	48.316	6.584	2.999	0	0	0	0	0	0
0203-288-287	3	52.782	0.626	20.606	Free Surface	0 - 15:25 hrs	4.254	4.38	0.39	0.648	32.175	6.585	2.999	0	0	0	0	0	0
0203-289-288	3	35.822	0.288	20.606	Free Surface	0 - 15:23 hrs	3.482	3.498	0.575	0.78	15.216	6.587	2.999	0	0	0	0	0	0
0203-290-304	2.5	33.019	0.648	20.607	Free Surface	0 - 15:22 hrs	4.977	4.977	0.624	0.786	12.412	6.59	2.5	0	9.448	0	0	0	0
0203-291-305	2.5	38.403	0.877	20.607	Backwater	0 - 15:22 hrs	4.198	4.198	0.537	1	17.796	6.593	2.499	9.494	9.494	9.554	0	9.445	2
0203-292-291	2	28.481	1.585	20.607	Backwater	0 - 15:22 hrs	6.559	6.559	0.724	1	7.874	6.585	1.999	9.461	9.461	9.634	0	0	1
0203-293-292	2	27.328	1.459	22.139	Backwater	0 - 11:49 hrs	7.134	7.134	0.81	1	5.189	6.587	2	9.461	9.613	9.461	0	9.46	1
0203-294-306	3.5	111.399	1.226	44.747	Free Surface	0 - 12:57 hrs	4.879	4.879	0.402	0.934	66.652	6.592	3.488	0	0	9.452	0	0	0
0203-295-294	3.5	77.262	0.59	44.777	Free Surface	0 - 12:56 hrs	4.884	5.157	0.58	0.927	32.485	6.597	3.5	0	1.299	0	0	0	0
0203-296-295	3.5	26.661	0.07	44.777	Exceeds Capacity	0 - 12:56 hrs	4.654	4.654	1.679	1	-18.116	6.602	3.499	1.299	3.452	1.299	3.511	1.299	0
0203-297-296	3.5	149.798	2.217	44.777	Backwater	0 - 12:56 hrs	4.654	4.654	0.299	1	105.021	6.605	3.491	3.393	3.393	3.452	0	0	0
0203-298-314	4.5	229.799	0.808	101.71	Backwater	0 - 11:51 hrs	7.118	7.248	0.443	1	128.089	17.657	4.497	3.573	3.573	5.545	0	0	1
0203-299-298	3	50.348	0.57	47.093	Backwater	0 - 12:25 hrs	6.662	6.662	0.935	1	3.255	5.043	2.999	2.414	2.417	3.582	0	2.414	0
0203-300-307	3	70.727	1.124	52.712	Backwater	0 - 12:30 hrs	7.457	7.457	0.745	1	18.015	9.498	3	4.324	4.679	4.324	0	4.323	0
0203-301-317	5	253.25	0.946	123.71	Backwater	0 - 15:38 hrs	6.3	6.3	0.488	1	129.541	27.143	4.998	7.401	7.401	7.467	0	5.212	0
0203-302-333	5.08	39.693	0.032	164.543	Exceeds Capacity	0 - 11:49 hrs	4.569	4.569	4.145	1	-124.849	40.389	7.536	7.883	8.353	7.883	9.569	7.552	0
0203-303-334	3	67.685	1.03	35.327	Backwater	0 - 11:49 hrs	4.998	4.998	0.522	1	32.358	4.638	2.998	7.437	7.439	7.443	0	3.091	0
0203-304-289	2.5	50.953	1.543	20.607	Free Surface	0 - 15:23 hrs	5.04	5.203	0.404	0.776	30.346	6.589	2.499	0	0	0	0	0	0
0203-305-290	2.5	28.637	0.487	20.607	Backwater	0 - 15:22 hrs	4.198	4.198	0.72	1	8.03	6.592	2.5	9.448	9.554	9.448	0	9.448	1
0203-306-293	2.5	45.114	1.21	21.987	Backwater	0 - 11:49 hrs	4.479	4.479	0.487	1	23.127	6.588	2.5	9.479	9.507	9.479	0	9.479	1
0203-307-308	3.5	108.726	1.168	52.709	Backwater	0 - 12:30 hrs	5.479	5.601	0.485	1	56.016	9.495	3.499	4.2	4.256	4.201	0	2.207	0
0203-308-309	3.5	95.984	0.91	52.703	Backwater	0 - 12:30 hrs	5.478	5.513	0.549	1	43.28	9.485	3.5	3.969	4.201	3.972	0	3.475	0
0203-309-310	3.5	106.384	1.118	52.694	Backwater	0 - 12:30 hrs	5.517	6.284	0.495	1	53.69	9.477	3.5	3.394	4.164	3.394	0	3.394	0
0203-310-311	3.5	121.546	1.459	53.916	Backwater	0 - 11:52 hrs	7.008	8.088	0.444	1	67.63	9.458	3.497	3.716	3.716	4.644	0	0	0
0203-311-301	4	119.146	0.688	52.648	Backwater	0 - 12:32 hrs	4.19	4.493	0.442	1	66.498	9.451	3.999	4.593	4.593	7.442	0	0	0
0203-312-301	5	184.133	0.5	86.778	Backwater	0 - 11:52 hrs	4.42	4.624	0.471	1	97.356	17.599	4.997	6.064	6.067	7.401	0	0.003	0
0203-313-312	5	227.511	0.763	100.562	Backwater	0 - 13:00 hrs	5.122	5.844	0.442	1	126.948	17.633	4.999	5.933	5.933	6.067	0	0.001	2
0203-314-313	5	209.24	0.645	100.566	Backwater	0 - 13:02 hrs	5.122	5.819	0.481	1	108.675	17.657	4.998	4.993	4.993	5.933	0	2.583	2
0203-315-340	3.5	106.06	1.111	69.517	Backwater	0 - 11:51 hrs	7.225	7.225	0.655	1	36.543	12.551	3.499	4.95	4.95	4.981	0	0.717	0
0203-316-315	3.5	69.433	0.476	73.099	Exceeds Capacity	0 - 11:51 hrs	7.605	7.611	1.053	1	-3.665	12.566	3.499	4.946	5.006	4.947	0.014	4.946	0
0203-317-302	5.08	262.51	1.382	120.998	Backwater	0 - 16:59 hrs	3.36	3.36	0.461	1	141.512	27.147	7.536	7.452	7.452	8.353	0	0.001	0
0203-318-549	3	67.552	1.026	39.984	Free Surface	0 - 12:42 hrs	5.682	5.682	0.592	0.981	27.568	13.676	3	0	12.333	0	0	0	0
0203-319-556	4	56.408	0.154	67.593	Free Surface	0 - 12:15 hrs	6.992	7.066	1.198	0.723	-11.184	5.921	4	0	0.26	0	0.18	0	0
0203-320-319	3	48.238	4.952	29.576	Free Surface	0 - 13:41 hrs	4.981	4.981	0.613	0.783	18.661	4.775	2.999	0	0	2.711	0	0	0
0203-321-320	4.392	162.289	0.061	29.577	Free Surface	0 - 13:38 hrs	1.413	1.486	0.182	0.452	132.712	4.779	21.103	0	0	0	0	0	0
0203-322-323	4	194.09	1.826	26.605	Backwater	0 - 13:14 hrs	2.117	3.004	0.137	1	167.485	5.697	3.995	6.102	6.102	20.301	0	0	0
0203-323-324	6	498.726	0.855	26.605	Free Surface	0 - 13:15 hrs	1.278	1.278	0.053	0.578	472.121	5.649	6	0	0	0	0	0	1
0203-324-008	11.346	4,998.01	0.94	26.605	Free Surface	0 - 13:15 hrs	3.551	3.551	0.005	0.091	4,971.41	5.686	12.299	0	0	0	0	0	19
0203-325-329	9.647	578.421	0.106	211.868	Free Surface	0 - 12:23 hrs	2.412	2.545	0.366	0.697	366.553	26.825	26.973	0	0	0	0	0	0
0203-326-327	6.218	1,235.41	1.437	159.239	Free Surface	0 - 12:15 hrs	4.303	4.305	0.129	0.477	1,076.17	4.441	19.68	0	0	0	0	0	0

Table B-4b. Existing System Analysis - Pipes/Channels
25-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-327-328	10	2,249.26	1.211	156.646	Free Surface	0 - 12:15 hrs	3.106	3.109	0.07	0.485	2,092.61	4.439	19.537	0	0	0	0	0	0
0203-328-133	4.533	193.213	0.927	180.071	Backwater	0 - 12:15 hrs	5.309	5.309	0.932	1	13.141	11.853	13.642	1.1	1.1	1.167	0	0.771	0
0203-329-195	9.647	621.526	0.122	209.689	Free Surface	0 - 12:29 hrs	2.568	2.87	0.337	0.671	411.836	26.68	25.295	0	0	0	0	0	0
0203-330-199	2.169	73.922	1.595	70.804	Backwater	0 - 12:18 hrs	5.013	5.013	0.958	1	3.118	5.433	10.228	0.562	0.562	0.616	0	0.522	0
0203-331-332	5.08	73.265	0.108	149.344	Exceeds Capacity	0 - 17:07 hrs	4.404	4.441	2.038	1	-76.079	40.313	7.536	1.396	8.01	1.396	8.443	1.396	0
0203-332-665	6	917.899	0.494	149.398	Free Surface	0 - 17:06 hrs	2.544	2.734	0.163	0.961	768.501	40.296	12	0	0	1.22	0	0	0
0203-333-655	6	240.786	0.322	150.388	Backwater	0 - 14:47 hrs	2.089	2.089	0.625	1	90.399	40.365	12	7.801	7.801	7.811	0	0.002	0
0203-334-302	3.5	153.045	2.314	34.802	Backwater	0 - 11:49 hrs	3.617	3.617	0.227	1	118.243	4.635	3.5	7.446	7.446	9.753	0	0	0
0203-335-009	10.591	5,438.11	2.093	313.895	Free Surface	0 - 13:08 hrs	16.096	16.096	0.058	0.312	5,124.22	12.614	18.623	0	0	0	0	0	3
0203-336-222	2	26.059	1.327	17.551	Backwater	0 - 13:52 hrs	5.587	5.905	0.673	1	8.509	2.307	1.995	1.964	3.035	1.965	0	0.769	0
0203-337-486	4.5	213.147	1.175	61.742	Free Surface	0 - 13:04 hrs	7.37	8.059	0.29	0.521	151.405	15.887	4.499	0	0	0	0	0	0
0203-338-070	4.647	318.699	0.132	81.46	Free Surface	0 - 12:18 hrs	1.839	1.839	0.256	0.516	237.24	8.115	24.968	0	0	0	0	0	0
0203-339-189	4.819	2,243.90	2.013	148.716	Free Surface	0 - 12:15 hrs	1.492	1.492	0.066	0.63	2,095.18	13.073	58.29	0	0	1.994	0	0	0
0203-340-298	4	132.209	0.847	81.473	Backwater	0 - 14:26 hrs	6.483	6.483	0.616	1	50.736	12.567	3.999	3.847	4.976	3.847	0	3.846	1
0203-341-345	8	1,383.33	0.495	254.018	Free Surface	0 - 15:52 hrs	7.306	7.463	0.184	0.362	1,129.31	69.581	12	0	0	0	0	0	0
0203-342-350	3	84.516	1.606	51.169	Backwater	0 - 12:15 hrs	7.239	7.239	0.605	1	33.347	9.164	3	4.297	4.297	4.503	0	0.459	0
0203-343-344	6	212.05	0.251	192.528	Backwater	0 - 12:15 hrs	6.809	6.809	0.908	1	19.522	7.293	5.993	7.495	7.495	7.559	0	0.207	0
0203-344-382	2	14.788	0.427	29.336	Free Surface	0 - 14:59 hrs	9.681	9.693	1.984	0.928	-14.548	7.252	2	0	8.389	0	7.917	0	0
0203-345-002	10.792	35,212.01	40.439	298.09	Free Surface	0 - 15:47 hrs	9.006	9.006	0.008	0.178	34,913.92	78.677	27.451	0	0	0	0	0	0
0203-346-345	7.846	738.424	0.86	47.461	Free Surface	0 - 12:33 hrs	2.242	2.243	0.064	0.241	690.963	9.131	11.858	0	0	0	0	0	0
0203-347-346	3	53.584	0.645	47.463	Free Surface	0 - 12:33 hrs	8.796	8.796	0.886	0.714	6.121	9.136	2.999	0	4.608	0	0	0	0
0203-348-347	7.265	454.602	0.802	47.759	Free Surface	0 - 12:18 hrs	1.031	1.701	0.105	0.733	406.843	9.143	9.5	0	0	0	0	0	0
0203-349-348	3	31.929	0.229	49.222	Exceeds Capacity	0 - 12:18 hrs	6.964	6.964	1.542	1	-17.294	9.147	3	4.222	4.862	4.222	4.554	4.222	0
0203-350-349	7.191	473.764	1.015	51.599	Free Surface	0 - 12:18 hrs	0.84	1.261	0.109	0.95	422.164	9.165	9.658	0	0	0.709	0	0	0
0203-351-551	7.04	318.643	0.203	66.979	Free Surface	0 - 12:15 hrs	2.115	4.357	0.21	0.583	251.664	2.364	13.592	0	0	0	0	0	0
0203-352-363	6.945	878.302	0.362	267.744	Free Surface	0 - 12:15 hrs	4.671	4.791	0.305	0.913	610.559	29.056	9.614	0	0	0	0	0	0
0203-353-354	7.03	983.531	0.483	278.042	Free Surface	0 - 12:18 hrs	7.185	7.186	0.283	0.66	705.489	31.314	9.5	0	0	0	0	0	0
0203-354-114	7.03	1,353.80	0.915	277.875	Free Surface	0 - 12:19 hrs	7.633	8.053	0.205	0.625	1,075.92	31.304	9.49	0	0	0	0	0	0
0203-355-356	6	934.066	0.802	278.008	Backwater	0 - 12:21 hrs	4.643	5.294	0.298	1	656.058	31.283	10	0.023	0.241	0.023	0	0.023	0
0203-356-113	8.464	2,294.28	2.604	357.84	Free Surface	0 - 12:15 hrs	7.04	7.061	0.156	0.855	1,936.44	34.285	8.708	0	0	1.674	0	0	0
0203-357-223	6	829.961	0.633	264.059	Backwater	0 - 12:41 hrs	4.401	4.401	0.318	1	565.902	35.345	10	1.863	1.895	1.863	0	1.863	0
0203-358-359	7.321	274.216	0.535	263.786	Free Surface	0 - 12:47 hrs	5.318	5.319	0.962	0.935	10.43	35.314	8.133	0	1.637	0	0	0	0
0203-359-112	7.321	466.386	1.548	286.629	Free Surface	0 - 12:47 hrs	5.778	5.78	0.615	0.935	179.757	38.685	8.12	0	0	2.69	0	0	0
0203-360-111	16.67	50,175.86	7.084	338.055	Free Surface	0 - 13:18 hrs	6.558	6.558	0.007	0.145	49,837.81	48.206	37.297	0	0	0	0	0	0
0203-361-220	7.957	146.481	0.006	100.546	Free Surface	0 - 13:02 hrs	2.009	2.6	0.686	0.452	45.934	9.603	22.151	0	0	0	0	0	0
0203-362-165	7.943	1,483.04	2.475	259.575	Free Surface	0 - 16:09 hrs	3.712	3.712	0.175	0.692	1,223.46	59.123	14.192	0	0	0	0	0	0
0203-363-117	6.945	873.512	0.358	266.978	Free Surface	0 - 12:15 hrs	4.775	4.832	0.306	0.892	606.534	29.046	9.613	0	0	0	0	0	0
0203-364-164	8.07	2,005.71	4.955	259.575	Free Surface	0 - 16:09 hrs	5.933	5.933	0.129	0.49	1,746.13	59.062	13.104	0	0	0	0	0	0
0203-365-461	5.5	515.198	2.354	177.807	Backwater	0 - 13:02 hrs	7.484	7.484	0.345	1	337.391	28.941	5.5	3.773	3.773	8.889	0	0.001	0
0203-366-367	6	500.191	1.395	181.232	Backwater	0 - 12:15 hrs	6.41	6.41	0.362	1	318.96	28.898	5.972	9.339	9.339	13.082	0	2.216	0
0203-367-368	3.377	255.263	2.077	298.767	Exceeds Capacity	0 - 12:15 hrs	8.741	8.741	1.17	1	-43.504	55.797	19.528	5.982	5.982	7.883	1.131	3.348	0
0203-368-370	6	157.161	0.804	205.161	Backwater	0 - 15:07 hrs	5.699	5.699	1.305	1	-48	55.799	6	9.801	9.801	11.184	7.825	0	0
0203-369-427	4	474.879	0.305	105.649	Backwater	0 - 18:21 hrs	1.887	1.995	0.222	1	369.23	16.052	14	6	6.045	6.008	0	0.204	0
0203-370-118	4.513	345.587	0.998	199.181	Backwater	0 - 16:04 hrs	3.7	4.231	0.576	1	146.407	55.777	21.428	5.427	5.427	8.567	0	0	0
0203-372-373	8.563	802.787	0.948	217.316	Backwater	0 - 13:30 hrs	2.328	4.34	0.271	1	585.471	59.083	19.12	3.896	3.896	8.45	0	0	0
0203-373-377	7	177.398	0.45	217.039	Exceeds Capacity	0 - 13:32 hrs	4.429	4.429	1.223	1	-39.641	59.13	7	10.298	10.352	10.298	7.719	10.29	0
0203-374-375	3.862	144.305	0.401	201.799	Exceeds Capacity	0 - 17:06 hrs	5.236	5.236	1.398	1	-57.494	59.04	17.32	9.199	9.199	9.771	8.673	8.905	0
0203-375-376	7.377	166.742	0.058	201.798	Free Surface	0 - 17:06 hrs	3.496	3.496	1.21	0.8	-35.056	59.021	14.762	0	0	0	8.531	0	0
0203-376-341	11.182	2,080.21	1.59	201.798	Free Surface	0 - 17:05 hrs	6.975	7.703	0.097	0.393	1,878.41	59.014	11.741	0	0	0	0	0	0
0203-377-374	7	43.345	0.027	214.414	Exceeds Capacity	0 - 13:34 hrs	4.376	4.376	4.947	1	-171.07	59.058	7	10.066	10.298	10.066	11.876	10.066	0
0203-378-379	3	78.635	1.39	67.224	Backwater	0 - 13:55 hrs	9.51	9.51	0.855	1	11.411	6.53	3	2.295	2.295	2.333	0	2.27	0
0203-379-242	4	89.876	0.391	67.224	Backwater	0 - 13:55 hrs	5.35	5.35	0.748	1	22.652	6.564	3.999	2.288	2.288	2.321	0	2.221	0
0203-380-187	9.535	663.228	0.26	149.917	Free Surface	0 - 12:19 hrs	3.462	3.505	0.226	0.553	513.311	14.591	16.674	0	0	0	0	0	0
0203-381-134	4.101	493.715	1.219	207.559	Free Surface	0 - 12:15 hrs	3.707	3.707	0.42	0.863	286.156	7.442	34.427	0	0	1.081	0	0	0
0203-382-339	9	320.398	0.393	29.328	Free Surface	0 - 15:03 hrs	6.216	6.298	0.092	0.151	291.071	7.249	4	0	0	0	0	0	0
0203-383-384	4.91	116.495	0.091	111.547	Backwater	0 - 16:53 hrs	2.07	2.07	0.958	1	4.948	45.989	12.036	12.431	12.431	12.479	0	6.636	0
0203-384-576	4.91	75.684	0.038	111.547	Free Surface	0 - 16:53 hrs	3.215	3.215	1.474	0.669	-35.863	45.237	11.721	0	12.479	0	13.079	0	0
0203-385-057	1.5	12.834	1.493	4.893	Backwater	0 - 12:02 hrs	2.769	2.769	0.381	1	7.941	0.031	1.5	1.438	1.438	2.138	0	0.001	0
0203-386-385	1.25	8.204	1.613	4.903	Backwater	0 - 12:02 hrs	1.998	3.14	0.299	1	3.302	0.086	1.248	1.333	1.333	1.507	0	0	0
0203-387-059	1.5	11.672	1.235	8.721	Backwater	0 - 12:02 hrs	4.935	4.935	0.747	1	2.95	0.33	1.498	1.307	1.307	1.42	0	0.073	0
0203-388-387	1.25	7.721	1.429	8.733	Backwater	0 - 12:02 hrs	3.558	3.558	0.566	1	-1.012	0.331	1.249	1.257	1.257	1.348	0	0	0
0203-389-113	1.75	11.978	0.571	14.554	Exceeds Capacity	0 - 11:55 hrs	6.051	6.051	1.215	1	-2.576	1.072	1.747	9.802	9.802	21.067	0.188	0.393	0
0203-390-389	1.25	5.902	0.835	14.556	Exceeds Capacity	0 - 11:55 hrs	5.93	5.93	1.233	1	-8.654	1.073	1.25	10.21	10.21	13.937	0.198	1.006	0
0203-391-123	6.887	598.08	0.367	294.261	Free Surface	0 - 12:23 hrs	3.451	3.519	0.492	0.852	303.819	14.917	26.864	0	0	0	0	0	0
0203-392-121	17.772	12,618.16	0.808	293.535	Free Surface	0 - 12:25 hrs	3.981	4.307	0.023	0.238	12,324.63	14.887	29.588	0	0	0	0	0	0
0203-393-201	14.057	3,408.70	3.486	20.042	Free Surface	0 - 13:21 hrs	3.156	3.402	0.006	0.251	3,388.66	3.071	4.051	0	0	0	0	0	0
0203-394-395	4	77.157	0.289	73.354	Free Surface	0 - 12:15 hrs	5.9	5.9	0.951	0.967	3.802	5.384	3.998	0	1.143	0	0	0	1
0203-395-206	5.829	807.214	1.066	138.828	Free Surface	0 - 12:15 hrs	3.931	3.981	0.172	0.591	668.387	10.359	21.361	0	0	0	0	0	0
0203-396-211	1.807	81.029	6.177	28.087	Backwater	0 - 12:15 hrs	2.964	2.964	0.347	1	52.942	0.683	9.996	11.878	11.878	12.11	0	0	0
0203-397-398	4	5.609	0.001	42.631	Free Surface	0 - 12:18 hrs	1.324	1.749	7.6	0.894	-37.022	9.409	9	0	0	0	13.827	0	0
0203-398-239	4	56.247	0.115	42.713	Free Surface	0 - 12:18 hrs	1.364	2.666	0.759	0.871	13.534	9.401	9	0	0	0	0	0	0
0203-399-400	3	59.881	0.806	31.792	Free Surface	0 - 12:15 hrs	4.952	4.952	0.531	0.853	28.089	1.622	3	0	0	0.391	0	0	0
0203-400-330	3.82	39.41	0.21	31.094	Free Surface	0 - 12:15 hrs	2.212	2.555	0.789	0.896	8.316	1.623	8.174	0	0	0	0	0	0
0203-401-195	4	182.264	1.61	107.486	Backwater	0 - 12:18 hrs	8.553	8.553	0.59	1	74.778	7.427	4	0.329	0.329	3.536	0	0	0
0203-402-173	4.497	396.477	0.394	290.317	Backwater	0 - 12:37 hrs	3.567	3.567	0.732	1	106.16	43.394	18.833	5.562	5.692	5.562	0	5.398	0
0203-403-404	4	36.617	0.007	215.198	Exceeds Capacity	0 - 14:12 hrs	2.562	2.562	5.877	1	-178.581	43.371	21	5.662	5.729	5.662	10.994	5.662	1
0203-404-405	6.83	653.514	0.416	215.182	Free Surface	0 - 14:12 hrs	2.496	3.464	0.329	0.786	438.332	43.355	17.378	0	0	0	0	0	0
0203-405-406	4	1,076.74	0.63	215.157	Backwater	0 - 14:12 hrs	2.561	2.664	0.2	1	861.58	43.342	21	5.614	5.621	5.63	0	4.671	0
0203-406-407	6.363	925.76	0.729	215.123	Free Surface	0 - 14:14 hrs	1.969	2.632	0.232	0.917	710.637	43.323	19.343	0	0	0	0	0	0
0203-407-408	4	686.455	0.256	215.087	Backwater	0 - 14:14 hrs	2.561	2.561	0.313	1	471.368	43.296	21	6.062	6.069	6.072	0	5.762	0
0203-408-409	6.078	408.194	0.133	212.184	Free Surface	0 - 13:47 hrs	1.756	2.213	0.52	0.997	196.01	43.289	20.919	0	2.302	0	0	0	0
0203-409-172	6.078	295.612	0.07	211.975	Free Surface	0 - 13:47 hrs	1.776	2.201	0.717	0.992	83.638	43.249	20.916	0	0	0	0	0	0

Table B-4b. Existing System Analysis - Pipes/Channels
25-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-410-170	8	246.927	0.244	211.548	Free Surface	0 - 13:48 hrs	4.316	4.953	0.428	0.784	35.379	43.212	4	0	0	0	0	0	0
0203-411-412	3	112.659	2.853	45.186	Backwater	0 - 12:15 hrs	6.393	6.393	0.401	1	67.473	1.988	2.999	0.136	0.136	0.175	0	0.09	0
0203-412-413	3	98.132	2.165	45.186	Backwater	0 - 12:15 hrs	6.393	6.393	0.46	1	52.946	1.99	2.999	0.024	0.175	0.024	0	0.024	0
0203-413-414	3	75.537	1.283	45.201	Free Surface	0 - 12:15 hrs	6.989	7.006	0.598	0.86	30.336	1.99	3	0	0.024	0	0	0	0
0203-414-339	3	94.644	2.014	44.579	Free Surface	0 - 12:15 hrs	10.029	10.03	0.471	0.602	50.066	1.987	2.999	0	0	0	0	0	0
0203-415-416	2	17.553	0.602	24.479	Free Surface	0 - 12:22 hrs	8.531	8.531	1.395	0.858	-6.926	1.591	2	0	1.558	0	1.047	0	0
0203-416-191	4.928	659.285	2.587	24.479	Free Surface	0 - 12:22 hrs	3.161	3.252	0.037	0.349	634.807	1.596	9.004	0	0	0	0	0	0
0203-417-418	6	304.449	4.893	141.109	Free Surface	0 - 12:23 hrs	5.395	5.407	0.463	0.874	163.34	14.579	6	0	0	0	0	0	0
0203-418-184	6.773	478.547	0.151	140.487	Free Surface	0 - 12:25 hrs	1.688	1.711	0.294	0.715	338.059	14.574	24.047	0	0	0	0	0	0
0203-419-420	2	21.115	8.248	19.688	Free Surface	0 - 12:48 hrs	8.539	8.539	0.932	0.688	1.428	1.565	1.999	0	2.04	0	0	0	0
0203-420-186	6.59	1,773.95	4.014	19.688	Free Surface	0 - 12:48 hrs	1.8	3.408	0.011	0.237	1,754.26	1.565	12.172	0	0	0	0	0	0
0203-421-192	5.831	443.929	2.958	20.257	Free Surface	0 - 12:15 hrs	3.504	4.225	0.046	0.412	423.672	0.676	5.946	0	0	0	0	0	0
0203-422-423	3	49.047	0.541	18.871	Free Surface	0 - 12:15 hrs	3.515	3.517	0.385	0.71	30.176	0.894	3	0	0	0	0	0	0
0203-423-501	3	108.54	2.648	18.811	Free Surface	0 - 12:15 hrs	6.839	6.839	0.173	0.412	89.729	0.894	2.949	0	0	0	0	0	0
0203-424-425	5	849.536	0.219	153.05	Free Surface	0 - 12:30 hrs	2.213	2.291	0.18	0.701	696.486	16.114	20	0	0	0	0	0	0
0203-425-180	11.155	5,446.72	0.483	151.371	Free Surface	0 - 12:30 hrs	1.237	1.403	0.028	0.343	5,295.35	16.109	47.578	0	0	0	0	0	0
0203-426-369	4	471.649	0.301	105.418	Backwater	0 - 18:21 hrs	1.882	1.929	0.224	1	366.232	16.055	14	6.037	6.092	6.045	0	0.268	0
0203-427-174	4.533	224.617	0.327	106.472	Backwater	0 - 18:21 hrs	2.245	2.567	0.474	1	118.145	16.045	14.018	5.561	5.561	5.833	0	0	0
0203-428-507	8	1,551.51	0.228	259.622	Free Surface	0 - 16:13 hrs	2.486	2.494	0.167	0.737	1,291.88	58.947	18	0	0	0	0	0	0
0203-429-162	12.147	1,032.00	0.184	281.384	Free Surface	0 - 13:07 hrs	4.247	4.249	0.273	0.378	750.615	63.631	17.381	0	0	0	0	0	0
0203-430-240	3	42.608	0.408	43.589	Exceeds Capacity	0 - 13:08 hrs	6.167	6.167	1.023	1	-0.982	4.108	2.998	2.136	2.607	2.188	0.001	0.781	0
0203-431-513	2	29.241	1.671	20.042	Backwater	0 - 13:17 hrs	6.38	6.38	0.685	1	9.199	3.068	2	3.643	3.694	3.643	0	3.642	1
0203-432-433	5	128.573	0.244	25.293	Free Surface	0 - 12:25 hrs	1.295	1.295	0.197	0.996	103.28	0.781	4.999	0	0	0.165	0	0	0
0203-433-253	4.946	221.964	0.118	26.425	Backwater	0 - 12:26 hrs	0.303	0.315	0.119	1	195.538	0.776	27.325	0.196	0.196	0.262	0	0	0
0203-434-435	5	107.609	0.171	91.395	Free Surface	0 - 12:19 hrs	5.514	5.569	0.849	0.804	16.214	4.465	4.999	0	0	0.238	0	0	0
0203-435-138	6.268	2,359.30	1.346	90.41	Free Surface	0 - 12:19 hrs	1.424	1.615	0.038	0.51	2,268.89	4.465	40.685	0	0	0	0	0	0
0203-437-438	5.5	449.896	1.795	73.95	Free Surface	0 - 12:37 hrs	9.038	9.038	0.164	0.376	375.945	4.397	5.326	0	0	0	0	0	0
0203-438-135	9.15	6,022.25	7.055	73.958	Free Surface	0 - 12:37 hrs	4.768	4.921	0.012	0.242	5,948.30	4.396	13.258	0	0	0	0	0	0
0203-439-440	3	87.529	1.722	62.022	Backwater	0 - 12:37 hrs	8.774	8.774	0.709	1	25.507	8.153	2.998	3.167	3.167	7.687	0	2.934	0
0203-440-441	3	80.476	1.456	31.626	Backwater	0 - 15:03 hrs	4.474	4.474	0.393	1	48.851	8.174	2.999	7.695	7.695	7.824	0	0	0
0203-441-442	3	14.501	0.047	31.17	Exceeds Capacity	0 - 15:14 hrs	4.41	4.41	2.15	1	-16.669	8.175	3	7.682	7.824	7.682	8.286	7.682	0
0203-442-443	3	43.012	0.416	31.17	Free Surface	0 - 15:14 hrs	4.461	4.461	0.725	0.964	11.842	8.177	2.999	0	7.682	0	0	0	0
0203-443-444	3	81.077	1.478	31.17	Free Surface	0 - 15:15 hrs	5.356	5.356	0.384	0.772	49.907	8.178	2.999	0	1.968	0	0	0	0
0203-444-445	3	93.201	1.953	31.269	Free Surface	0 - 14:52 hrs	8.91	9.094	0.336	0.498	61.932	8.178	3	0	0	0	0	0	0
0203-445-446	3	81.206	1.482	31.172	Free Surface	0 - 15:15 hrs	5.517	5.561	0.384	0.748	50.033	8.181	2.999	0	0	7.679	0	0	0
0203-446-447	3	51.337	0.592	31.173	Free Surface	0 - 15:15 hrs	5.455	5.62	0.607	0.865	20.164	8.181	3	0	7.684	0	0	0	0
0203-447-448	3	125.519	3.541	34.884	Free Surface	0 - 14:52 hrs	6.069	7.395	0.278	0.865	90.635	8.181	2.999	0	0	3.033	0	0	0
0203-448-452	4	240.383	2.801	72.766	Backwater	0 - 14:07 hrs	5.791	6.249	0.303	1	167.617	13.595	4	1.91	2.628	1.91	0	1.91	0
0203-449-450	3	160.418	5.785	53.432	Backwater	0 - 12:30 hrs	7.559	7.559	0.333	1	106.986	5.407	2.922	2.188	2.251	2.189	0	2.188	0
0203-450-451	3	71.197	1.139	53.432	Backwater	0 - 12:30 hrs	7.559	7.559	0.75	1	17.765	5.402	3	2.189	2.189	3.058	0	0	0
0203-451-448	3.5	31.481	0.098	43.953	Exceeds Capacity	0 - 11:56 hrs	4.568	4.568	1.396	1	-12.472	5.42	3.5	3.004	3.035	3.008	3.032	3.004	0
0203-452-453	4	164.465	1.311	76.067	Backwater	0 - 11:55 hrs	7.373	7.62	0.463	1	88.398	13.587	3.999	2.263	2.263	2.932	0	0	0
0203-453-454	4	184.959	1.658	72.766	Backwater	0 - 14:07 hrs	5.791	7.474	0.393	1	112.194	13.593	3.999	2.945	2.945	3.514	0	0	0
0203-454-455	4.5	211.484	1.157	72.448	Backwater	0 - 14:15 hrs	4.555	5.121	0.343	1	139.036	13.588	4.497	3.503	3.504	3.524	0	0.001	0
0203-455-457	4.5	164.682	0.701	114.787	Backwater	0 - 15:15 hrs	7.217	7.217	0.697	1	49.895	15.838	4.488	3.532	3.532	3.676	0	1.229	0
0203-456-455	2	39.779	3.092	25.83	Backwater	0 - 15:37 hrs	8.222	8.222	0.649	1	13.949	2.171	2	3.719	3.719	6.52	0	0	0
0203-457-458	5.5	268.326	0.638	148.909	Backwater	0 - 12:23 hrs	6.268	6.268	0.555	1	119.417	23.997	5.5	3.506	3.506	3.804	0	0	0
0203-458-365	5.5	112.891	0.113	152.164	Exceeds Capacity	0 - 13:52 hrs	6.405	6.405	1.348	1	-39.273	23.932	5.499	3.771	3.804	3.773	3.661	3.77	0
0203-459-460	3.5	120.316	1.43	56.067	Backwater	0 - 12:22 hrs	5.827	5.827	0.466	1	64.249	5.01	3.427	2.034	2.038	2.976	0	1.953	0
0203-460-365	3.5	92.077	0.838	56.067	Backwater	0 - 12:22 hrs	5.827	5.827	0.609	1	36.01	5.013	3.5	3.687	3.687	3.802	0	1.059	0
0203-461-244	5.737	36.296	0.054	174.708	Exceeds Capacity	0 - 13:27 hrs	6.348	6.348	4.813	1	-138.412	28.968	6.184	8.533	8.633	8.696	8.819	7.825	0
0203-462-119	5.737	112.77	0.521	102.07	Free Surface	0 - 15:06 hrs	3.908	4.399	0.905	0.99	10.701	28.982	6.171	0	4.09	0.214	0	0	0
0203-463-465	3.5	87.513	0.757	62.832	Free Surface	0 - 13:32 hrs	6.885	7.016	0.718	0.901	24.681	13.676	3.499	0	5.973	0	0	0	0
0203-464-463	3	66.062	0.981	62.832	Backwater	0 - 13:32 hrs	8.889	8.889	0.951	1	3.23	13.683	3	5.975	5.975	5.991	0	5.974	0
0203-465-466	4	108.88	0.575	62.831	Free Surface	0 - 13:33 hrs	7.546	7.546	0.577	0.686	46.049	13.648	3.997	0	0	0	0	0	0
0203-466-367	4	154.166	1.152	68.099	Free Surface	0 - 12:19 hrs	6.046	7.925	0.442	0.878	86.066	13.637	3.986	0	0	3.495	0	0	0
0203-467-485	3.94	223.265	0.212	73.619	Backwater	0 - 18:50 hrs	2.72	2.72	0.33	1	149.646	13.869	8.105	7.484	7.495	7.489	0	3.573	0
0203-468-469	3	124.699	3.495	25.15	Backwater	0 - 11:56 hrs	3.558	4.252	0.202	1	99.549	3.391	2.979	3.765	3.765	3.766	0	0.082	1
0203-469-470	3	45.052	0.456	25.149	Backwater	0 - 11:56 hrs	3.558	4.012	0.558	1	19.902	3.385	3	3.766	3.766	7.82	0	0.001	1
0203-470-471	3	35.858	0.289	25.147	Backwater	0 - 11:56 hrs	3.558	3.558	0.701	1	10.711	3.385	2.973	7.82	7.82	8.086	0	2.328	1
0203-471-473	3	98.839	2.196	25.147	Backwater	0 - 11:56 hrs	3.558	3.558	0.254	1	73.692	3.385	2.99	8.086	8.086	8.531	0	0	2
0203-472-013	4.033	172.862	0.159	89.66	Free Surface	0 - 15:11 hrs	3.584	3.755	0.519	0.999	83.203	13.83	7.053	0	3.816	0	0	0	0
0203-473-372	3	49.747	0.556	25.143	Backwater	0 - 11:56 hrs	3.557	3.557	0.505	1	24.604	3.384	3	8.531	8.531	8.594	0	0.011	1
0203-474-242	3	65.121	0.953	50.793	Backwater	0 - 12:22 hrs	7.186	7.186	0.78	1	14.328	3.054	3	2.306	2.306	2.437	0	1.04	0
0203-475-476	3	58.078	0.758	32.772	Backwater	0 - 14:52 hrs	4.636	4.636	0.564	1	25.307	3.384	3	3.063	3.071	3.066	0	3.057	0
0203-476-359	3	24.18	0.131	32.773	Exceeds Capacity	0 - 14:52 hrs	4.636	4.636	1.355	1	-8.592	3.38	3	3.055	3.081	3.244	1.349	3.04	0
0203-477-478	3	55.864	0.702	38.393	Backwater	0 - 11:53 hrs	5.431	6.226	0.687	1	17.471	5.496	2.963	3.863	3.863	3.879	0	0.012	0
0203-478-479	3	52.374	0.617	38.392	Backwater	0 - 11:53 hrs	5.431	5.431	0.733	1	13.983	5.501	2.999	3.884	3.884	4.391	0	0.003	0
0203-479-480	3	4.209	0.004	38.385	Exceeds Capacity	0 - 11:53 hrs	5.43	5.43	9.12	1	-34.176	5.483	3	4.395	4.434	4.395	9.151	4.395	1
0203-480-342	3	3.562	0.003	38.38	Exceeds Capacity	0 - 11:53 hrs	5.441	5.444	10.776	1	-34.818	5.437	3	4.297	4.395	4.297	10.18	4.297	0
0203-481-482	3	74.134	1.235	61.712	Backwater	0 - 13:25 hrs	8.73	8.73	0.832	1	12.422	15.912	2.999	7.185	7.185	7.28	0	7.184	0
0203-482-483	3	65.191	0.955	61.712	Free Surface	0 - 13:25 hrs	9.22	9.22	0.947	0.911	3.48	15.891	2.999	0	7.28	0	0	0	0
0203-483-484	3.5	127.295	1.601	61.712	Free Surface	0 - 13:25 hrs	9.373	9.59	0.485	0.647	65.583	15.876	3.499	0	0	0	0	0	0
0203-484-337	4.5	186.418	0.899	61.712	Free Surface	0 - 13:26 hrs	7.979	7.979	0.331	0.489	124.707	15.884	4.498	0	0	0	0	0	0
0203-485-006	3.9	296.101	0.613	84.943	Backwater	0 - 12:17 hrs	3.738	3.738	0.287	1	211.158	13.855	6.636	6.892	7.497	6.899	0	4.12	0
0203-486-487	5	258.438	0.985	62.933	Free Surface	0 - 12:03 hrs	6.84	7.471	0.244	0.584	195.504	15.891	4.999	0	0	0	0	0	0
0203-487-488	5	256.983	0.974	66.186	Free Surface	0 - 12:25 hrs	3.7	5.945	0.258	0.886	190.797	15.914	4.998	0	0	1.73	0	0	0
0203-488-491	6	195.36	0.213	216.261	Exceeds Capacity	0 - 12:07 hrs	7.698	7.708	1.107	1	-20.902	27.16	6	0.124	1.522	0.124	0.447	0.124	0
0203-489-488	3.5	167.486	2.771	52.885	Backwater	0 - 12:07 hrs	5.497	5.497	0.316	1	114.601	0.584	3.5	1.574	1.574	1.65	0	0.643	0
0203-490-489	3.5	116.974	1.352	24.923	Backwater	0 - 12:15 hrs	2.59	3.518	0.213	1	92.052	0.582	3.493	1.321	1.321	1.574	0	0	0
0203-491-221	6	442.205	1.09	212.475	Backwater	0 - 12:23 hrs	7.546	7.777	0.48	1	229.73	27.138	5.999	0.124	0.124	0.334	0	0	0
0203-492-221	3.5	68.221	0.46	67.281	Backwater	0 - 12:15 hrs	6.993	6.993	0.986	1	0.941	1.928	3.5	0.334	0.42	0.334	0	0.334	0

Table B-4b. Existing System Analysis - Pipes/Channels
25-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-493-421	3	95.492	2.05	20.472	Free Surface	0 - 12:15 hrs	4.864	4.864	0.214	0.575	75.02	0.675	2.998	0	0	0	0	0	0
0203-494-254	4	74.23	0.267	112.204	Exceeds Capacity	0 - 12:36 hrs	8.929	8.929	1.512	1	-37.973	11.288	4	1.302	2.096	1.306	1.296	1.298	0
0203-495-241	2.5	20.372	0.247	37.965	Exceeds Capacity	0 - 12:15 hrs	7.734	7.734	1.864	1	-17.593	1.29	2.49	0.767	0.772	0.909	0.38	0.69	0
0203-496-497	3	50.948	0.583	18.279	Free Surface	0 - 12:15 hrs	2.744	2.744	0.359	0.893	32.669	0.597	2.999	0	0	0	0	0	0
0203-497-498	3	15.612	0.055	18.188	Free Surface	0 - 12:15 hrs	2.712	2.713	1.165	0.901	-2.576	0.598	2.999	0	0	0	0.127	0	0
0203-498-499	3	24.975	0.14	18.132	Free Surface	0 - 12:15 hrs	3.185	3.187	0.726	0.751	6.843	0.597	2.998	0	0	0	0	0	0
0203-499-500	3	51.689	0.601	18.02	Free Surface	0 - 12:15 hrs	5.467	5.467	0.349	0.474	33.669	0.597	2.994	0	0	0	0	0	0
0203-500-200	6.864	1,240.30	3.132	17.996	Free Surface	0 - 12:15 hrs	1.543	1.543	0.015	0.247	1,222.30	0.597	8.701	0	0	0	0	0	0
0203-501-194	3.615	519.532	5.96	18.799	Free Surface	0 - 12:15 hrs	3.405	3.41	0.036	0.215	500.734	0.894	8.088	0	0	0	0	0	0
0203-502-503	3.5	74.926	0.555	67.649	Backwater	0 - 12:15 hrs	7.031	7.031	0.903	1	7.277	3.577	3.5	0.009	0.217	0.009	0	0.009	0
0203-503-504	3.5	106.95	1.13	67.226	Free Surface	0 - 12:15 hrs	7.685	7.873	0.629	0.855	39.724	3.576	3.498	0	0.009	0	0	0	0
0203-504-198	3.075	230.775	0.995	72.323	Free Surface	0 - 12:15 hrs	1.997	2.332	0.313	0.908	158.453	3.815	22.893	0	0	0.454	0	0	0
0203-505-504	3	58.702	0.775	6.93	Free Surface	0 - 12:15 hrs	1.313	1.983	0.118	0.709	51.772	0.246	2.983	0	0	0	0	0	0
0203-506-430	2.5	30.24	0.544	36.427	Exceeds Capacity	0 - 13:15 hrs	7.421	7.421	1.205	1	-6.187	4.054	2.5	3.554	3.634	3.559	2.255	2.318	0
0203-507-429	8	765.468	0.056	281.401	Free Surface	0 - 13:06 hrs	2.759	2.759	0.368	0.708	484.067	63.677	18	0	0	0	0	0	0
0203-508-509	7.34	1,006.51	1.616	119.254	Free Surface	0 - 12:14 hrs	1.303	2.934	0.118	0.971	887.26	3.092	26.595	0	0	1.495	0	0	0
0203-509-517	7.66	974.388	1.962	118.738	Backwater	0 - 12:15 hrs	3.058	3.058	0.122	1	855.65	3.091	5.331	0.057	0.057	2.352	0	0	0
0203-510-095	3	255.354	14.657	53.755	Backwater	0 - 11:52 hrs	7.605	7.605	0.211	1	201.599	10.632	3	5.2	5.2	5.235	0	0	1
0203-511-230	2.5	96.373	5.521	20.042	Backwater	0 - 13:17 hrs	4.083	4.083	0.208	1	76.331	3.072	2.5	3.639	3.639	3.648	0	0.001	0
0203-512-231	2.5	51.032	1.548	20.042	Free Surface	0 - 13:17 hrs	6.326	6.438	0.393	0.615	30.99	3.075	2.493	0	0	0	0	0	0
0203-513-229	2	34.719	2.355	20.042	Backwater	0 - 13:17 hrs	6.38	6.38	0.577	1	14.677	3.065	2	3.643	3.643	3.666	0	3.642	1
0203-514-515	3	39.502	0.351	20.042	Free Surface	0 - 13:18 hrs	4.39	4.39	0.507	0.616	19.46	3.074	2.991	0	0	0	0	0	0
0203-515-232	3	84.046	1.588	20.042	Free Surface	0 - 13:18 hrs	5.717	5.728	0.238	0.497	64.004	3.074	3	0	0	0	0	0	0
0203-516-393	3.5	136.994	1.854	20.042	Free Surface	0 - 13:21 hrs	3.098	3.098	0.146	0.637	116.951	3.071	3.499	0	0	0	0	0	0
0203-517-048	8.92	861.063	0.529	118.238	Free Surface	0 - 12:15 hrs	1.197	1.198	0.137	0.906	742.825	3.089	25.064	0	0	0	0	0	0
0203-518-519	2.4	58.661	0.743	39.744	Backwater	0 - 12:27 hrs	5.437	5.437	0.678	1	18.916	3.312	3.797	1.892	1.892	2.197	0	1.79	0
0203-519-203	5.134	201.594	1.52	39.719	Free Surface	0 - 12:26 hrs	4.341	4.371	0.197	0.693	161.875	3.311	6.32	0	0	0	0	0	0
0203-520-006	7.17	2,505.53	1.421	219.872	Free Surface	0 - 12:18 hrs	3.978	3.978	0.088	0.394	2,285.66	38.632	27.138	0	0	0	0	0	0
0203-521-526	3.5	87.303	0.753	36.302	Backwater	0 - 13:07 hrs	3.773	3.773	0.416	1	51.001	4.738	3.499	3.316	3.336	3.316	0	3.316	1
0203-522-521	3.5	35.258	0.123	36.302	Exceeds Capacity	0 - 13:07 hrs	3.773	3.773	1.03	1	-1.044	4.737	3.5	3.335	3.354	3.336	2.551	3.334	1
0203-523-524	3.5	68.693	0.466	36.968	Backwater	0 - 12:32 hrs	3.842	3.842	0.538	1	31.725	4.737	3.499	3.362	3.37	3.362	0	3.362	2
0203-524-522	3.5	51.644	0.263	36.302	Backwater	0 - 13:07 hrs	3.773	3.773	0.703	1	15.343	4.737	3.5	3.353	3.362	3.354	0	3.352	2
0203-525-033	16.9	11,949.49	1.886	180.362	Free Surface	0 - 12:17 hrs	5.222	5.224	0.015	0.189	11,769.12	36.359	16.51	0	0	0	0	0	0
0203-526-527	3.5	30.056	0.089	36.302	Free Surface	0 - 13:07 hrs	3.787	3.824	1.208	0.985	-6.246	4.738	3.478	0	3.316	0	3.339	0	0
0203-527-528	3.5	101.622	1.02	36.302	Free Surface	0 - 13:07 hrs	3.787	4.157	0.357	0.985	65.321	4.738	3.491	0	0	1.471	0	0	0
0203-528-234	4	131.535	0.839	36.302	Free Surface	0 - 13:07 hrs	2.981	3.128	0.276	0.93	95.233	4.738	3.977	0	0	0	0	0	0
0203-529-235	4	77.78	0.293	36.302	Free Surface	0 - 13:07 hrs	3.098	3.098	0.467	0.881	41.478	4.738	3.999	0	0	0	0	0	0
0203-530-001	9.53	528.594	0.062	131.386	Free Surface	0 - 13:04 hrs	0.69	0.736	0.249	0.996	397.208	33.911	27.563	0	0	2.017	0	0	0
0203-531-055	2.5	55.941	1.86	56.63	Exceeds Capacity	0 - 12:07 hrs	11.537	11.537	1.012	1	-0.689	2.221	2.499	0.632	0.632	1.251	0.213	0.308	0
0203-532-580	9.45	2,462.51	1.34	111.551	Free Surface	0 - 17:05 hrs	3.053	3.061	0.045	0.372	2,350.96	44.443	20.742	0	0	0	0	0	0
0203-533-538	3	287.313	0.382	96.326	Free Surface	0 - 13:38 hrs	4.511	4.577	0.335	0.593	190.987	24.139	12	0	0	0	0	0	0
0203-534-535	3	63.109	0.895	23.17	Backwater	0 - 14:08 hrs	3.865	4.605	0.367	1	39.939	6.584	3	1.463	2.028	1.463	0	1.463	0
0203-535-542	3	89.294	1.792	31.09	Backwater	0 - 14:08 hrs	5.009	6.939	0.348	1	58.204	6.58	2.999	1.463	1.463	2.197	0	0	0
0203-536-537	3.5	3.806	0.001	81.853	Exceeds Capacity	0 - 12:00 hrs	8.508	8.508	21.507	1	-78.047	13.248	3.5	2.193	2.628	2.193	20.075	2.193	0
0203-537-539	4	126.979	0.781	81.294	Backwater	0 - 12:42 hrs	6.469	6.985	0.64	1	45.684	13.248	3.989	2.135	2.14	2.137	0	2.134	0
0203-538-608	4.87	3,433.72	7.246	96.332	Free Surface	0 - 13:38 hrs	5.794	5.92	0.028	0.318	3,337.39	24.148	12.287	0	0	0	0	0	0
0203-539-540	4	145.306	1.023	81.295	Backwater	0 - 12:42 hrs	6.469	6.469	0.559	1	64.011	13.259	4	2.137	2.137	2.255	0	0	0
0203-540-541	4	152.206	1.123	81.295	Free Surface	0 - 12:42 hrs	7.009	7.697	0.534	0.875	70.911	13.251	4	0	2.261	0	0	0	0
0203-541-543	4	189.82	1.746	81.266	Free Surface	0 - 12:44 hrs	7.005	7.26	0.428	0.875	108.553	13.251	3.998	0	0	2.225	0	0	0
0203-542-536	3.5	129.193	1.649	46.257	Backwater	0 - 14:08 hrs	4.959	5.037	0.358	1	82.936	6.598	3.499	2.16	2.16	2.628	0	0	0
0203-543-544	4	159.361	1.231	81.266	Backwater	0 - 12:42 hrs	6.467	6.467	0.51	1	78.095	13.245	4	2.185	2.225	2.268	0	2.177	0
0203-544-650	4.04	121.062	0.856	81.266	Backwater	0 - 12:42 hrs	3.482	3.482	0.671	1	39.797	13.241	7.247	2.234	2.251	2.247	0	2.136	0
0203-545-251	3.91	3.866	0.001	34.096	Exceeds Capacity	0 - 16:06 hrs	1.325	1.325	8.82	1	-30.23	12.889	7.382	11.548	12.161	11.548	19.859	11.548	0
0203-546-548	3.5	28.097	0.056	34.104	Exceeds Capacity	0 - 16:06 hrs	1.218	1.218	1.214	1	-6.007	12.859	8	12.202	12.223	12.202	11.38	12.202	0
0203-547-600	6.67	1,344.78	0.969	110.678	Free Surface	0 - 12:19 hrs	1.005	1.744	0.082	0.844	1,234.10	24.115	36.526	0	0	0.288	0	0	0
0203-548-651	3.89	111.91	0.698	34.104	Backwater	0 - 16:06 hrs	1.422	1.429	0.305	1	77.806	12.849	7.177	10.965	10.965	11.223	0	0	0
0203-549-633	4.49	145.474	0.523	39.982	Free Surface	0 - 12:42 hrs	2.07	2.07	0.275	0.608	105.492	13.672	7.814	0	0	0	0	0	0
0203-550-638	10.26	9,226.24	2.917	1,029.06	Backwater	0 - 12:48 hrs	2.325	2.325	0.112	1	8,197.18	208.792	69.83	0.731	0.731	2.274	0	0	0
0203-551-550	3.5	380.538	14.306	66.144	Backwater	0 - 12:15 hrs	6.875	6.875	0.174	1	314.394	2.362	3.5	0.179	0.179	18.399	0	0	0
0203-552-553	3	16.916	0.609	26.605	Exceeds Capacity	0 - 13:15 hrs	3.764	3.764	1.573	1	-9.689	5.716	3	5.837	5.859	5.838	5.868	5.836	0
0203-553-322	4	109.183	0.578	26.605	Backwater	0 - 13:14 hrs	2.117	2.935	0.244	1	82.578	5.707	3.995	3.276	3.276	6.102	0	0	0
0203-554-555	3	91.986	1.902	39.249	Backwater	0 - 12:15 hrs	5.553	6.527	0.427	1	52.737	1.146	3	0.114	0.114	0.176	0	0	0
0203-555-319	4	59.203	0.17	39.255	Backwater	0 - 12:15 hrs	3.124	3.124	0.663	1	19.947	1.151	3.998	0.235	0.235	0.26	0	0.164	0
0203-556-558	4.5	250.472	1.622	64.628	Free Surface	0 - 12:12 hrs	5.673	5.674	0.258	0.698	185.844	5.916	4.5	0	0	3.472	0	0	0
0203-557-584	14	1,993.65	1.603	461.848	Free Surface	0 - 12:15 hrs	8.54	8.647	0.232	0.645	1,531.81	93.937	6	0	0	0	0	0	0
0203-558-644	17.29	23,504.65	1.58	1,218.46	Free Surface	0 - 12:29 hrs	4.442	4.571	0.052	0.394	22,286.20	226.571	56.017	0	0	0	0	0	0
0203-559-547	8.04	86.352	0.001	101.859	Free Surface	0 - 12:19 hrs	1.361	2.921	1.18	0.574	-15.507	24.113	30.935	0	0	0	5.45	0	0
0203-560-564	4.58	457.706	1.81	371.307	Backwater	0 - 12:22 hrs	7.211	7.211	0.811	1	86.399	25.612	19.156	0.981	0.981	1.916	0	0.98	0
0203-561-565	5	246.32	1.547	245.258	Free Surface	0 - 13:02 hrs	7.589	7.589	0.996	0.808	1.062	25.599	8	0	1.953	0	0	0	1
0203-562-590	4.43	15.809	0.103	53.257	Free Surface	0 - 17:30 hrs	7.509	7.527	3.369	0.721	-37.448	14.565	10.471	0	9.119	0	10.07	0	0
0203-563-562	5.67	87.661	1.863	78.333	Backwater	0 - 12:33 hrs	4.816	4.816	0.894	1	9.328	14.556	3.577	5.731	5.731	8.444	0	2.717	0
0203-564-561	4.58	331.093	0.947	245.258	Backwater	0 - 13:02 hrs	4.763	4.901	0.741	1	85.835	25.563	19.156	1.916	1.916	2.002	0	0	1
0203-565-566	6.13	3,871.66	1.408	245.234	Free Surface	0 - 13:03 hrs	1.854	1.868	0.063	0.532	3,626.43	25.601	69.194	0	0	0	0	0	0
0203-566-567	4.89	320.067	1.093	245.16	Free Surface	0 - 13:04 hrs	5.368	5.406	0.766	0.968	74.906	25.557	18.161	0	0	0	0	0	0
0203-567-568	7.77	909.854	0.572	245.104	Free Surface	0 - 13:06 hrs	4.095	4.095	0.269	0.661	664.75	25.536	21.68	0	0	0	0	0	0
0203-568-569	6.66	552.088	0.267	250.152	Free Surface	0 - 12:18 hrs	4.057	4.302	0.453	0.704	301.936	25.514	24.408	0	0	0	0	0	0
0203-569-570	5.1	1,171.14	0.51	254.015	Free Surface	0 - 14:37 hrs	1.524	2.143	0.217	0.928	917.126	25.455	83.572	0	0	2.406	0	0	0
0203-570-571	4.54	290.106	1.015	216.046	Backwater	0 - 14:07 hrs	4.792	4.792	0.745	1	74.06	25.45	17.729	2.523	2.523	12.423	0	0	0
0203-571-572	7.53	767.629	0.506	223.684	Backwater	0 - 14:10 hrs	2.009	2.009	0.291	1	543.946	25.316	20.731	2.469	2.469	3.411	0	0	0
0203-572-573	10	155.838	0.002	224.536	Exceeds Capacity	0 - 12:42 hrs	1.497	1.601	1.441	1	-68.698	25.201	15	0.55	0.658	0.55	2.364	0.55	0
0203-573-574	8.35	39.275	0	837.762	Exceeds Capacity	0 - 12:18 hrs	4.835	4.835	21.331	1	-798.487	74.447	35.504	3.215	3.255	3.215	16.178	3.215	0
0203-574-575	6.44	19.662	0.001	538.43	Exceeds Capacity	0 - 13:02 hrs	5.741	5.741	27.385	1	-518.769	74.045	18.158	12.388	12.426	12.388	19.248	12.388	0

Table B-4b. Existing System Analysis - Pipes/Channels
25-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-575-383	4.91	96.731	0.063	119.198	Backwater	0 - 11:33 hrs	2.212	2.212	1.232	1	-22.468	46.625	12.036	12.431	12.431	13.247	12.781	0	0
0203-576-577	13.143	8,486.87	3.432	111.547	Free Surface	0 - 16:55 hrs	4.112	4.112	0.013	0.194	8,375.33	45.127	15.02	0	0	0	0	0	0
0203-577-578	13.143	1,842.63	0.162	111.547	Free Surface	0 - 16:57 hrs	3.266	3.295	0.061	0.228	1,731.08	45.061	16.352	0	0	0	0	0	0
0203-578-579	12.6	3,409.35	0.426	111.547	Free Surface	0 - 16:58 hrs	1.755	1.755	0.033	0.276	3,297.81	44.953	23.312	0	0	0	0	0	0
0203-579-247	16	13,470.77	1.049	111.546	Free Surface	0 - 17:00 hrs	1.14	1.14	0.008	0.245	13,359.23	44.723	25	0	0	0	0	0	0
0203-580-582	9.94	1,281.46	0.17	111.561	Free Surface	0 - 17:05 hrs	2.61	3.051	0.087	0.396	1,169.90	44.361	24.068	0	0	0	0	0	0
0203-581-592	3	67.993	1.039	65.826	Backwater	0 - 12:04 hrs	9.357	9.493	0.968	1	2.167	3.25	2.999	0.67	0.768	0.683	0	0.669	0
0203-582-583	8.81	4,032.92	2.092	113.241	Free Surface	0 - 19:22 hrs	1.836	3.896	0.028	0.58	3,919.68	44.328	32.095	0	0	0	0	0	0
0203-583-584	11.75	15,533.00	2.768	116.591	Free Surface	0 - 19:51 hrs	0.617	0.991	0.008	0.649	15,416.41	44.27	60.271	0	0	0	0	0	0
0203-584-585	13.35	2,358.24	0.069	547.196	Free Surface	0 - 12:17 hrs	1.723	1.807	0.232	0.64	1,811.05	138.092	53.87	0	0	0	0	0	0
0203-585-586	13.32	3,869.75	0.284	544.865	Free Surface	0 - 12:17 hrs	2.184	2.308	0.141	0.638	3,324.88	138.035	43.773	0	0	0	0	0	0
0203-586-587	14.17	4,356.39	0.461	540.059	Free Surface	0 - 12:18 hrs	2.832	3.225	0.124	0.628	3,816.33	137.954	43.215	0	0	0	0	0	0
0203-587-588	13.84	7,989.37	1.179	533.78	Free Surface	0 - 12:19 hrs	1.765	1.876	0.067	0.734	7,455.59	137.829	47.803	0	0	0	0	0	0
0203-588-589	15.24	7,355.74	0.878	529.181	Free Surface	0 - 12:21 hrs	2.26	2.536	0.072	0.635	6,826.56	137.642	44.216	0	0	0	0	0	0
0203-589-612	16.27	3,369.78	0.088	523.025	Free Surface	0 - 12:22 hrs	2.253	2.97	0.155	0.514	2,846.75	137.482	46.889	0	0	0	0	0	0
0203-590-591	2.03	69.27	1.283	53.239	Free Surface	0 - 17:31 hrs	3.8	3.827	0.769	0.983	16.031	14.553	10.387	0	0	8.791	0	0	0
0203-591-593	2.62	73.4	1.343	52.641	Free Surface	0 - 17:44 hrs	5.821	5.821	0.717	0.731	20.759	14.536	6.411	0	5.048	0	0	0	0
0203-592-611	4	95.093	0.438	62.65	Backwater	0 - 12:06 hrs	5.349	5.408	0.659	1	32.443	3.239	4	0.533	0.533	3.104	0	0	0
0203-593-594	3.6	453.849	1.331	52.641	Free Surface	0 - 17:45 hrs	1.578	1.687	0.116	0.668	401.208	14.533	19.801	0	0	9.321	0	0	0
0203-594-595	2.19	35.906	0.524	44.822	Exceeds Capacity	0 - 19:44 hrs	3.414	3.414	1.248	1	-8.915	14.504	11.638	10.145	10.145	10.31	9.738	10.009	0
0203-595-596	3.06	64.797	0.373	44.821	Free Surface	0 - 19:45 hrs	3.055	3.055	0.692	0.785	19.975	14.496	8.165	0	0	0	0	0	0
0203-596-597	2.33	73.112	1.685	44.821	Free Surface	0 - 19:46 hrs	3.869	3.869	0.613	0.908	28.291	14.487	10.101	0	0	10.158	0	0	0
0203-597-598	7.08	393.884	0.474	44.821	Free Surface	0 - 19:47 hrs	3.32	3.32	0.114	0.4	349.063	14.478	8.818	0	0	0	0	0	0
0203-598-599	6.15	520.803	0.782	45.783	Free Surface	0 - 12:22 hrs	1.306	2.419	0.088	0.677	475.019	14.476	15.204	0	0	0	0	0	0
0203-599-679	4.583	13.78	0.012	50.335	Exceeds Capacity	0 - 12:22 hrs	1.757	3.173	3.653	1	-36.555	14.466	6.25	0.459	0.801	0.459	11.923	0.459	0
0203-600-601	6.67	1,189.60	0.758	470.389	Backwater	0 - 12:15 hrs	3.068	5.011	0.395	1	719.211	93.954	38.079	0.657	0.657	0.937	0	0	0
0203-601-557	9.29	10,571.93	4.543	465.256	Free Surface	0 - 12:15 hrs	1.266	4.213	0.044	0.915	10,106.67	93.955	70.375	0	0	0.226	0	0	0
0203-602-532	9	3,094.64	0.323	111.549	Free Surface	0 - 17:02 hrs	1.914	1.915	0.036	0.294	2,983.10	44.481	24	0	0	0	0	0	0
0203-603-604	4.549	95.959	0.384	96.328	Exceeds Capacity	0 - 13:34 hrs	3.621	3.621	1.004	1	-0.369	24.168	7.32	3.041	7.406	3.041	1.045	3.041	0
0203-604-605	4.539	43.632	0.049	96.326	Free Surface	0 - 13:37 hrs	3.191	3.191	2.208	0.943	-52.694	24.159	7.852	0	3.151	0	7.939	0	0
0203-605-606	4.52	148.955	0.689	96.326	Free Surface	0 - 13:37 hrs	4.487	4.487	0.647	0.742	52.629	24.146	7.222	0	0	0	0	0	0
0203-606-607	3.356	295.43	1.499	96.326	Free Surface	0 - 13:37 hrs	3.725	3.725	0.326	0.702	199.104	24.139	12.906	0	0	0	0	0	0
0203-607-533	3.063	600.121	1.062	96.326	Free Surface	0 - 13:37 hrs	4.663	4.675	0.161	0.671	503.795	24.137	11.432	0	0	0	0	0	0
0203-608-609	6.23	920.531	0.657	96.308	Free Surface	0 - 13:40 hrs	5.235	5.357	0.105	0.501	824.223	24.139	8.428	0	0	0	0	0	0
0203-609-610	8.2	2,600.98	0.173	96.575	Free Surface	0 - 13:36 hrs	1.787	1.908	0.037	0.557	2,504.41	24.124	26.015	0	0	0	0	0	0
0203-610-559	8.04	117.505	0.003	99.543	Free Surface	0 - 12:19 hrs	1.282	2.103	0.847	0.581	17.961	24.115	31.191	0	0	0	0	0	0
0203-611-621	15.12	3,023.71	0.281	741.133	Free Surface	0 - 12:21 hrs	3.902	4.051	0.245	0.675	2,282.58	150.387	33.92	0	0	0	0	0	0
0203-612-611	11.76	7,994.65	1.202	687.203	Free Surface	0 - 12:19 hrs	1.878	1.937	0.086	0.805	7,307.45	147.256	59.56	0	0	0	0	0	0
0203-613-614	13.8	4,726.46	0.449	724.872	Free Surface	0 - 12:22 hrs	2.5	2.658	0.153	0.787	4,001.59	150.202	50.335	0	0	0	0	0	0
0203-614-615	14.09	134.302	0	708.136	Free Surface	0 - 12:22 hrs	2.72	2.909	5.273	0.811	-573.835	149.972	43.733	0	0	0	14.588	0	0
0203-615-616	16.66	3,218.90	0.047	683.86	Free Surface	0 - 12:23 hrs	1.699	1.848	0.212	0.681	2,535.04	149.678	67.909	0	0	0	0	0	0
0203-616-617	12.01	1,156.69	0.039	651.6	Free Surface	0 - 12:37 hrs	1.741	2.181	0.563	0.932	505.091	149.252	59.405	0	0	0	0	0	0
0203-617-618	10.93	4,117.66	0.453	697.695	Backwater	0 - 12:36 hrs	1.627	1.795	0.169	1	3,419.97	158.227	53.824	0.429	0.429	1.13	0	0	0
0203-618-619	10.66	2,216.36	0.228	693.203	Backwater	0 - 12:55 hrs	1.81	1.96	0.313	1	1,523.16	158.042	60.711	1.398	1.398	1.75	0	0	0
0203-619-620	11.76	1,212.85	0.102	679.833	Free Surface	0 - 12:48 hrs	2.337	3.45	0.561	0.965	533.016	157.727	40.701	0	0	0.364	0	0	0
0203-620-622	13.9	5,243.80	0.147	679.647	Free Surface	0 - 13:04 hrs	1.136	1.429	0.13	0.774	4,564.15	157.572	64.626	0	0	0	0	0	0
0203-621-613	13.58	3,962.39	0.558	737.741	Free Surface	0 - 12:21 hrs	3.55	3.751	0.186	0.737	3,224.65	150.345	38.534	0	0	0	0	0	0
0203-622-623	1.76	230.845	0.512	698.576	Exceeds Capacity	0 - 12:52 hrs	9.06	9.06	3.026	1	-467.731	160.37	64.23	17.515	17.515	17.851	9.428	15.031	0
0203-623-676	7.33	4,490.61	0.149	810.488	Free Surface	0 - 13:03 hrs	3.729	3.736	0.18	0.707	3,680.12	172.039	57.23	0	0	0	0	0	0
0203-624-623	4.01	549.756	2.467	111.982	Backwater	0 - 13:06 hrs	2.093	2.095	0.204	1	437.774	11.753	20.41	1.806	1.806	4.641	0	0	0
0203-625-270	11.2	3,720.17	1.794	120.324	Free Surface	0 - 12:06 hrs	1.541	1.816	0.032	0.669	3,599.84	11.793	26.151	0	0	0	0	0	0
0203-626-657	3.86	270.391	1.937	185.34	Backwater	0 - 12:15 hrs	5.624	5.624	0.685	1	85.051	11.751	13.226	1.946	1.946	2.008	0	0.223	0
0203-627-252	6.45	380.355	0.191	54.559	Free Surface	0 - 12:48 hrs	2.726	2.791	0.143	0.393	325.797	5.291	13.694	0	0	0	0	0	0
0203-628-629	6.99	10,583.69	1.162	831.176	Free Surface	0 - 12:53 hrs	4.848	6.012	0.079	0.656	9,752.52	174.773	50.217	0	0	0	0	0	0
0203-629-630	8.41	10,075.58	0.756	919.653	Free Surface	0 - 12:53 hrs	3.831	4.277	0.091	0.794	9,155.92	186.681	50.355	0	0	0.493	0	0	0
0203-630-268	12.401	1,060.03	0.014	919.586	Free Surface	0 - 12:55 hrs	2.755	2.757	0.868	0.656	140.445	186.35	64.517	0	0	0	0	0	0
0203-631-632	12.016	1,549.05	0.035	970.499	Free Surface	0 - 12:56 hrs	3.448	3.465	0.627	0.623	578.551	193.252	61.312	0	0	0	0	0	0
0203-632-637	9.93	7,174.33	1.141	971.336	Free Surface	0 - 12:56 hrs	3.936	4.122	0.135	0.602	6,203.00	193.064	59.065	0	0	0	0	0	0
0203-633-634	4.51	102.646	0.306	39.976	Free Surface	0 - 12:42 hrs	2.651	2.651	0.389	0.526	62.67	13.66	7.083	0	0	0	0	0	0
0203-634-255	4.56	151.447	0.923	39.961	Free Surface	0 - 12:42 hrs	3.352	3.389	0.264	0.528	111.486	13.644	6.274	0	0	0	0	0	0
0203-635-636	6.75	673.062	1.181	40.094	Free Surface	0 - 12:44 hrs	1.066	2.091	0.06	0.617	632.968	13.617	12.656	0	0	0	0	0	0
0203-636-637	11.29	4,138.85	0.961	40.339	Free Surface	0 - 12:44 hrs	0.389	1.067	0.01	0.486	4,098.51	13.579	29.98	0	0	0	0	0	0
0203-637-550	10.26	9,217.28	2.911	1,008.98	Free Surface	0 - 13:02 hrs	3.739	3.929	0.109	0.744	8,208.30	206.588	58.083	0	0	0.731	0	0	0
0203-638-639	17.23	13,754.19	1.014	1,030.07	Free Surface	0 - 12:49 hrs	3.064	3.099	0.075	0.577	12,724.12	208.59	48.436	0	0	0	0	0	0
0203-639-640	11.92	1,425.16	0.041	1,142.31	Free Surface	0 - 12:21 hrs	4.123	4.233	0.802	0.653	282.85	218.27	48.332	0	0	0	0	0	0
0203-640-641	13.4	6,157.15	0.482	1,137.81	Free Surface	0 - 12:27 hrs	3.999	4.238	0.185	0.561	5,019.34	218.103	57.22	0	0	0	0	0	0
0203-641-642	7.11	1,605.32	0.414	1,136.96	Backwater	0 - 12:30 hrs	4.651	4.651	0.708	1	468.357	217.872	49.661	1.468	1.558	1.468	0	1.468	0
0203-642-643	17.21	1,925.72	0.009	1,156.50	Free Surface	0 - 12:30 hrs	4.345	4.353	0.601	0.369	769.215	219.264	58.319	0	0	0	0	0	0
0203-643-558	17.29	19,135.11	1.047	1,156.11	Free Surface	0 - 12:30 hrs	5.237	5.262	0.06	0.337	17,979.00	219.055	52.244	0	0	0	0	0	0
0203-644-645	22.03	20,938.12	0.668	1,217.59	Free Surface	0 - 12:30 hrs	4.638	4.693	0.058	0.375	19,720.53	226.408	49.926	0	0	0	0	0	0
0203-645-646	23.07	16,084.02	0.29	1,216.75	Free Surface	0 - 12:32 hrs	3.837	3.837	0.076	0.371	14,867.27	226.102	53.425	0	0	0	0	0	0
0203-646-007	23.07	17,808.79	0.355	1,216.65	Free Surface	0 - 12:33 hrs	7.055	7.055	0.068	0.241	16,592.14	225.96	43.085	0	0	0	0	0	0
0203-647-351	3.6	105.916	0.448	74.035	Free Surface	0 - 12:12 hrs	2.84	2.918	0.699	0.994	31.882	2.365	12.757	0	0	0.21	0	0	0
0203-648-647	3.6	105.904	0.448	51.222	Free Surface	0 - 12:15 hrs	2.054	2.177	0.484	0.946	54.682	1.503	12.411	0	0	0	0	0	0
0203-649-647	4.97	241.168	0.392	29.393	Free Surface	0 - 12:14 hrs	1.317	1.436	0.122	0.618	211.775	0.867	13.551	0	0	0	0	0	0
0203-650-250	4.04	90.812	0.482	80.724	Backwater	0 - 12:23 hrs	3.459	3.459	0.889	1	10.088	13.224	7.247	2.247	2.247	3.651	0	2.169	0
0203-651-248	4.17	61.813	0.13	34.106	Backwater	0 - 16:07 hrs	1.179	1.217	0.552	1	27.707	12.821	8.005	7.531	7.531	10.498	0	0	0
0203-652-653	3	89.924	1.818	71.226	Backwater	0 - 11:53 hrs	10.076	10.076	0.792	1	18.697	9.451	2.999	2.998	2.998	3.021	0	2.995	0
0203-653-654	3.5	89.147	0.785	69.524	Free Surface	0 - 12:55 hrs	8.386	8.402	0.78	0.819	19.623	9.501	3.481	0	2.988	0	0	0	0
0203-654-656	4	192.782	1.801	69.521	Free Surface	0 - 12:56 hrs	7.742	8.16	0.361	0.675	123.261	9.514	3.966	0	0	0	0	0	0
0203-655-661	6	544.482	0.174	149.671	Backwater	0 - 16:35 hrs	2.079	2.079	0.275	1	394.81	40.396	12	7.808	7.811	7.808	0	7.808	0
0203-656-272	4	136.969	0.538	69.54	Free Surface	0 - 12:52 hrs	6.908	7.038	0.508	0.839	67.429	9.504	3.997	0	0	0	0	0	0

Table B-4b. Existing System Analysis - Pipes/Channels
25-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-657-625	3.86	140.903	0.526	139.861	Backwater	0 - 12:06 hrs	4.244	4.244	0.993	1	1.042	11.819	13.226	2.008	2.008	2.136	0	0.125	0
0203-658-671	4.5	115.357	1.52	111.971	Backwater	0 - 13:03 hrs	4.977	4.977	0.971	1	3.386	11.761	5	2.059	2.101	2.059	0	2.059	0
0203-659-624	3.98	491.176	1.802	111.979	Backwater	0 - 13:04 hrs	4.918	5.258	0.228	1	379.197	11.759	5.812	1.183	1.183	1.835	0	0	0
0203-660-552	3	65.969	0.978	26.605	Backwater	0 - 13:14 hrs	3.764	3.764	0.403	1	39.364	5.721	3	5.857	5.862	5.858	0	5.857	0
0203-661-331	6	229.475	0.292	149.351	Backwater	0 - 17:04 hrs	2.074	2.074	0.651	1	80.124	40.375	12	7.808	7.808	7.821	0	0.002	0
0203-662-663	3.5	64.069	0.406	57.455	Backwater	0 - 12:02 hrs	5.978	5.978	0.897	1	6.614	5.286	3.475	1.78	1.787	1.782	0	1.779	0
0203-663-664	3.5	155.483	2.388	54.689	Backwater	0 - 12:02 hrs	5.684	5.684	0.352	1	100.794	5.293	3.497	1.782	1.782	1.793	0	1.779	0
0203-664-627	3.5	130.884	1.692	54.575	Free Surface	0 - 12:47 hrs	6.037	6.278	0.417	0.896	76.309	5.292	3.5	0	1.793	0	0	0	0
0203-665-673	6	506.09	0.15	149.432	Backwater	0 - 17:05 hrs	2.416	2.619	0.295	1	356.657	40.292	12	1.057	1.22	1.057	0	1.057	0
0203-666-667	3	55.113	0.683	46.606	Backwater	0 - 12:22 hrs	6.593	6.593	0.846	1	8.507	3.198	2.998	1.278	1.28	1.433	0	0.971	0
0203-667-668	3	70.995	1.133	46.605	Backwater	0 - 12:22 hrs	6.593	6.593	0.656	1	24.39	3.206	2.998	1.437	1.439	1.466	0	0.968	0
0203-668-669	3	88.178	1.748	37.636	Backwater	0 - 13:00 hrs	5.324	5.324	0.427	1	50.542	3.178	2.999	1.483	1.483	1.519	0	1.442	0
0203-669-670	3	23.852	0.128	37.636	Exceeds Capacity	0 - 13:00 hrs	5.324	5.324	1.578	1	-13.784	3.177	3	1.442	1.519	1.442	1.471	1.44	0
0203-670-252	3.5	2.598	0.001	37.605	Free Surface	0 - 13:00 hrs	4.794	4.794	14.474	0.791	-35.007	3.177	3.5	0	1.128	0	9.955	0	0
0203-671-672	4.5	224.625	0.609	111.972	Backwater	0 - 13:03 hrs	4.977	4.977	0.498	1	112.654	11.761	5	1.969	2.059	1.969	0	1.969	0
0203-672-659	4.5	193.383	0.451	111.972	Free Surface	0 - 13:03 hrs	5.182	5.387	0.579	0.961	81.411	11.76	5	0	1.969	0	0	0	0
0203-673-677	6	624.338	0.228	157.532	Backwater	0 - 12:15 hrs	2.188	2.681	0.252	1	466.805	37.955	12	1.057	1.057	1.437	0	0	0
0203-674-675	4	103.697	0.521	74.882	Backwater	0 - 12:17 hrs	5.959	5.959	0.722	1	28.815	2.926	4	0.275	0.395	0.275	0	0.275	0
0203-675-676	4	75.888	0.279	74.882	Free Surface	0 - 12:17 hrs	6.737	6.737	0.987	0.827	1.007	2.919	4	0	0.275	0	0	0	0
0203-676-628	7.33	4,266.06	0.134	831.322	Free Surface	0 - 12:52 hrs	4.49	4.606	0.195	0.629	3,434.74	174.832	57.029	0	0	0	0	0	0
0203-677-679	6	286.566	0.048	157.513	Backwater	0 - 12:15 hrs	2.188	2.759	0.55	1	129.053	37.928	12	1.3	1.437	1.303	0	0.675	0
0203-678-283	3.5	73.608	0.535	66.948	Backwater	0 - 12:29 hrs	6.958	6.958	0.91	1	6.661	7.457	3.5	2.218	2.218	3.162	0	2.192	0
0203-679-600	7.55	1,792.78	0.744	201.21	Free Surface	0 - 19:20 hrs	2.231	2.511	0.112	0.992	1,591.57	52.374	48.974	0	0	0	0	0	0
0203-680-681	3	36.722	0.303	38.75	Exceeds Capacity	0 - 11:56 hrs	5.482	5.482	1.055	1	-2.028	5.087	2.998	3.378	3.439	3.379	0.117	3.377	0
0203-681-682	3	60.903	0.834	38.743	Backwater	0 - 11:56 hrs	5.481	5.481	0.636	1	22.16	5.092	2.998	3.391	3.391	3.438	0	0.142	0
0203-682-683	4	80.161	0.311	38.415	Backwater	0 - 11:56 hrs	3.712	3.78	0.479	1	41.746	5.093	4	3.2	3.252	3.2	0	3.2	0
0203-683-684	4	120.044	0.698	37.557	Backwater	0 - 11:56 hrs	3.799	4.174	0.313	1	82.487	5.093	3.973	3.2	3.2	3.31	0	0	0
0203-684-685	4	88.644	0.381	35.431	Backwater	0 - 12:02 hrs	2.82	2.913	0.4	1	53.213	5.09	3.996	3.31	3.31	3.465	0	0	0
0203-685-686	4.5	201.454	1.049	35.392	Backwater	0 - 12:02 hrs	2.225	2.225	0.176	1	166.062	5.089	4.5	3.384	3.384	3.404	0	0	1
0203-686-687	4.5	8.888	0.002	35.363	Exceeds Capacity	0 - 12:02 hrs	2.224	2.224	3.979	1	-26.475	5.088	4.5	3.378	3.404	3.378	4.521	3.378	1
0203-687-269	7.321	16.942	0.011	35.017	Free Surface	0 - 12:02 hrs	1.982	2.414	2.067	0.812	-18.075	5.087	4.799	0	0	0	3.608	0	0
0203-688-689	3	20.487	0.094	45.173	Free Surface	0 - 12:15 hrs	6.79	6.792	2.205	0.9	-24.686	1.612	3	0	0.379	0	0.491	0	0
0203-689-631	3.333	69.94	0.627	45.522	Free Surface	0 - 12:17 hrs	6.298	6.828	0.651	0.779	24.418	1.6	3.333	0	0	0.173	0	0	0
CDT-395	3.75	65.819	0.296	65.481	Free Surface	0 - 12:15 hrs	5.932	5.932	0.995	0.998	0.338	4.981	3.747	0	1.774	0	0	0	1

Table B-5a. Existing System Analysis - Nodes
50-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-001	10.007	276.397	Below Maximum Depth	1.783	0 - 12:34 hrs	0	157.754	0	39.413	0.156	5.389	0.477	1.783	0	0	0	0 - 00:00 hrs
0203-002	10.654	279.014	Surcharged	-1.555	0 - 12:15 hrs	50.571	50.571	1.171	1.172	0	22.263	7.654	0	0.006	0.191	2.188	0 - 12:10 hrs
0203-003	7.558	276.518	Below Maximum Depth	2.312	0 - 12:34 hrs	0	146.243	0	38.416	0.002	2.021	0.088	2.312	0	0	0	0 - 00:00 hrs
0203-004	8.63	278.97	Surcharged	0	0 - 12:17 hrs	201.046	201.046	6.737	38.934	0.019	5.124	0.57	0	0.281	0.704	47.373	0 - 12:18 hrs
0203-005	7.835	282.185	Surcharged	-3.585	0 - 12:18 hrs	476.949	476.949	12.922	29.752	0.003	15.7	3.665	0	1.441	7.845	173.558	0 - 12:10 hrs
0203-006	6.56	281.51	Surcharged	-2.39	0 - 12:19 hrs	0	102.65	0	17.881	0.002	14.559	2.39	0	0.059	7.28	7.525	0 - 12:15 hrs
0203-007	3.314	284.894	Below Link Crown	0.436	0 - 15:59 hrs	0	90.155	0	15.748	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-008	3.918	285.998	Below Maximum Depth	2.052	0 - 15:57 hrs	0	90.155	0	15.748	0.001	5.715	0.168	2.052	0	0	0	0 - 00:00 hrs
0203-009	5.261	280.861	Surcharged	-0.921	0 - 16:30 hrs	0	67.834	0	16.201	0.002	18.882	1.181	0	0.029	8.88	2.177	0 - 11:53 hrs
0203-010	4.57	286.77	Below Link Crown	0.83	0 - 15:57 hrs	0	90.156	0	15.748	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-011	2.931	292.641	Below Link Crown	0.989	0 - 15:56 hrs	0	90.157	0	15.727	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-012	3.574	293.714	Below Maximum Depth	1.976	0 - 15:56 hrs	0	90.157	0	15.726	0.001	6.108	0.174	1.976	0	0	0	0 - 00:00 hrs
0203-013	4.059	294.819	Surcharged	-0.019	0 - 15:56 hrs	0	92.187	0	15.732	0.001	2.535	0.026	0	0.035	1.191	2.107	0 - 15:41 hrs
0203-014	6.524	298.134	Below Maximum Depth	0.676	0 - 14:45 hrs	0	105.174	0	15.734	0.002	7.675	1.024	0.676	0	0	0	0 - 00:00 hrs
0203-015	5.544	299.044	Below Maximum Depth	2.696	0 - 14:22 hrs	0	105.186	0	15.727	-0.001	2.701	0.044	2.696	0	0	0	0 - 00:00 hrs
0203-016	7.283	314.763	Below Maximum Depth	5.037	0 - 13:49 hrs	0	63.215	0	7.91	-0.001	6.087	3.353	5.037	0	0	0	0 - 00:00 hrs
0203-017	5.839	297.249	Surcharged	-0.339	0 - 15:03 hrs	0	105.173	0	15.732	0.002	6.299	0.339	0	0.173	3.149	3.94	0 - 13:07 hrs
0203-018	5.222	296.342	Surcharged	-0.842	0 - 15:32 hrs	0	103.71	0	15.786	0.001	9.163	1.187	0	0.66	4.422	21.787	0 - 11:53 hrs
0203-019	6.227	322.147	Surcharged	-0.827	0 - 12:42 hrs	120.018	120.018	3.557	3.559	0	6.349	3.227	0	0.732	3.173	91.133	0 - 12:15 hrs
0203-020	6.999	321.509	Surcharged	-0.649	0 - 13:14 hrs	0	39.954	0	3.563	0.001	6.368	3.999	0	0.111	2.628	8.07	0 - 12:22 hrs
0203-021	6.533	320.973	Surcharged	-0.313	0 - 13:12 hrs	0	40.627	0	3.558	0.001	6.352	3.463	0	0.013	1.824	1.378	0 - 11:52 hrs
0203-022	2.557	271.547	Below Link Crown	8.453	0 - 12:15 hrs	0	199.478	0	41.079	0.02	0	0	0	0	0	0	0 - 00:00 hrs
0203-023	7.746	320.156	Surcharged	-0.956	0 - 13:04 hrs	0	40.611	0	3.625	0	6.392	4.596	0	0.429	2.788	35.579	0 - 12:15 hrs
0203-024	8.027	319.917	Surcharged	-0.747	0 - 12:22 hrs	154.062	154.062	4.369	7.968	0.004	5.772	4.817	0	0.473	1.844	78.849	0 - 12:15 hrs
0203-025	5.918	311.848	Surcharged	-0.978	0 - 13:15 hrs	0	63.214	0	7.916	0.001	6.463	2.418	0	0.121	2.726	6.326	0 - 12:19 hrs
0203-026	4.483	309.963	Below Maximum Depth	0.737	0 - 13:06 hrs	0	61.361	0	7.905	0.001	5.381	0.973	0.737	0	0	0	0 - 00:00 hrs
0203-027	6.269	306.449	Below Maximum Depth	1.261	0 - 12:42 hrs	0	60.061	0	7.929	0.002	5.715	2.269	1.261	0	0	0	0 - 00:00 hrs
0203-028	5.578	305.408	Below Maximum Depth	2.112	0 - 12:42 hrs	0	60.061	0	7.925	0.001	5.444	1.078	2.112	0	0	0	0 - 00:00 hrs
0203-029	7.523	304.413	Surcharged	-1.073	0 - 12:41 hrs	0	106.872	0	8.264	0.003	6.38	3.023	0	1.072	2.805	106.872	0 - 12:15 hrs
0203-030	7.686	304.496	Below Maximum Depth	0.004	0 - 12:18 hrs	0	79.999	0	8.613	0.002	0.095	0.026	0.004	0	0	0	0 - 00:00 hrs
0203-031	4.194	273.194	Below Link Crown	4.136	0 - 12:15 hrs	62.236	62.236	1.82	1.821	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-032	7.009	275.139	Surcharged	-0.879	0 - 12:22 hrs	104.549	104.549	2.615	2.616	0	2.653	4.509	0	0.383	1.14	64.19	0 - 12:15 hrs
0203-033	3.298	265.308	Below Link Crown	13.692	0 - 12:17 hrs	0	235.986	0	43.625	0.011	0	0	0	0	0	0	0 - 00:00 hrs
0203-034	4.967	281.337	Surcharged	-0.887	0 - 16:37 hrs	0	107.939	0	15.97	-0.001	18.829	0.887	0	6.454	9.411	107.939	0 - 12:37 hrs
0203-035	2.122	287.312	Below Link Crown	3.269	0 - 15:57 hrs	0	90.157	0	15.74	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-036	3.544	289.964	Below Link Crown	1.796	0 - 15:56 hrs	0	90.156	0	15.739	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-037	8.633	304.573	Surcharged	-0.973	0 - 12:17 hrs	297.962	297.962	7.841	16.145	0.002	1.327	0.973	0	0.393	0.663	82.479	0 - 12:15 hrs
0203-038	5.771	300.441	Surcharged	-0.741	0 - 13:51 hrs	0	168.188	0	15.775	0.003	7.502	0.771	0	1.468	3.75	65.835	0 - 12:17 hrs
0203-039	2.701	290.951	Below Link Crown	1.182	0 - 15:56 hrs	0	90.156	0	15.732	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-040	2.919	283.279	Below Link Crown	1.201	0 - 16:15 hrs	0	90.155	0	15.746	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-041	5.726	279.926	Surcharged	-1.666	0 - 13:19 hrs	0	211.498	0	28.646	0.002	14.918	1.666	0	1.46	7.458	118.939	0 - 12:18 hrs
0203-042	5.896	279.576	Surcharged	-1.736	0 - 13:26 hrs	0	166.496	0	29.117	0.001	15.03	1.736	0	1.939	7.514	166.496	0 - 12:17 hrs
0203-043	7.203	279.073	Below Link Crown	1.427	0 - 13:07 hrs	0	109.163	0	29.554	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-044	7.581	279.061	Below Link Crown	1.089	0 - 13:07 hrs	0	106.791	0	29.584	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-045	7.538	279.048	Below Link Crown	3.382	0 - 13:07 hrs	0	102.686	0	29.641	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-046	8.271	279.041	Below Link Crown	8.659	0 - 13:07 hrs	0	107.232	0	29.74	0.044	0	0	0	0	0	0	0 - 00:00 hrs
0203-047	7.526	279.016	Below Link Crown	9.384	0 - 13:06 hrs	0	122.934	0	29.858	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-048	8.08	279.01	Below Link Crown	0.94	0 - 13:06 hrs	0	134.654	0	32.74	0.019	0	0	0	0	0	0	0 - 00:00 hrs
0203-049	8.61	279	Surcharged	-0.55	0 - 12:29 hrs	0	111.381	0	32.156	0.02	5.069	0.55	0	0.099	2.534	39.524	0 - 12:14 hrs
0203-050	8.621	278.991	Surcharged	-0.561	0 - 12:18 hrs	0	111.891	0	32.305	0.023	5.084	0.561	0	0.044	2.542	19.122	0 - 12:12 hrs
0203-051	8.306	276.486	Below Link Crown	1.224	0 - 12:34 hrs	0	143.81	0	38.413	0.026	0	0	0	0	0	0	0 - 00:00 hrs
0203-052	7.597	317.39	Below Maximum Depth	0.41	0 - 12:15 hrs	35.392	35.392	1.035	1.035	0	3.164	4.597	0.41	0	0	0	0 - 00:00 hrs
0203-053	7.004	316.017	Below Maximum Depth	0.683	0 - 12:15 hrs	0	35.396	0	1.037	0	3.168	3.874	0.683	0	0	0	0 - 00:00 hrs
0203-054	6.013	314.913	Below Maximum Depth	0.776	0 - 12:02 hrs	0	35.39	0	1.041	0	3.169	3.013	0.776	0	0	0	0 - 00:00 hrs
0203-055	6.199	313.666	Surcharged	-0.666	0 - 12:30 hrs	0	92.443	0	3.618	0	3.205	2.699	0	0.411	1.583	47.954	0 - 12:15 hrs
0203-056	6.567	312.517	Surcharged	-0.217	0 - 12:37 hrs	0	46.721	0	3.62	0.002	3.272	2.896	0	0.016	1.004	15.712	0 - 13:37 hrs
0203-057	6.532	311.13	Surcharged	-0.48	0 - 12:33 hrs	0	45.407	0	3.793	0.001	3.409	2.882	0	0.11	1.62	16.015	0 - 12:14 hrs
0203-058	6.672	310.293	Surcharged	-0.024	0 - 12:15 hrs	0	49.206	0	3.931	0	3.422	3.172	0	0	0.024	9.182	0 - 13:38 hrs
0203-059	5.526	310.296	Below Maximum Depth	0.304	0 - 12:15 hrs	0	8.433	0	0.354	0	3.279	2.469	0.304	0	0	0	0 - 00:00 hrs
0203-060	3.427	311.337	Below Link Crown	6.144	0 - 12:15 hrs	0	36.879	0	5.537	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-061	4.258	310.626	Below Maximum Depth	4.175	0 - 12:15 hrs	0	37.096	0	5.537	0	0.384	0.758	4.175	0	0	0	0 - 00:00 hrs
0203-062	7.58	308.47	Below Maximum Depth	6.845	0 - 12:15 hrs	0	103.21	0	11.125	0.003	3.08	2.37	6.845	0	0	0	0 - 00:00 hrs
0203-063	7.393	306.658	Below Maximum Depth	16.356	0 - 12:15 hrs	0	103.211	0	11.126	0.006	3.192	2.075	16.356	0	0	0	0 - 00:00 hrs
0203-064	6.444	304.818	Below Maximum Depth	15.762	0 - 12:15 hrs	0	103.212	0	11.123	-0.001	1.961	1.331	15.762	0	0	0	0 - 00:00 hrs
0203-065	6.751	302.782	Below Maximum Depth	7.518	0 - 12:15 hrs	0	103.215	0	11.132	0.003	3.448	1.751	7.518	0	0	0	0 - 00:00 hrs
0203-066	5.624	301.38	Below Maximum Depth	7.161	0 - 12:15 hrs	0	103.216	0	11.129	0.001	1.519	0.624	7.161	0	0	0	0 - 00:00 hrs
0203-067	4.756	299.8	Below Link Crown	4.1	0 - 12:15 hrs	0	103.214	0	11.124	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-068	0.811	304.554	Below Link Crown	2.346	0 - 12:15 hrs	0	27.799	0	0.817	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-069	2.688	307.176	Below Link Crown	0.424	0 - 12:15 hrs	0	29.142	0	0.817	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-070	2.412	295.389	Below Link Crown	10.511	0 - 12:19 hrs	0	233.735	0	30.651	0.052	0	0	0	0	0	0	0 - 00:00 hrs
0203-071	2.55	312.061	Below Link Crown	1.925	0 - 12:15 hrs	0	36.843	0	5.538	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-072	2.943	311.472	Below Link Crown	4.228	0 - 13:18 hrs	15.594	15.594	0.683	0.683	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-073	4.565	311.46	Below Maximum Depth	4.006	0 - 13:21 hrs	0	20.159	0	0.683	0	2.262	0.065	4.006	0	0	0	0 - 00:00 hrs
0203-074	4.561	311.456	Below Maximum Depth	2.556	0 - 13:21 hrs	0	27.254	0	0.69	0	2.224	0.061	2.556	0	0	0	0 - 00:00 hrs
0203-075	5.76	311.452	Below Maximum Depth	2.212	0 - 13:21 hrs	0	29.777	0	0.693	0	6.686	0.613	2.212	0	0	0	0 - 00:00 hrs
0203-076	8.138	311.449	Surcharged	-0.839	0 - 13:22 hrs	0	94.269	0	7.989	0.001	8.027	2.048	0	0.843	3.953	48.911	0 - 12:06 hrs
0203-077	3.812	311.463	Below Link Crown	3.137	0 - 13:21 hrs	0	15.463	0	0.681	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-078	7.151	310.223	Surcharged	-0.151	0 - 13:22 hrs	0	47.14	0	7.989	0	8.342	3.651	0	0.001	1.733	0.186	0 - 12:48 hrs
0203-079	7.326	308.715	Below Maximum Depth	1.146	0 - 13:36 hrs	0	47.075	0	7.989	0.001	8.502	3.826	1.146	0	0	0	0 - 00:00 hrs
0203-080	6.234	307.527	Below Maximum Depth	1.796	0 - 13:37 hrs	0	47.109	0	7.987	0	8.371	2.734	1.796	0	0	0	0 - 00:00 hrs
0203-081	6.236	305.936	Below Maximum Depth	1.318	0 - 13:38 hrs	0	47.076	0	7.986	0.001	8.586	2.73	1.318	0	0	0	0 - 00:00 hrs
0203-082	5.212	304.759	Below Maximum Depth	1.664	0 - 13:37 hrs	0	47.089	0	7.985	0	8.416	1.682	1.664	0	0	0	0 - 00:00 hrs
0203-083	4.038	303.585	Below Maximum Depth	0.915	0 - 13:18 hrs	0	47.079	0	7.984	0.001	2.949	0.038	0.915	0	0	0	0 - 00:00 hrs
0203-084	4.528	302.781	Below Maximum Depth	3.963	0 - 13:17 hrs	0	47.075	0	7.984	0	7.981	0.402	3.963	0	0	0	0 - 00:00 hrs
0203-085	3.715	301.352	Below Link Crown	5.498	0 - 12:15 hrs	0	47.075	0	7.984	0	0	0	0	0	0	0	0 - 00:00 hrs

Table B-5a. Existing System Analysis - Nodes
50-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-086	3.321	300.399	Below Link Crown	4.836	0 - 12:15 hrs	0	47.076	0	7.983	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-087	4.209	299.692	Below Link Crown	2.908	0 - 12:15 hrs	0	59.293	0	8.262	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-088	5.946	309.058	Below Maximum Depth	0.25	0 - 12:15 hrs	48.109	48.109	1.861	1.861	0	0.251	2.946	0.25	0	0	0	0 - 00:00 hrs
0203-089	5.785	306.073	Below Maximum Depth	1.562	0 - 12:15 hrs	0	48.104	0	1.862	0	0.309	2.3	1.562	0	0	0	0 - 00:00 hrs
0203-090	4.058	303.151	Below Maximum Depth	3.194	0 - 12:15 hrs	0	48.113	0	1.865	0.002	0.241	1.058	3.194	0	0	0	0 - 00:00 hrs
0203-091	2.826	299.906	Below Link Crown	4.431	0 - 12:15 hrs	0	48.122	0	2.588	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-092	3.319	298.708	Below Link Crown	4.492	0 - 12:15 hrs	0	59.212	0	7.539	0.01	0	0	0	0	0	0	0 - 00:00 hrs
0203-093	3.711	298.13	Below Link Crown	2.27	0 - 12:15 hrs	0	33.368	0	2.306	-0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-094	2.575	296.628	Below Link Crown	4.072	0 - 12:17 hrs	0	92.014	0	9.831	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-095	5.477	273.277	Below Maximum Depth	2.023	0 - 13:38 hrs	0	53.92	0	12.018	0.002	12.178	1.977	2.023	0	0	0	0 - 00:00 hrs
0203-096	4.948	271.348	Below Maximum Depth	1.752	0 - 13:45 hrs	0	53.911	0	12.009	0	12.17	1.418	1.752	0	0	0	0 - 00:00 hrs
0203-097	4.738	269.388	Below Maximum Depth	1.912	0 - 13:37 hrs	0	53.868	0	11.999	0.002	12.149	0.738	1.912	0	0	0	0 - 00:00 hrs
0203-098	4.468	268.348	Below Maximum Depth	2.152	0 - 13:37 hrs	0	53.698	0	11.994	0.001	12.091	0.398	2.152	0	0	0	0 - 00:00 hrs
0203-099	4.01	267.33	Below Link Crown	2.27	0 - 13:38 hrs	0	53.698	0	11.992	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-100	4.029	266.129	Below Maximum Depth	2.771	0 - 13:38 hrs	0	53.696	0	11.991	0.003	5.129	0.029	2.771	0	0	0	0 - 00:00 hrs
0203-101	3.516	264.946	Below Link Crown	3.554	0 - 13:38 hrs	0	53.696	0	11.99	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-102	2.906	263.566	Below Link Crown	3.734	0 - 13:38 hrs	0	53.696	0	11.988	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-103	3.117	262.507	Below Link Crown	4.263	0 - 13:45 hrs	0	53.695	0	11.989	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-104	2.827	261.274	Below Link Crown	4.566	0 - 14:26 hrs	0	53.693	0	11.988	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-105	3.719	292.739	Surcharged	-0.839	0 - 12:52 hrs	104.203	104.203	2.615	2.616	0	7.778	1.719	0	0.794	3.856	88.413	0 - 12:15 hrs
0203-106	2.866	291.284	Below Maximum Depth	1.996	0 - 12:33 hrs	0	17.643	0	2.628	0	6.791	0.866	1.996	0	0	0	0 - 00:00 hrs
0203-107	3.907	285.297	Below Maximum Depth	0.293	0 - 12:19 hrs	0	17.647	0	2.622	0	7.597	1.907	0.293	0	0	0	0 - 00:00 hrs
0203-108	4.118	283.488	Below Maximum Depth	1.212	0 - 12:19 hrs	0	17.65	0	2.619	0	3.764	1.618	1.212	0	0	0	0 - 00:00 hrs
0203-109	2.206	245.439	Below Link Crown	18.661	0 - 13:34 hrs	0	340.387	0	54.256	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-110	2.92	247.739	Below Link Crown	17.961	0 - 13:34 hrs	0	340.392	0	54.267	0.009	0	0	0	0	0	0	0 - 00:00 hrs
0203-111	2.571	249.968	Below Link Crown	14.132	0 - 13:34 hrs	0	340.395	0	54.279	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-112	7.723	262.825	Surcharged	-0.325	0 - 14:02 hrs	0	290.945	0	43.563	0.024	6.237	0.402	0	2.291	3.116	55.183	0 - 12:45 hrs
0203-113	10.58	272.346	Surcharged	-1.746	0 - 12:23 hrs	0	384.272	0	39.72	0.016	3.877	2.116	0	0.269	1.916	63.865	0 - 12:08 hrs
0203-114	5.929	276.336	Below Link Crown	1.101	0 - 12:19 hrs	0	282.971	0	35.227	0.014	0	0	0	0	0	0	0 - 00:00 hrs
0203-115	8.079	283.886	Below Link Crown	1.071	0 - 12:18 hrs	0	268.533	0	32.664	0.029	0	0	0	0	0	0	0 - 00:00 hrs
0203-116	5.054	284.184	Below Link Crown	4.906	0 - 12:18 hrs	0	271.002	0	32.67	0.009	0	0	0	0	0	0	0 - 00:00 hrs
0203-117	5.865	285.931	Below Link Crown	1.08	0 - 12:17 hrs	0	271.385	0	32.676	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-118	6.807	273.47	Below Link Crown	1.796	0 - 16:19 hrs	0	200.397	0	63.335	0.024	0	0	0	0	0	0	0 - 00:00 hrs
0203-119	5.875	286.13	Below Link Crown	1.461	0 - 12:55 hrs	0	103.821	0	32.9	0.033	0	0	0	0	0	0	0 - 00:00 hrs
0203-120	6.902	255.684	Below Link Crown	15.616	0 - 12:26 hrs	0	298.33	0	16.979	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-121	3.879	255.964	Below Link Crown	13.936	0 - 12:25 hrs	0	298.617	0	16.981	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-122	5.237	257.537	Below Link Crown	20.103	0 - 12:23 hrs	0	298.917	0	16.999	0.016	0	0	0	0	0	0	0 - 00:00 hrs
0203-123	5.623	258.023	Below Link Crown	19.617	0 - 12:23 hrs	0	299.128	0	17.016	0.014	0	0	0	0	0	0	0 - 00:00 hrs
0203-124	6.092	259.225	Below Link Crown	1.875	0 - 12:22 hrs	0	299.663	0	17.02	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-125	2.059	266.089	Below Link Crown	4.665	0 - 12:22 hrs	0	117.866	0	3.618	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-126	3.586	268.484	Below Link Crown	2.588	0 - 12:22 hrs	0	117.875	0	3.619	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-127	2.286	270.063	Below Link Crown	2.246	0 - 12:21 hrs	0	117.893	0	3.622	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-128	4.96	272.5	Below Maximum Depth	0	0 - 12:14 hrs	182.225	207.621	5.757	6.139	0	0.419	0.099	0	0.168	0.117	90.05	0 - 12:17 hrs
0203-129	5.462	273	Below Maximum Depth	0	0 - 12:15 hrs	64.231	100.073	2.109	4.483	0.025	0.325	0.601	0	0	0.002	9.375	0 - 12:15 hrs
0203-130	5.645	260.131	Below Link Crown	2.291	0 - 12:22 hrs	0	182.118	0	13.407	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-131	5.99	260.926	Below Link Crown	2.174	0 - 12:22 hrs	0	182.935	0	13.417	0.011	0	0	0	0	0	0	0 - 00:00 hrs
0203-132	5.363	263.265	Below Link Crown	2.735	0 - 12:19 hrs	0	183.079	0	13.427	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-133	5.359	265.449	Below Link Crown	1.456	0 - 12:18 hrs	0	183.148	0	13.441	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-134	5.242	269.942	Surcharged	-0.709	0 - 12:33 hrs	0	239.023	0	8.468	0.007	2.609	0.709	0	1.405	1.303	228.694	0 - 12:15 hrs
0203-135	2.549	265.789	Below Link Crown	6.611	0 - 12:37 hrs	0	83.757	0	5.005	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-136	3.542	273.682	Below Link Crown	3.318	0 - 12:34 hrs	0	84.626	0	5.025	0.021	0	0	0	0	0	0	0 - 00:00 hrs
0203-137	3.869	274.009	Below Link Crown	2.991	0 - 12:33 hrs	0	92.08	0	5.068	0.042	0	0	0	0	0	0	0 - 00:00 hrs
0203-138	3.506	274.186	Below Link Crown	2.814	0 - 12:32 hrs	0	101.316	0	5.077	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-139	4.688	276.738	Below Link Crown	4.362	0 - 12:19 hrs	0	28.082	0	0.959	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-140	4.578	276.738	Below Link Crown	4.462	0 - 12:18 hrs	0	24.592	0	0.909	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-141	3.801	276.741	Below Link Crown	4.859	0 - 12:19 hrs	0	30.603	0	0.885	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-142	2.555	276.763	Below Link Crown	6.047	0 - 12:19 hrs	32.088	32.088	0.886	0.886	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-143	1.65	252.92	Below Link Crown	24.692	0 - 13:18 hrs	0	288.184	0	73.363	0.054	0	0	0	0	0	0	0 - 00:00 hrs
0203-144	2.026	253.296	Below Link Crown	24.316	0 - 13:17 hrs	0	288.2	0	73.411	0.054	0	0	0	0	0	0	0 - 00:00 hrs
0203-145	6.713	258.323	Below Link Crown	12.027	0 - 13:15 hrs	0	288.198	0	73.49	0.076	0	0	0	0	0	0	0 - 00:00 hrs
0203-146	7.003	258.613	Below Link Crown	3.207	0 - 13:15 hrs	0	288.202	0	73.529	0.039	0	0	0	0	0	0	0 - 00:00 hrs
0203-147	6.958	258.818	Below Link Crown	8.582	0 - 13:15 hrs	0	288.205	0	73.548	0.019	0	0	0	0	0	0	0 - 00:00 hrs
0203-148	7.443	259.303	Below Link Crown	8.097	0 - 13:15 hrs	0	288.21	0	73.568	0.021	0	0	0	0	0	0	0 - 00:00 hrs
0203-149	7.525	259.535	Below Link Crown	7.569	0 - 13:15 hrs	0	288.217	0	73.589	0.022	0	0	0	0	0	0	0 - 00:00 hrs
0203-150	7.666	259.676	Below Link Crown	0.724	0 - 13:14 hrs	0	288.229	0	73.609	0.02	0	0	0	0	0	0	0 - 00:00 hrs
0203-151	7.023	259.813	Below Link Crown	10.087	0 - 13:14 hrs	0	288.276	0	73.646	0.038	0	0	0	0	0	0	0 - 00:00 hrs
0203-152	7.308	260.558	Below Link Crown	9.529	0 - 13:12 hrs	0	288.332	0	73.682	0.035	0	0	0	0	0	0	0 - 00:00 hrs
0203-153	7.606	260.936	Below Link Crown	0.402	0 - 13:11 hrs	0	288.373	0	73.705	0.023	0	0	0	0	0	0	0 - 00:00 hrs
0203-154	7.917	261.247	Below Link Crown	2.253	0 - 13:11 hrs	0	288.457	0	73.737	0.032	0	0	0	0	0	0	0 - 00:00 hrs
0203-155	8.133	261.463	Below Link Crown	2.137	0 - 13:11 hrs	0	288.554	0	73.768	0.031	0	0	0	0	0	0	0 - 00:00 hrs
0203-156	7.585	261.715	Below Link Crown	3.785	0 - 13:11 hrs	0	288.603	0	73.781	0.013	0	0	0	0	0	0	0 - 00:00 hrs
0203-157	7.948	262.078	Below Link Crown	11.522	0 - 13:10 hrs	0	288.641	0	73.791	0.01	0	0	0	0	0	0	0 - 00:00 hrs
0203-158	8.199	262.329	Below Link Crown	11.271	0 - 13:10 hrs	0	288.783	0	73.823	0.031	0	0	0	0	0	0	0 - 00:00 hrs
0203-159	8.291	262.421	Below Link Crown	1.679	0 - 13:10 hrs	0	289.015	0	73.862	0.038	0	0	0	0	0	0	0 - 00:00 hrs
0203-160	7.305	262.543	Below Link Crown	0.557	0 - 13:08 hrs	0	289.164	0	73.887	0.025	0	0	0	0	0	0	0 - 00:00 hrs
0203-161	3.303	262.901	Below Link Crown	4.599	0 - 13:07 hrs	0	291.61	0	73.906	0.021	0	0	0	0	0	0	0 - 00:00 hrs
0203-162	4.008	267.619	Below Link Crown	8.181	0 - 12:17 hrs	0	289.295	0	73.968	0.062	0	0	0	0	0	0	0 - 00:00 hrs
0203-163	4.781	272.783	Below Link Crown	3.777	0 - 16:53 hrs	0	263.956	0	68.424	0.047	0	0	0	0	0	0	0 - 00:00 hrs
0203-164	4.898	275.4	Below Link Crown	3.172	0 - 17:22 hrs	0	263.956	0	68.449	0.026	0	0	0	0	0	0	0 - 00:00 hrs
0203-165	7.351	278.351	Below Link Crown	4.399	0 - 17:21 hrs	0	263.956	0	68.51	0.051	0	0	0	0	0	0	0 - 00:00 hrs
0203-166	7.553	280.464	Below Link Crown	0.636	0 - 17:21 hrs	0	263.957	0	68.566	0.04	0	0	0	0	0	0	0 - 00:00 hrs
0203-167	9.025	282.025	Surcharged	-0.825	0 - 17:20 hrs	0	263.959	0	68.571	0.029	14.722	0.881	0	0.051	7.338	2.892	0 - 12:41 hrs
0203-168	8.854	283.512	Surcharged	-0.612	0 - 17:19 hrs	0	263.971	0	68.621	0.024	13.792	0.71	0	0.052	6.836	3.916	0 - 12:51 hrs
0203-169	5.747	284.237	Surcharged	-0.515	0 - 17:17 hrs	0	286.563	0	68.674	0.007	14.416	1.211	0	2.11	6.686	29.96	0 - 13:21 hrs
0203-170	6.102	284.751	Below Link Crown	4.249	0 - 16:57 hrs	0	215.112	0	50.094	0.015	0	0	0	0	0	0	0 - 00:00 hrs

Table B-5a. Existing System Analysis - Nodes
50-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-171	6.627	285.777	Below Link Crown	0.323	0 - 16:32 hrs	0	215.26	0	50.128	0.024	0	0	0	0	0	0	0 - 00:00 hrs
0203-172	6.173	285.945	Below Link Crown	0.755	0 - 16:30 hrs	0	215.484	0	50.184	0.04	0	0	0	0	0	0	0 - 00:00 hrs
0203-173	6.181	288.555	Surcharged	-1.655	0 - 14:33 hrs	0	306.485	0	50.301	0.014	13.655	1.684	0	3.494	6.816	112.17	0 - 12:33 hrs
0203-174	5.799	284.292	Surcharged	-1.192	0 - 17:10 hrs	0	123.478	0	18.559	0.004	14.609	1.266	0	0.163	7.264	9.886	0 - 12:37 hrs
0203-175	4.874	284.552	Surcharged	-0.348	0 - 15:47 hrs	0	122.296	0	18.566	0.004	13.297	0.348	0	0.264	6.646	7.178	0 - 13:23 hrs
0203-176	4.857	284.621	Surcharged	-0.352	0 - 15:15 hrs	0	111.504	0	18.579	0	13.736	0.352	0	0.891	6.868	25.19	0 - 13:18 hrs
0203-177	5.897	284.786	Surcharged	-1.386	0 - 14:33 hrs	0	162.084	0	18.577	0.017	16.599	1.413	0	1.791	8.299	96.888	0 - 12:32 hrs
0203-178	4.485	285.011	Surcharged	-0.001	0 - 13:45 hrs	0	163.821	0	18.598	0.008	0.317	0.001	0	0.001	0.155	0.453	0 - 13:41 hrs
0203-179	4.056	285.732	Below Link Crown	7.468	0 - 12:34 hrs	0	164.556	0	18.61	0.01	0	0	0	0	0	0	0 - 00:00 hrs
0203-180	4.337	286.013	Below Link Crown	7.187	0 - 12:33 hrs	0	165.621	0	18.617	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-181	4.126	286.755	Below Link Crown	4.445	0 - 12:32 hrs	0	170.438	0	18.635	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-182	4.337	287.109	Below Link Crown	4.234	0 - 12:30 hrs	0	172.07	0	18.644	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-183	4.768	287.331	Below Link Crown	3.803	0 - 12:30 hrs	0	172.964	0	18.651	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-184	4.901	288.444	Below Link Crown	2.667	0 - 12:26 hrs	0	173.424	0	18.654	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-185	4.683	288.456	Below Link Crown	2.725	0 - 12:26 hrs	0	21.002	0	1.865	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-186	2.617	288.465	Below Link Crown	4.035	0 - 12:26 hrs	0	20.596	0	1.866	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-187	5.177	291.02	Below Link Crown	4.38	0 - 12:23 hrs	0	165.644	0	16.808	0.011	0	0	0	0	0	0	0 - 00:00 hrs
0203-188	6.939	294.105	Below Link Crown	3.195	0 - 12:18 hrs	0	170.67	0	16.838	0.012	0	0	0	0	0	0	0 - 00:00 hrs
0203-189	6.924	294.49	Below Link Crown	3.21	0 - 12:18 hrs	0	184.697	0	16.901	0.063	0	0	0	0	0	0	0 - 00:00 hrs
0203-190	5.204	294.51	Below Link Crown	5.89	0 - 12:18 hrs	0	25.357	0	1.887	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-191	2.033	300.469	Below Link Crown	9.031	0 - 12:36 hrs	0	25.357	0	1.885	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-192	4.422	296.502	Below Link Crown	1.698	0 - 13:00 hrs	0	45.325	0	1.87	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-193	0.811	298.702	Below Link Crown	3.626	0 - 12:15 hrs	0	21.889	0	1.071	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-194	1.145	302.507	Below Link Crown	2.47	0 - 12:15 hrs	0	22.325	0	1.073	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-195	6.986	291.583	Below Link Crown	2.717	0 - 12:26 hrs	254.431	492.819	11.229	50.381	0.037	0	0	0	0	0	0	0 - 00:00 hrs
0203-196	4.343	299.462	Below Maximum Depth	0.518	0 - 12:25 hrs	0	146.141	0	8.932	0.002	0.451	0.775	0.517	0	0	0	0 - 00:00 hrs
0203-197	2.343	299.725	Below Link Crown	3.075	0 - 12:25 hrs	0	94.327	0	7.305	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-198	3.899	310.504	Surcharged	-0.804	0 - 12:22 hrs	0	75.676	0	4.674	0.002	1.596	0.824	0	0.165	0.797	33.224	0 - 12:15 hrs
0203-199	2.593	303.369	Below Link Crown	4.331	0 - 12:15 hrs	0	92.544	0	7.314	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-200	2.738	303.418	Below Link Crown	4.182	0 - 12:15 hrs	0	20.863	0	0.695	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-201	4.454	312.352	Below Link Crown	9.648	0 - 17:07 hrs	0	20.355	0	3.745	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-202	4.975	310.475	Below Link Crown	9.125	0 - 12:15 hrs	0	20.376	0	3.742	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-203	4.346	310.572	Below Link Crown	0.828	0 - 12:15 hrs	0	41.893	0	3.908	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-204	4.965	310.456	Below Link Crown	0.444	0 - 12:15 hrs	103.145	155.446	4.772	12.42	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-205	5.104	310.204	Below Maximum Depth	0.476	0 - 12:15 hrs	0	155.032	0	12.418	0.007	0.295	0.335	0.476	0	0	0	0 - 00:00 hrs
0203-206	3.775	307.445	Below Link Crown	2.054	0 - 17:08 hrs	0	148.316	0	12.389	0.065	0	0	0	0	0	0	0 - 00:00 hrs
0203-207	8.232	307.424	Below Link Crown	0.418	0 - 17:10 hrs	0	145.748	0	12.325	0.391	0	0	0	0	0	0	0 - 00:00 hrs
0203-208	2.273	299.877	Surcharged	-0.377	0 - 12:22 hrs	0	24.627	0	9.006	0.01	3.332	0.496	0	0.009	1.35	2.137	0 - 12:15 hrs
0203-209	9.145	307.423	Surcharged	-0.423	0 - 17:14 hrs	0	139.489	0	12.907	0.227	21.935	0.495	0	2.511	10.892	52.353	0 - 13:30 hrs
0203-210	7.624	307.424	Surcharged	-1.924	0 - 17:15 hrs	0	131.731	0	3.912	0.017	23.862	2.437	0	3.291	11.909	131.731	0 - 12:11 hrs
0203-211	7.472	307.424	Surcharged	-1.524	0 - 17:16 hrs	0	32.911	0	1.089	0.009	23.983	3.536	0	0.758	11.802	27.144	0 - 12:22 hrs
0203-212	2.778	299.228	Below Maximum Depth	4.852	0 - 12:19 hrs	0	24.627	0	8.999	0.018	23.82	1.001	4.852	0	0	0	0 - 00:00 hrs
0203-213	2.937	298.758	Below Link Crown	3.067	0 - 12:18 hrs	0	47.179	0	9.789	0.022	0	0	0	0	0	0	0 - 00:00 hrs
0203-214	2.9	298.8	Below Link Crown	3.147	0 - 12:18 hrs	0	27.787	0	0.817	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-215	0.981	299.578	Below Link Crown	5.122	0 - 12:15 hrs	0	27.804	0	0.817	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-216	1.506	307.206	Below Link Crown	1.561	0 - 12:15 hrs	30.266	30.266	0.817	0.817	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-217	3.17	298.51	Below Link Crown	2.779	0 - 12:18 hrs	0	46.257	0	9.767	0.011	0	0	0	0	0	0	0 - 00:00 hrs
0203-218	5.918	259.848	Below Link Crown	9.947	0 - 13:34 hrs	0	340.41	0	54.328	0.012	0	0	0	0	0	0	0 - 00:00 hrs
0203-219	6.042	259.972	Below Link Crown	9.7	0 - 13:33 hrs	0	100.747	0	10.835	0.036	0	0	0	0	0	0	0 - 00:00 hrs
0203-220	3.298	260.179	Below Link Crown	4.659	0 - 13:22 hrs	0	100.963	0	10.825	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-221	7.087	290.087	Below Maximum Depth	2.533	0 - 12:15 hrs	0	273.019	0	32.691	0.003	0.827	0.887	2.533	0	0	0	0 - 00:00 hrs
0203-222	3.413	287.333	Below Maximum Depth	3.647	0 - 12:21 hrs	0	17.643	0	2.625	0	5.984	1.413	3.647	0	0	0	0 - 00:00 hrs
0203-223	8.892	270.092	Surcharged	-0.962	0 - 12:48 hrs	0	268.519	0	39.763	0.009	4.269	2.892	0	0.011	1.895	2.844	0 - 12:07 hrs
0203-224	7.283	268.363	Surcharged	-0.903	0 - 12:56 hrs	139.03	139.03	3.849	3.85	0	7.051	4.283	0	1.03	3.436	115.519	0 - 12:15 hrs
0203-225	3.307	309.967	Below Maximum Depth	4.763	0 - 12:15 hrs	22.571	22.571	1.072	1.072	0	0.219	0.807	4.763	0	0	0	0 - 00:00 hrs
0203-226	14.694	318.714	Surcharged	-0.684	0 - 12:19 hrs	136.541	136.541	7.306	7.308	0	8.541	11.194	0	0.266	0.865	59.565	0 - 12:15 hrs
0203-227	11.265	314.885	Surcharged	-0.635	0 - 12:33 hrs	0	77.388	0	7.25	0.001	8.517	7.765	0	0.028	0.907	3.606	0 - 12:15 hrs
0203-228	3.467	311.467	Below Link Crown	5.803	0 - 13:21 hrs	0	15.524	0	0.682	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-229	3.567	330.157	Below Maximum Depth	6.653	0 - 14:00 hrs	0	20.355	0	3.751	0	10.378	1.317	6.653	0	0	0	0 - 00:00 hrs
0203-230	2.912	327.412	Below Maximum Depth	2.738	0 - 14:00 hrs	0	20.355	0	3.748	0	10.356	0.412	2.738	0	0	0	0 - 00:00 hrs
0203-231	1.577	322.957	Below Link Crown	4.883	0 - 14:02 hrs	0	20.355	0	3.745	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-232	1.415	318.275	Below Link Crown	6.855	0 - 14:03 hrs	0	20.355	0	3.741	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-233	1.215	315.715	Below Link Crown	7.576	0 - 14:03 hrs	0	20.355	0	3.743	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-234	3.961	319.711	Below Link Crown	1.629	0 - 13:26 hrs	0	36.844	0	5.542	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-235	3.423	318.673	Below Link Crown	2.387	0 - 13:26 hrs	0	36.844	0	5.539	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-236	1.459	316.459	Below Link Crown	2.901	0 - 13:23 hrs	0	36.844	0	5.539	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-237	2.429	313.429	Below Link Crown	4.581	0 - 13:40 hrs	0	36.844	0	5.539	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-238	7.825	309.825	Below Maximum Depth	6.595	0 - 12:15 hrs	42.09	103.222	1.654	11.124	0.001	3.234	2.825	6.595	0	0	0	0 - 00:00 hrs
0203-239	4.635	298.135	Below Link Crown	6.555	0 - 12:18 hrs	0	146.633	0	20.86	0.011	0	0	0	0	0	0	0 - 00:00 hrs
0203-240	9.441	276.891	Surcharged	-0.031	0 - 13:22 hrs	0	45.375	0	4.616	0.014	3.099	5.441	0	0.005	0.03	27.117	0 - 13:23 hrs
0203-241	9.986	275.986	Below Maximum Depth	1.304	0 - 12:18 hrs	0	39.741	0	1.456	0	2.092	6.956	1.304	0	0	0	0 - 00:00 hrs
0203-242	8.449	265.799	Surcharged	-0.189	0 - 13:12 hrs	0	110.609	0	10.779	0.013	5.272	4.115	0	0.266	1.653	32.994	0 - 13:36 hrs
0203-243	9.351	266.321	Surcharged	-0.001	0 - 13:36 hrs	0	101.013	0	10.841	0.008	5.212	5.017	0	0.004	0.017	32.615	0 - 13:36 hrs
0203-244	6.656	289.777	Surcharged	-0.919	0 - 16:16 hrs	0	175.737	0	32.96	0.001	20.054	0.919	0	8.407	10.025	84.341	0 - 11:56 hrs
0203-245	4.251	297.251	Below Link Crown	6.219	0 - 12:18 hrs	0	146.566	0	20.849	0.014	0	0	0	0	0	0	0 - 00:00 hrs
0203-246	4.944	290.597	Below Link Crown	2.503	0 - 12:25 hrs	0	159.005	0	16.797	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-247	3.438	297.194	Below Link Crown	12.562	0 - 17:45 hrs	0	112.664	0	46.336	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-248	4.683	284.145	Below Maximum Depth	1.445	0 - 15:12 hrs	0	34.739	0	13.308	0.03	23.877	0.513	1.445	0	0	0	0 - 00:00 hrs
0203-249	1.429	304.029	Below Link Crown	2.171	0 - 12:15 hrs	56.716	56.716	1.633	1.633	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-250	4.903	285.653	Surcharged	-0.853	0 - 14:37 hrs	0	80.856	0	15.055	0.043	13.364	0.863	0	0.215	6.603	6.018	0 - 12:02 hrs
0203-251	4.62	284.598	Below Link Crown	2.032	0 - 15:18 hrs	0	34.729	0	13.381	0.02	0	0	0	0	0	0	0 - 00:00 hrs
0203-252	2.346	294.836	Below Link Crown	4.164	0 - 12:17 hrs	0	93.231	0	9.631	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-253	5.903	276.673	Below Maximum Depth	2.457	0 - 12:18 hrs	36.933	44.441	1.014	1.997	0.003	0.659	0.762	2.457	0	0	0	0 - 00:00 hrs
0203-254	4.857	269.244	Below Link Crown	6.576	0 - 12:18 hrs	0	149.836	0	14.231	0.017	0	0	0	0	0	0	0 - 00:00 hrs
0203-255	2.838	278.786	Below Link Crown	7.112	0 - 12:33 hrs	0	40.278	0	14.246	0.013	0	0	0	0	0	0	0 - 00:00 hrs

Table B-5a. Existing System Analysis - Nodes
50-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-256	4.422	302.032	Below Maximum Depth	4.728	0 - 12:15 hrs	0	47.075	0	7.985	0.001	8.052	0.422	4.728	0	0	0	0 - 00:00 hrs
0203-257	2.429	280.659	Below Link Crown	2.016	0 - 13:45 hrs	0	29.826	0	5.45	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-258	3.543	281.773	Below Maximum Depth	4.247	0 - 13:42 hrs	0	29.826	0	5.453	0.003	8.897	0.543	4.247	0	0	0	0 - 00:00 hrs
0203-259	4.933	284.413	Below Maximum Depth	1.097	0 - 11:59 hrs	0	29.837	0	5.45	0.002	8.774	1.933	1.097	0	0	0	0 - 00:00 hrs
0203-260	4.704	285.254	Below Maximum Depth	1.576	0 - 11:59 hrs	0	31.474	0	5.449	0.003	8.766	1.704	1.576	0	0	0	0 - 00:00 hrs
0203-261	4.656	286.156	Below Maximum Depth	1.624	0 - 11:59 hrs	0	31.638	0	5.45	0.002	8.811	1.656	1.624	0	0	0	0 - 00:00 hrs
0203-262	6.601	289.821	Surcharged	-0.811	0 - 13:42 hrs	0	31.721	0	5.452	0.003	8.873	3.601	0	0.067	4.384	2.688	0 - 12:26 hrs
0203-263	7.026	291.416	Surcharged	-0.796	0 - 13:22 hrs	113.407	113.407	5.456	5.459	0	8.848	4.026	0	1.114	4.398	82.551	0 - 12:15 hrs
0203-264	3.335	290.335	Surcharged	-0.735	0 - 12:22 hrs	37.281	37.281	1.028	1.028	0	1.611	1.335	0	0.098	0.804	19.479	0 - 12:15 hrs
0203-265	3.411	284.631	Below Maximum Depth	1.769	0 - 12:25 hrs	0	18.276	0	1.022	0.001	1.597	0.411	1.769	0	0	0	0 - 00:00 hrs
0203-266	3.27	284.17	Below Maximum Depth	1.75	0 - 12:29 hrs	0	18.033	0	1.024	0.004	1.571	0.21	1.75	0	0	0	0 - 00:00 hrs
0203-267	3.079	283.859	Below Maximum Depth	2.091	0 - 12:33 hrs	0	18.032	0	1.021	0.006	1.276	0.079	2.091	0	0	0	0 - 00:00 hrs
0203-268	7.991	281.005	Below Link Crown	4.485	0 - 12:41 hrs	0	973.193	0	212.253	0.322	0	0	0	0	0	0	0 - 00:00 hrs
0203-269	5.949	286.113	Below Link Crown	1.387	0 - 14:00 hrs	0	35.27	0	5.8	0.011	0	0	0	0	0	0	0 - 00:00 hrs
0203-270	8.185	290.705	Below Link Crown	3.995	0 - 13:04 hrs	0	120.189	0	13.357	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-271	6.22	308.81	Surcharged	-0.66	0 - 12:27 hrs	170.177	170.177	6.022	6.025	0	1.847	3.33	0	0.395	0.913	79.091	0 - 12:15 hrs
0203-272	3.586	294.716	Below Link Crown	5.304	0 - 12:07 hrs	0	69.989	0	10.81	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-273	4.349	291.219	Below Link Crown	6.581	0 - 12:44 hrs	0	70.928	0	10.812	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-274	5.333	291.193	Below Maximum Depth	1.217	0 - 13:15 hrs	0	75.262	0	10.944	0.006	7.306	1.313	1.217	0	0	0	0 - 00:00 hrs
0203-275	3.056	287.236	Below Link Crown	6.144	0 - 13:27 hrs	0	75.262	0	10.945	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-276	3.347	286.617	Below Link Crown	6.763	0 - 13:27 hrs	0	75.26	0	10.944	0.01	0	0	0	0	0	0	0 - 00:00 hrs
0203-277	1.768	284.688	Below Link Crown	2.512	0 - 13:27 hrs	0	75.257	0	10.936	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-278	5.311	291.311	Below Maximum Depth	1.169	0 - 13:15 hrs	0	30.461	0	2.471	0.003	6.831	1.311	1.169	0	0	0	0 - 00:00 hrs
0203-279	4.335	291.895	Below Maximum Depth	0.985	0 - 12:41 hrs	0	30.461	0	2.47	0	2.989	0.835	0.985	0	0	0	0 - 00:00 hrs
0203-280	4.38	292.52	Below Maximum Depth	0.33	0 - 12:34 hrs	0	30.462	0	2.469	0.001	2.956	0.88	0.33	0	0	0	0 - 00:00 hrs
0203-281	4.773	293.813	Below Maximum Depth	0.877	0 - 12:30 hrs	0	30.462	0	2.468	-0.001	2.964	1.523	0.877	0	0	0	0 - 00:00 hrs
0203-282	5.319	294.969	Surcharged	-0.799	0 - 12:30 hrs	83.464	83.464	2.475	2.476	0	2.988	2.319	0	0.339	1.464	53.82	0 - 12:15 hrs
0203-283	5.865	293.445	Surcharged	-0.995	0 - 14:40 hrs	0	67.458	0	8.512	0.001	7.464	2.365	0	1.041	3.723	24.175	0 - 12:22 hrs
0203-284	10.395	336.105	Surcharged	-0.685	0 - 12:32 hrs	187.969	187.969	7.526	7.53	0	8.209	6.895	0	0.532	1.117	91.486	0 - 12:15 hrs
0203-285	3.167	307.667	Below Maximum Depth	2.333	0 - 12:47 hrs	0	20.809	0	7.514	0	2.085	0.167	2.333	0	0	0	0 - 00:00 hrs
0203-286	2.114	308.114	Below Link Crown	2.726	0 - 12:48 hrs	0	20.725	0	7.515	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-287	1.681	309.381	Below Link Crown	1.709	0 - 16:01 hrs	0	20.725	0	7.515	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-288	2.261	310.601	Below Link Crown	1.849	0 - 16:01 hrs	0	20.725	0	7.518	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-289	2.441	311.441	Below Link Crown	3.099	0 - 16:00 hrs	0	20.725	0	7.52	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-290	2.724	314.724	Below Maximum Depth	5.806	0 - 16:00 hrs	0	20.725	0	7.521	0.001	22.206	0.224	5.806	0	0	0	0 - 00:00 hrs
0203-291	3.54	316.84	Below Maximum Depth	2.58	0 - 16:00 hrs	0	20.726	0	7.524	0	22.469	1.04	2.58	0	0	0	0 - 00:00 hrs
0203-292	3.431	321.241	Below Maximum Depth	4.639	0 - 15:59 hrs	0	20.726	0	7.529	0.001	22.235	1.431	4.639	0	0	0	0 - 00:00 hrs
0203-293	4.638	324.378	Below Maximum Depth	0.152	0 - 15:59 hrs	0	20.726	0	7.531	0	22.248	1.908	0.152	0	0	0	0 - 00:00 hrs
0203-294	3.153	326.383	Below Link Crown	0.907	0 - 15:56 hrs	0	45.542	0	7.523	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-295	3.639	327.639	Below Maximum Depth	6.401	0 - 13:22 hrs	0	45.541	0	7.522	0.001	4.846	0.139	6.401	0	0	0	0 - 00:00 hrs
0203-296	4.774	328.824	Below Maximum Depth	4.516	0 - 13:11 hrs	0	45.541	0	7.522	0.001	8.201	1.274	4.516	0	0	0	0 - 00:00 hrs
0203-297	4.312	330.022	Surcharged	-0.812	0 - 13:11 hrs	0	98.027	0	7.546	0	8.103	0.812	0	1.631	4.05	55.119	0 - 12:22 hrs
0203-298	6.69	316.22	Surcharged	0	0 - 11:51 hrs	0	116.674	0	20.023	-0.006	8.469	2.19	0	0	0	14.674	0 - 11:51 hrs
0203-299	6.536	320.376	Surcharged	-0.806	0 - 12:38 hrs	213.265	213.265	5.719	5.722	0	5.709	3.536	0	1.308	2.846	166.369	0 - 12:15 hrs
0203-300	6.046	321.026	Surcharged	-0.816	0 - 13:10 hrs	356.101	356.101	10.778	10.784	0	11.3	3.046	0	3.067	5.473	303.53	0 - 12:15 hrs
0203-301	9.527	309.527	Surcharged	-1.067	0 - 17:16 hrs	0	131.022	0	30.845	0.015	17.3	4.527	0	0.996	7.043	51.973	0 - 18:53 hrs
0203-302	10.903	306.093	Surcharged	-0.973	0 - 16:13 hrs	328.547	470.106	9.942	46.016	0.051	19.454	5.823	0	4.238	8.636	313.428	0 - 12:15 hrs
0203-303	6.642	307.392	Surcharged	-0.822	0 - 13:02 hrs	188.952	188.952	5.27	5.273	0	17.374	3.642	0	1.496	5.71	159.788	0 - 12:15 hrs
0203-304	1.464	312.814	Below Link Crown	1.726	0 - 16:00 hrs	0	20.725	0	7.52	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-305	3.397	315.727	Surcharged	-0.167	0 - 16:00 hrs	0	20.726	0	7.521	0.001	22.663	0.897	0	0	10.579	0.003	0 - 13:48 hrs
0203-306	4.955	325.285	Surcharged	-0.845	0 - 15:59 hrs	0	45.51	0	7.528	0.001	22.197	1.455	0	2.507	11.089	25.275	0 - 13:11 hrs
0203-307	4.064	318.264	Below Maximum Depth	1.966	0 - 13:33 hrs	0	52.898	0	10.785	0	10.264	0.564	1.966	0	0	0	0 - 00:00 hrs
0203-308	4.004	316.504	Below Maximum Depth	4.346	0 - 14:03 hrs	0	52.895	0	10.783	0.002	10.162	0.504	4.346	0	0	0	0 - 00:00 hrs
0203-309	4.001	314.671	Below Maximum Depth	3.179	0 - 15:00 hrs	0	52.888	0	10.775	0	9.83	0.401	3.179	0	0	0	0 - 00:00 hrs
0203-310	3.901	313.041	Below Maximum Depth	4.619	0 - 15:41 hrs	0	52.879	0	10.77	0.006	8.979	0.331	4.619	0	0	0	0 - 00:00 hrs
0203-311	7.35	312.91	Surcharged	0	0 - 11:52 hrs	0	53.691	0	10.76	-0.001	10.976	3.35	0	0	0.001	10.396	0 - 11:52 hrs
0203-312	8.542	310.542	Surcharged	-0.942	0 - 16:06 hrs	0	100.907	0	19.966	0.009	14.42	3.542	0	2.019	7.028	33.99	0 - 18:50 hrs
0203-313	7.706	311.956	Surcharged	-0.146	0 - 14:44 hrs	0	100.907	0	20.054	0.002	13.997	2.706	0	0.021	1.11	8.922	0 - 11:49 hrs
0203-314	7.917	313.407	Surcharged	-0.307	0 - 14:41 hrs	0	101.599	0	20.042	0.005	11.945	2.917	0	0.065	2.033	15.759	0 - 11:49 hrs
0203-315	6.269	320.899	Below Maximum Depth	0.151	0 - 11:48 hrs	0	74.417	0	14.328	-0.004	11.723	2.629	0.151	0	0	0	0 - 00:00 hrs
0203-316	7.239	323.289	Surcharged	-0.819	0 - 13:19 hrs	454.267	454.267	14.311	14.319	0	11.825	3.739	0	4.254	5.858	391.066	0 - 12:15 hrs
0203-317	9.12	307.24	Surcharged	-0.71	0 - 17:22 hrs	0	123.93	0	30.68	0.008	17.43	4.04	0	1.627	7.232	61.596	0 - 20:27 hrs
0203-318	4.239	283.378	Below Maximum Depth	2.212	0 - 12:51 hrs	0	40.323	0	14.292	0.012	25.014	1.239	2.212	0	0	0	0 - 00:00 hrs
0203-319	6.063	273.763	Below Maximum Depth	9.717	0 - 12:11 hrs	0	72.517	0	6.728	0.006	0.584	2.063	9.717	0	0	0	0 - 00:00 hrs
0203-320	1.707	279.699	Below Link Crown	4.542	0 - 13:48 hrs	0	29.826	0	5.431	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-321	2.276	280.568	Below Link Crown	6.034	0 - 13:45 hrs	0	29.826	0	5.447	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-322	4.689	274.824	Below Maximum Depth	1.176	0 - 13:25 hrs	0	26.948	0	6.488	0.01	14.442	0.689	1.176	0	0	0	0 - 00:00 hrs
0203-323	5.481	274.59	Below Link Crown	28.03	0 - 13:25 hrs	0	26.948	0	6.478	0.049	0	0	0	0	0	0	0 - 00:00 hrs
0203-324	1.478	274.393	Below Link Crown	28.227	0 - 13:26 hrs	0	26.948	0	6.445	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-325	7.074	293.218	Below Link Crown	7.542	0 - 12:26 hrs	0	232.642	0	30.6	0.228	0	0	0	0	0	0	0 - 00:00 hrs
0203-326	2.605	273.553	Below Link Crown	4.247	0 - 12:15 hrs	182.909	182.909	4.987	4.99	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-327	3.682	270.782	Below Link Crown	6.318	0 - 12:15 hrs	0	181.629	0	4.99	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-328	6.401	269.605	Below Link Crown	3.695	0 - 12:18 hrs	0	210.366	0	13.467	0.011	0	0	0	0	0	0	0 - 00:00 hrs
0203-329	6.983	292.409	Below Link Crown	3.951	0 - 12:26 hrs	0	221.899	0	30.374	0.145	0	0	0	0	0	0	0 - 00:00 hrs
0203-330	3.749	308.611	Below Link Crown	0.089	0 - 12:18 hrs	0	78.926	0	6.629	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-331	7.494	301.494	Surcharged	-0.144	0 - 17:57 hrs	0	150.683	0	45.848	0.041	18.179	1.494	0	0.005	6.774	0.239	0 - 20:31 hrs
0203-332	5.539	299.039	Below Link Crown	0.561	0 - 12:56 hrs	0	150.677	0	45.814	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-333	7.5	302.5	Surcharged	-1.22	0 - 17:39 hrs	0	158.323	0	45.944	0.033	18.118	1.5	0	0.809	9.056	32.273	0 - 12:03 hrs
0203-334	6.91	306.55	Surcharged	-0.17	0 - 13:33 hrs	0	30.648	0	5.275	0	17.395	3.38	0	0.004	3.817	7.642	0 - 17:30 hrs
0203-335	3.992	268.379	Below Link Crown	10.721	0 - 12:52 hrs	0	149.782	0	14.214	-0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-336	3.156	289.366	Below Maximum Depth	5.194	0 - 12:22 hrs	0	17.643	0	2.627	0	7.347	1.156	5.194	0	0	0	0 - 00:00 hrs
0203-337	2.231	303.121	Below Link Crown	4.879	0 - 12:26 hrs	0	62.026	0	17.966	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-338	2.534	296.164	Below Link Crown	2.113	0 - 12:18 hrs	0	90.125	0	9.83	0.013	0	0	0	0	0	0	0 - 00:00 hrs
0203-339	1.311	296.361	Below Link Crown	7.739	0 - 12:15 hrs	89.844	163.42	4.698	15.021	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-340	7.025	317.155	Surcharged	-1.005	0 - 14:41 hrs	0	69.509	0	14.319	0	11.776	3.025	0	0.517	4.232	11.95	0 - 11:51 hrs

Table B-5a. Existing System Analysis - Nodes
50-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-341	3.304	260.326	Below Link Crown	8.174	0 - 17:44 hrs	0	255.033	0	78.801	0.014	0	0	0	0	0	0	0 - 00:00 hrs
0203-342	7.238	272.966	Surcharged	-2.366	0 - 12:15 hrs	0	100.532	0	10.159	0.004	6.743	2.377	0	0.08	3.329	48.557	0 - 12:15 hrs
0203-343	13.865	315.151	Surcharged	-0.241	0 - 12:14 hrs	221.121	221.121	8.553	8.68	0	12.463	7.865	0	0.23	0.976	39.393	0 - 12:10 hrs
0203-344	9.819	308.93	Surcharged	-0.73	0 - 14:33 hrs	0	241.481	0	7.684	0.005	17.08	3.674	0	2.959	8.485	213.663	0 - 12:15 hrs
0203-345	2.553	256.59	Below Link Crown	8.239	0 - 16:08 hrs	0	299.05	0	88.892	0.039	0	0	0	0	0	0	0 - 00:00 hrs
0203-346	1.282	258.235	Below Link Crown	6.564	0 - 12:36 hrs	0	47.494	0	10.112	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-347	6.204	264.9	Below Link Crown	1.061	0 - 12:34 hrs	0	47.855	0	10.119	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-348	4.465	264.979	Below Link Crown	2.821	0 - 12:34 hrs	0	49.624	0	10.124	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-349	7.642	269.037	Below Maximum Depth	0	0 - 12:15 hrs	0	55.148	0	10.141	0.009	1.669	0.451	0	0.012	0.316	5.526	0 - 12:15 hrs
0203-350	6.495	269.11	Below Link Crown	0.696	0 - 12:15 hrs	0	53.293	0	10.145	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-351	4.734	280.214	Below Link Crown	2.546	0 - 12:18 hrs	0	76.401	0	2.687	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-352	6.166	288.299	Below Link Crown	0.779	0 - 12:15 hrs	0	273.009	0	32.692	0.011	0	0	0	0	0	0	0 - 00:00 hrs
0203-353	6.173	282.738	Below Link Crown	0.857	0 - 12:18 hrs	0	283.285	0	35.247	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-354	3.204	278.921	Below Link Crown	3.826	0 - 12:19 hrs	0	283.285	0	35.236	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-355	6.739	275.258	Below Link Crown	0.215	0 - 12:18 hrs	0	283.621	0	35.214	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-356	6.425	274.179	Below Link Crown	2.121	0 - 12:18 hrs	123.645	381.467	3.414	38.624	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-357	9.632	271.046	Surcharged	-0.916	0 - 12:48 hrs	0	359.199	0	39.757	0.011	3.787	1.168	0	0.975	1.859	103.051	0 - 12:18 hrs
0203-358	8.109	269.141	Surcharged	-0.741	0 - 12:49 hrs	0	268.431	0	39.755	0.012	3.804	0.788	0	0.038	1.892	7.297	0 - 12:08 hrs
0203-359	6.457	266.207	Below Link Crown	0.893	0 - 13:00 hrs	0	291.038	0	43.602	0.012	0	0	0	0	0	0	0 - 00:00 hrs
0203-360	2.285	253.092	Below Link Crown	14.408	0 - 13:34 hrs	0	340.397	0	54.299	0.014	0	0	0	0	0	0	0 - 00:00 hrs
0203-361	3.931	260.79	Below Link Crown	5.84	0 - 13:14 hrs	0	102.761	0	10.852	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-362	3.767	279.087	Below Link Crown	4.176	0 - 17:21 hrs	0	263.957	0	68.527	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-363	6.696	287.156	Below Link Crown	0.249	0 - 12:17 hrs	0	272.118	0	32.689	0.011	0	0	0	0	0	0	0 - 00:00 hrs
0203-364	3.122	277.089	Below Link Crown	4.948	0 - 17:22 hrs	0	263.956	0	68.458	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-365	9.137	295.537	Below Maximum Depth	0.063	0 - 14:14 hrs	0	178.894	0	32.934	0	8.909	3.637	0.063	0	0	0	0 - 00:00 hrs
0203-366	12.621	285.905	Surcharged	-0.705	0 - 12:52 hrs	0	308.239	0	34.398	0.006	7.441	0.72	0	2.827	3.718	308.237	0 - 12:15 hrs
0203-367	16.111	288.56	Surcharged	-5.548	0 - 12:15 hrs	505.795	557.692	14.989	64.891	0.023	8.433	6.896	0	0.229	3.983	42.902	0 - 12:02 hrs
0203-368	10.66	277.321	Surcharged	-1.004	0 - 15:55 hrs	0	312.816	0	63.382	0.007	18.612	2.739	0	5.459	9.03	122.023	0 - 12:15 hrs
0203-369	6.758	284.419	Below Maximum Depth	0.9	0 - 16:25 hrs	0	122.876	0	18.57	0.003	15.158	1.41	0.9	0	0	0	0 - 00:00 hrs
0203-370	8.518	275.415	Surcharged	-0.294	0 - 16:47 hrs	0	206.872	0	63.301	0	13.96	0.297	0	0.789	6.971	13.203	0 - 14:59 hrs
0203-371	0	270.605	Below Link Invert	4.595	0 - 00:00 hrs	0	0	0	0	0	48	0	4.595	0	0	0	0 - 00:00 hrs
0203-372	8.716	273.01	Surcharged	0	0 - 14:59 hrs	0	218.569	0	67.165	0.019	11.818	0.153	0	0.233	1.326	10.757	0 - 16:17 hrs
0203-373	15.069	272.633	Surcharged	-2.113	0 - 16:19 hrs	0	218.14	0	66.927	0.005	19.583	2.113	0	0.051	9.791	13.32	0 - 11:52 hrs
0203-374	13.338	270.83	Surcharged	-0.83	0 - 18:20 hrs	0	215.068	0	66.816	0.035	21.319	5.388	0	1.558	9.448	20.445	0 - 13:07 hrs
0203-375	6.271	265.637	Below Link Crown	5.063	0 - 18:35 hrs	0	202.68	0	66.859	0.027	0	0	0	0	0	0	0 - 00:00 hrs
0203-376	5.561	264.944	Below Link Crown	6.471	0 - 18:45 hrs	0	202.679	0	66.828	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-377	14.22	271.716	Surcharged	-1.716	0 - 17:27 hrs	0	217.843	0	66.915	0.016	24.102	7.22	0	0.414	9.813	26.093	0 - 11:56 hrs
0203-378	10.975	271.875	Surcharged	-0.662	0 - 12:49 hrs	231.574	231.574	7.4	7.404	0	5.414	7.975	0	1.54	2.599	173.812	0 - 12:15 hrs
0203-379	10.964	269.436	Below Maximum Depth	1.777	0 - 13:45 hrs	0	71.323	0	7.383	0.001	5.401	6.964	1.777	0	0	0	0 - 00:00 hrs
0203-380	6.142	293.142	Below Link Crown	4.158	0 - 12:19 hrs	0	167.513	0	16.825	0.017	0	0	0	0	0	0	0 - 00:00 hrs
0203-381	3.141	272.629	Below Link Crown	0.971	0 - 12:15 hrs	242.311	242.311	8.462	8.466	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-382	1.714	299.714	Below Link Crown	8.486	0 - 18:25 hrs	0	29.548	0	8.09	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-383	6.071	317.141	Below Maximum Depth	0.559	0 - 17:27 hrs	0	116.957	0	48.245	0	25.338	1.161	0.559	0	0	0	0 - 00:00 hrs
0203-384	6.001	315.001	Below Maximum Depth	1.369	0 - 17:28 hrs	0	112.665	0	47.606	0.753	25.485	1.091	1.369	0	0	0	0 - 00:00 hrs
0203-385	4.952	310.55	Below Maximum Depth	0	0 - 12:02 hrs	0	5.259	0	0.362	0	3.696	3.452	0	0.093	1.608	2.97	0 - 12:33 hrs
0203-386	3.892	310.49	Below Maximum Depth	0	0 - 12:00 hrs	10.427	12.716	0.321	0.419	0	3.529	2.642	0	0.249	1.63	12.715	0 - 12:15 hrs
0203-387	4.619	310.39	Surcharged	0	0 - 12:08 hrs	0	8.435	0	0.36	0	3.477	3.119	0	0.005	0.172	2.198	0 - 12:15 hrs
0203-388	3.839	310.61	Below Maximum Depth	0	0 - 12:00 hrs	18.677	18.677	0.453	0.453	0	3.39	2.589	0	0.09	0.438	14.38	0 - 12:15 hrs
0203-389	9.907	272.673	Below Maximum Depth	0.087	0 - 12:23 hrs	0	14.454	0	1.138	0.002	22.803	8.157	0.087	0	0	0	0 - 00:00 hrs
0203-390	9.71	272.91	Surcharged	0	0 - 11:52 hrs	57.02	57.02	1.656	1.657	0	23.278	8.46	0	0.516	1.365	50.919	0 - 12:15 hrs
0203-391	6.215	258.7	Below Link Crown	4.608	0 - 12:23 hrs	0	299.26	0	17.016	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-392	4.686	256.969	Below Link Crown	13.131	0 - 12:25 hrs	0	298.74	0	16.984	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-393	2.659	313.537	Below Link Crown	11.463	0 - 14:03 hrs	0	20.355	0	3.745	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-394	5.701	309.938	Surcharged	-0.028	0 - 12:17 hrs	0	155.017	0	12.409	0.004	0.226	0.179	0	0.005	0.077	7.109	0 - 12:15 hrs
0203-395	3.841	307.971	Below Link Crown	3.235	0 - 12:17 hrs	0	148.336	0	12.396	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-396	3.227	307.424	Below Maximum Depth	2.676	0 - 17:16 hrs	32.892	32.892	0.794	0.795	0	23.823	1.42	2.676	0	0	0	0 - 00:00 hrs
0203-397	3.766	298.399	Below Link Crown	2.89	0 - 12:18 hrs	0	46.242	0	9.756	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-398	3.625	298.258	Below Link Crown	2.737	0 - 12:18 hrs	0	46.342	0	9.747	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-399	3.352	311.995	Below Maximum Depth	0.852	0 - 12:15 hrs	38.449	38.449	1.958	1.958	0	0.025	0.352	0.852	0	0	0	0 - 00:00 hrs
0203-400	3.822	309.23	Surcharged	0	0 - 12:15 hrs	0	38.148	0	1.958	0.001	0.019	0	0	0	0.004	0.081	0 - 12:15 hrs
0203-401	7.186	299.4	Below Maximum Depth	0	0 - 12:15 hrs	0	144.322	0	8.957	0.009	1.33	3.186	0	0	0.001	25.006	0 - 12:15 hrs
0203-402	6.495	288.992	Surcharged	-1.992	0 - 14:10 hrs	0	457.878	0	50.321	0.05	13.885	1.998	0	4.15	6.942	207.142	0 - 12:15 hrs
0203-403	5.981	288.082	Below Maximum Depth	0.393	0 - 14:37 hrs	0	231.182	0	50.32	0.013	13.695	1.567	0.393	0	0	0	0 - 00:00 hrs
0203-404	5.592	287.693	Below Link Crown	1.307	0 - 14:42 hrs	0	231.18	0	50.307	0.012	0	0	0	0	0	0	0 - 00:00 hrs
0203-405	5.663	287.295	Below Link Crown	1.205	0 - 14:53 hrs	0	231.126	0	50.294	0.009	0	0	0	0	0	0	0 - 00:00 hrs
0203-406	5.536	286.943	Below Link Crown	0.957	0 - 15:11 hrs	0	231.043	0	50.278	0.014	0	0	0	0	0	0	0 - 00:00 hrs
0203-407	6.529	286.686	Surcharged	-0.166	0 - 15:33 hrs	0	230.93	0	50.255	0.025	7.555	0.166	0	0.052	3.774	2.259	0 - 13:55 hrs
0203-408	6.297	286.362	Surcharged	-0.219	0 - 16:10 hrs	0	229.912	0	50.225	0.013	9.527	0.219	0	0.464	4.762	13.506	0 - 14:10 hrs
0203-409	6.202	286.202	Surcharged	-0.102	0 - 16:24 hrs	0	224.071	0	50.237	0.038	7.594	0.124	0	0.372	3.66	9.867	0 - 14:38 hrs
0203-410	6.804	285.654	Below Link Crown	1.246	0 - 16:36 hrs	0	215.154	0	50.104	0.013	0	0	0	0	0	0	0 - 00:00 hrs
0203-411	5.01	312.618	Surcharged	-0.368	0 - 12:15 hrs	51.969	51.969	2.229	2.23	0	0.471	2.01	0	0.009	0.167	5.842	0 - 12:15 hrs
0203-412	4.496	310.307	Below Maximum Depth	2.393	0 - 12:15 hrs	0	46.387	0	2.216	0	0.5	1.496	2.393	0	0	0	0 - 00:00 hrs
0203-413	3.288	308.071	Below Maximum Depth	4.529	0 - 12:15 hrs	0	46.388	0	2.22	0	0.346	0.288	4.529	0	0	0	0 - 00:00 hrs
0203-414	2.238	304.442	Below Link Crown	1.848	0 - 12:17 hrs	0	46.389	0	2.233	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-415	6.532	310.137	Surcharged	-0.837	0 - 12:33 hrs	50.68	50.68	1.892	1.892	0	3.758	4.532	0	0.144	1.51	26.115	0 - 12:15 hrs
0203-416	1.452	304.207	Below Link Crown	3.493	0 - 12:34 hrs	0	25.358	0	1.885	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-417	5.891	290.461	Below Link Crown	1.548	0 - 12:25 hrs	0	155.51	0	16.795	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-418	5.28	288.644	Below Link Crown	3.187	0 - 12:26 hrs	0	154.74	0	16.794	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-419	6.562	296.486	Surcharged	-0.386	0 - 13:02 hrs	0	33.972	0	1.876	0.002	2.834	0.482	0	0.066	1.383	13.648	0 - 12:25 hrs
0203-420	0.81	288.531	Below Link Crown	5.78	0 - 12:27 hrs	0	20.56	0	1.867	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-421	1.511	301.653	Below Link Crown	4.347	0 - 12:15 hrs	0	24.512	0	0.798	-0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-422	2.635	308.385	Below Link Crown	0.815	0 - 12:15 hrs	0	22.568	0	1.073	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-423	2.189	307.595	Below Link Crown	5.005	0 - 12:15 hrs	0	22.426	0	1.073	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-424	3.715	286.344	Below Link Crown	4.056	0 - 12:33 hrs	0	168.761	0	18.628	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-425	3.771	286.11	Below Link Crown	7.39	0 - 12:33 hrs	0	167.448	0	18.625	0.007	0	0	0	0	0	0	0 - 00:00 hrs

Table B-5a. Existing System Analysis - Nodes
50-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-426	5.387	284.471	Below Maximum Depth	2.529	0 - 16:25 hrs	0	122.668	0	18.58	0.004	14.316	0.861	2.529	0	0	0	0 - 00:00 hrs
0203-427	5.44	284.369	Below Maximum Depth	2.531	0 - 16:55 hrs	0	122.936	0	18.567	0.004	14.129	0.907	2.531	0	0	0	0 - 00:00 hrs
0203-428	6.046	270.692	Below Link Crown	7.797	0 - 13:00 hrs	0	263.966	0	68.381	0.049	0	0	0	0	0	0	0 - 00:00 hrs
0203-429	5.578	270.045	Below Link Crown	6.57	0 - 13:00 hrs	0	289.33	0	74.019	0.052	0	0	0	0	0	0	0 - 00:00 hrs
0203-430	7.109	277.005	Surcharged	-0.555	0 - 12:53 hrs	0	37.227	0	4.619	0.013	5.9	4.109	0	0.128	1.452	14.718	0 - 12:23 hrs
0203-431	4.883	335.663	Surcharged	-0.723	0 - 13:59 hrs	69.879	69.879	3.746	3.747	0	10.414	2.883	0	0.548	5.137	49.982	0 - 12:15 hrs
0203-432	5.494	276.734	Below Maximum Depth	0.946	0 - 12:19 hrs	0	30.634	0	1.006	0.001	0.503	0.494	0.946	0	0	0	0 - 00:00 hrs
0203-433	5.748	276.678	Below Maximum Depth	2.192	0 - 12:18 hrs	0	30.671	0	1.059	0.003	0.648	0.748	2.192	0	0	0	0 - 00:00 hrs
0203-434	5.899	276.669	Below Maximum Depth	2.391	0 - 12:18 hrs	79.718	102.424	3.187	5.077	0.002	0.654	0.758	2.391	0	0	0	0 - 00:00 hrs
0203-435	3.218	274.248	Below Link Crown	5.272	0 - 12:30 hrs	0	102.457	0	5.076	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-436	0	269.45	Below Link Invert	3.53	0 - 00:00 hrs	0	0	0	0	0	48	0	3.53	0	0	0	0 - 00:00 hrs
0203-437	2.342	272.482	Below Link Crown	3.618	0 - 12:37 hrs	0	83.902	0	5.003	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-438	2.144	267.094	Below Link Crown	7.107	0 - 12:37 hrs	0	83.752	0	5	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-439	5.276	330.721	Surcharged	-0.803	0 - 12:59 hrs	290.482	290.482	9.291	9.296	0	7.54	2.138	0	2.178	3.761	229.242	0 - 12:15 hrs
0203-440	4.901	325.037	Surcharged	-0.879	0 - 15:37 hrs	0	62.718	0	9.269	-0.002	17.774	1.604	0	3.011	8.882	33.257	0 - 12:34 hrs
0203-441	5.081	323.881	Surcharged	-0.421	0 - 15:47 hrs	0	32.006	0	9.289	0.004	18.27	2.081	0	0.037	6.093	0.582	0 - 13:45 hrs
0203-442	3.573	322.218	Below Maximum Depth	0.182	0 - 15:47 hrs	0	31.566	0	9.287	0.003	17.766	0.573	0.182	0	0	0	0 - 00:00 hrs
0203-443	3.101	321.054	Below Link Crown	0.746	0 - 15:47 hrs	0	31.566	0	9.288	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-444	1.639	319.03	Below Link Crown	2.67	0 - 13:00 hrs	0	31.567	0	9.289	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-445	1.528	312.858	Below Link Crown	3.008	0 - 15:26 hrs	0	31.667	0	9.29	-0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-446	3.519	311.059	Below Maximum Depth	0.621	0 - 15:25 hrs	0	31.57	0	9.289	0.002	17.766	0.482	0.621	0	0	0	0 - 00:00 hrs
0203-447	2.379	309.701	Below Link Crown	2.54	0 - 14:32 hrs	0	31.571	0	9.286	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-448	4.828	308.639	Below Maximum Depth	3.111	0 - 14:32 hrs	0	72.868	0	15.405	0.002	6.392	0.828	3.111	0	0	0	0 - 00:00 hrs
0203-449	5.874	318.592	Surcharged	-0.792	0 - 12:41 hrs	221.94	221.94	6.131	6.134	0	5.349	2.874	0	1.331	2.617	168.775	0 - 12:15 hrs
0203-450	6.05	316.918	Below Maximum Depth	1.082	0 - 11:53 hrs	0	53.823	0	6.141	0.001	5.24	3.038	1.082	0	0	0	0 - 00:00 hrs
0203-451	5.811	309.742	Surcharged	-0.842	0 - 14:32 hrs	0	53.823	0	6.135	0.001	7.179	2.311	0	0.697	3.52	11.073	0 - 12:52 hrs
0203-452	4.675	306.945	Below Maximum Depth	4.307	0 - 14:32 hrs	0	72.868	0	15.41	0.003	5.157	0.532	4.307	0	0	0	0 - 00:00 hrs
0203-453	5.179	304.889	Below Maximum Depth	0.511	0 - 14:32 hrs	0	76.319	0	15.42	0	6.991	1.109	0.511	0	0	0	0 - 00:00 hrs
0203-454	7.428	302.623	Surcharged	-1.023	0 - 14:34 hrs	0	72.868	0	15.414	0.002	8.325	2.928	0	0.161	3.86	19.995	0 - 11:52 hrs
0203-455	7.902	301.472	Surcharged	-0.762	0 - 14:22 hrs	0	95	0	17.885	0.001	8.356	3.303	0	0.597	4.126	20.473	0 - 12:25 hrs
0203-456	3.969	303.102	Surcharged	-0.834	0 - 13:00 hrs	99.008	99.008	2.461	2.462	0	8.805	1.969	0	0.762	4.396	83.438	0 - 12:15 hrs
0203-457	8.305	299.95	Surcharged	-0.819	0 - 12:45 hrs	297.04	366.458	9.392	27.271	0.005	8.327	2.805	0	1.778	4.021	218.554	0 - 12:15 hrs
0203-458	10.535	297.044	Surcharged	-1.066	0 - 14:15 hrs	0	151.102	0	27.233	0.017	8.969	5.035	0	1.105	4.332	36.282	0 - 16:13 hrs
0203-459	7.565	299.295	Surcharged	-0.775	0 - 12:37 hrs	198.921	198.921	5.685	5.687	0	5.042	4.065	0	1.031	2.304	143.06	0 - 12:15 hrs
0203-460	7.963	298.097	Below Maximum Depth	0	0 - 14:15 hrs	0	56.814	0	5.709	0.002	7.365	3.536	0	0	0.001	16.435	0 - 14:15 hrs
0203-461	9.414	292.59	Surcharged	-0.64	0 - 14:15 hrs	0	178.894	0	32.947	0.007	20.123	3.677	0	0.194	4.286	4.777	0 - 12:32 hrs
0203-462	6.118	288.69	Below Maximum Depth	0.98	0 - 16:15 hrs	0	103.834	0	32.9	0.01	11.525	0.381	0.98	0	0	0	0 - 00:00 hrs
0203-463	5.074	297.301	Below Maximum Depth	2.199	0 - 12:19 hrs	0	63.382	0	15.561	0.001	13.995	1.574	2.199	0	0	0	0 - 00:00 hrs
0203-464	8.261	303.789	Surcharged	-0.825	0 - 13:41 hrs	409.074	409.074	15.539	15.547	0	13.999	5.261	0	4.806	6.957	348.036	0 - 12:15 hrs
0203-465	2.875	294.5	Below Link Crown	4.525	0 - 13:45 hrs	0	63.382	0	15.554	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-466	4.663	291.271	Below Maximum Depth	2.181	0 - 12:17 hrs	0	64.068	0	15.536	0.004	0.041	0.605	2.181	0	0	0	0 - 00:00 hrs
0203-467	5.376	280.786	Surcharged	-1.286	0 - 12:38 hrs	0	90.692	0	16.803	0.002	17.149	1.296	0	1.073	8.574	90.692	0 - 12:17 hrs
0203-468	5.188	276.096	Surcharged	-0.896	0 - 13:03 hrs	122.384	122.384	3.831	3.833	0	8.833	2.188	0	0.989	4.414	99.221	0 - 12:15 hrs
0203-469	5.493	275.844	Below Maximum Depth	0.256	0 - 11:52 hrs	0	25.032	0	3.823	0.001	8.836	2.493	0.256	0	0	0	0 - 00:00 hrs
0203-470	5.936	274.705	Below Maximum Depth	3.539	0 - 13:36 hrs	0	25.031	0	3.818	0.001	18.286	2.936	3.539	0	0	0	0 - 00:00 hrs
0203-471	5.853	273.999	Below Maximum Depth	1.101	0 - 13:56 hrs	0	25.03	0	3.818	0	18.827	2.853	1.101	0	0	0	0 - 00:00 hrs
0203-472	4.543	295.504	Surcharged	-0.508	0 - 15:45 hrs	0	96.185	0	15.738	0.003	8.988	0.508	0	0.762	4.493	10.948	0 - 12:45 hrs
0203-473	6.024	273.531	Below Maximum Depth	1.369	0 - 14:59 hrs	0	25.027	0	3.817	0.001	19.751	3.024	1.369	0	0	0	0 - 00:00 hrs
0203-474	10.234	269.21	Surcharged	-0.61	0 - 12:26 hrs	129.207	129.207	3.457	3.459	0	5.195	7.234	0	0.464	1.266	78.591	0 - 12:15 hrs
0203-475	7.151	267.455	Surcharged	-0.155	0 - 13:21 hrs	0	33.027	0	3.877	0.001	7.063	4.007	0	0.037	1.703	2.395	0 - 12:41 hrs
0203-476	6.942	266.904	Below Maximum Depth	0.696	0 - 13:11 hrs	0	33.027	0	3.878	0.001	7.084	3.812	0.696	0	0	0	0 - 00:00 hrs
0203-477	7.511	279.552	Surcharged	-0.852	0 - 13:08 hrs	203.866	203.866	6.223	6.226	0	9.039	4.511	0	1.724	4.518	169.209	0 - 12:15 hrs
0203-478	8.071	277.455	Surcharged	-0.707	0 - 13:12 hrs	0	45.707	0	6.2	-0.002	9.06	4.98	0	0.033	3.894	11.426	0 - 11:52 hrs
0203-479	9.084	274.827	Below Maximum Depth	0	0 - 11:52 hrs	0	39.587	0	6.211	0.005	10.045	5.925	0	0.032	0.933	2.449	0 - 12:41 hrs
0203-480	7.705	273.44	Surcharged	0	0 - 12:11 hrs	0	39.576	0	6.176	0.003	10.049	4.705	0	0.059	0.503	13.375	0 - 12:15 hrs
0203-481	8.322	329.355	Surcharged	-0.847	0 - 13:33 hrs	710.096	710.096	17.989	17.998	0	16.807	5.322	0	7.364	8.284	648.93	0 - 12:15 hrs
0203-482	6.345	322.01	Below Maximum Depth	0.688	0 - 13:33 hrs	0	62.026	0	17.987	0.01	16.978	3.345	0.688	0	0	0	0 - 00:00 hrs
0203-483	2.494	314.267	Below Link Crown	3.885	0 - 13:33 hrs	0	62.026	0	17.97	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-484	2.63	307.749	Below Link Crown	3.691	0 - 13:34 hrs	0	62.026	0	17.959	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-485	5.734	280.914	Surcharged	-1.094	0 - 12:29 hrs	0	98.189	0	17.605	0.002	17.194	1.794	0	0.264	6.154	38.699	0 - 12:15 hrs
0203-486	2.722	299.001	Below Link Crown	6.073	0 - 13:36 hrs	0	62.046	0	17.967	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-487	3.867	297.37	Below Link Crown	5.818	0 - 12:07 hrs	0	63.002	0	17.974	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-488	8.57	296.591	Surcharged	0	0 - 12:06 hrs	355.575	416.439	12.683	31.991	0.014	3.589	2.57	0	0.729	0.344	159.611	0 - 12:15 hrs
0203-489	4.739	295.318	Surcharged	-0.218	0 - 12:41 hrs	0	80.067	0	1.33	0	3.709	1.239	0	0.962	1.801	80.063	0 - 12:15 hrs
0203-490	4.002	295.665	Below Maximum Depth	1.395	0 - 12:15 hrs	28.34	28.34	0.636	0.637	0	3.146	0.502	1.395	0	0	0	0 - 00:00 hrs
0203-491	6.023	293.1	Surcharged	0	0 - 12:08 hrs	0	217.442	0	30.526	0.011	0.371	0.023	0	0.025	0.172	8.633	0 - 12:15 hrs
0203-492	7.402	293.4	Surcharged	-1.458	0 - 12:15 hrs	79.424	79.424	2.186	2.187	0	0.979	3.902	0	0.011	0.19	4.135	0 - 12:10 hrs
0203-493	2.376	303.294	Below Link Crown	13.306	0 - 12:15 hrs	24.588	24.588	0.798	0.798	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-494	10.698	276.771	Surcharged	-0.761	0 - 12:33 hrs	227.605	234.825	8.203	12.804	0.031	4.229	6.698	0	0.765	1.394	125.533	0 - 12:15 hrs
0203-495	9.478	276.416	Surcharged	-0.284	0 - 12:15 hrs	43.503	43.503	1.465	1.466	0	1.773	6.978	0	0.004	0.126	4.032	0 - 12:15 hrs
0203-496	2.983	308.23	Below Link Crown	1.22	0 - 12:15 hrs	21.193	21.193	0.694	0.694	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-497	3.26	307.674	Below Maximum Depth	0.626	0 - 12:15 hrs	0	21.073	0	0.694	0	0.176	0.26	0.626	0	0	0	0 - 00:00 hrs
0203-498	2.805	307.177	Below Link Crown	4.723	0 - 12:15 hrs	0	21.074	0	0.695	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-499	2.365	306.534	Below Link Crown	4.066	0 - 12:15 hrs	0	21.025	0	0.695	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-500	0.795	303.985	Below Link Crown	6.115	0 - 12:15 hrs	0	20.892	0	0.695	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-501	0.589	303.94	Below Link Crown	3.36	0 - 12:15 hrs	0	22.341	0	1.073	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-502	6.119	318.478	Surcharged	-0.278	0 - 12:15 hrs	78.091	78.091	4.382	4.383	0	0.514	2.619	0	0.014	0.159	8.521	0 - 12:15 hrs
0203-503	3.876	315.161	Below Maximum Depth	4.754	0 - 12:08 hrs	0	70.1	0	4.367	0.001	0.325	0.376	4.754	0	0	0	0 - 00:00 hrs
0203-504	2.9	310.696	Below Link Crown	1.147	0 - 12:18 hrs	0	77.589	0	4.67	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-505	2.123	310.725	Below Link Crown	5.297	0 - 12:18 hrs	8.097	8.097	0.288	0.289	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-506	6.383	277.647	Surcharged	-0.83	0 - 13:30 hrs	141.231	141.231	4.627	4.63	0	8.606	3.883	0	1.705	4.219	127.897	0 - 12:15 hrs
0203-507	5.932	270.432	Below Link Crown	6.183	0 - 13:00 hrs	122.937	289.355	5.711	74.044	0.022	0	0	0	0	0	0	0 - 00:00 hrs
0203-508	7.256	279.496	Below Link Crown	0.084	0 - 12:15 hrs	136.09	136.09	3.491	3.493	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-509	8.11	279.41	Surcharged	-0.17	0 - 12:15 hrs	0	134.731	0	3.493	0.003	2.499	0.45	0	0.008	0.107	10.066	0 - 12:15 hrs
0203-510	5.285	276.078	Surcharged	-0.819	0 - 13:37 hrs	293.858	293.858	11.997	12.003	0	12.177	2.285	0	3.479	6.08	241.413	0 - 12:15 hrs

Table B-5a. Existing System Analysis - Nodes
50-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-511	2.897	328.251	Below Maximum Depth	1.049	0 - 14:00 hrs	0	20.355	0	3.75	0	10.319	0.397	1.049	0	0	0	0 - 00:00 hrs
0203-512	1.54	325.699	Below Link Crown	4.552	0 - 14:00 hrs	0	20.355	0	3.746	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-513	3.803	332.883	Surcharged	-0.173	0 - 14:00 hrs	0	20.356	0	3.753	0	10.346	1.803	0	0.001	3.194	0.033	0 - 12:33 hrs
0203-514	2.244	321.861	Below Link Crown	0.839	0 - 14:02 hrs	0	20.355	0	3.742	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-515	1.599	320.25	Below Link Crown	3.342	0 - 14:03 hrs	0	20.355	0	3.742	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-516	1.839	313.907	Below Link Crown	5.073	0 - 14:03 hrs	0	20.355	0	3.745	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-517	8.436	279.046	Below Link Crown	0.484	0 - 12:18 hrs	0	129.63	0	3.467	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-518	4.313	320.624	Surcharged	-0.824	0 - 12:42 hrs	105.069	105.069	3.905	3.906	0	4.818	1.913	0	0.448	2.256	65.647	0 - 12:15 hrs
0203-519	3.224	318.635	Below Link Crown	1.965	0 - 12:42 hrs	0	41.894	0	3.915	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-520	3.847	263.797	Below Link Crown	10.063	0 - 12:18 hrs	0	235.735	0	43.615	0.014	0	0	0	0	0	0	0 - 00:00 hrs
0203-521	4.67	322.47	Below Maximum Depth	1.674	0 - 13:47 hrs	0	36.844	0	5.55	0	8.331	1.17	1.674	0	0	0	0 - 00:00 hrs
0203-522	5.369	323.369	Below Maximum Depth	1.304	0 - 13:47 hrs	0	36.844	0	5.554	0.001	8.356	1.869	1.304	0	0	0	0 - 00:00 hrs
0203-523	6.437	324.937	Surcharged	-0.737	0 - 13:17 hrs	157.029	157.029	5.543	5.545	0	8.381	2.937	0	1.119	4.14	121.122	0 - 12:15 hrs
0203-524	5.929	324.179	Surcharged	-0.279	0 - 13:25 hrs	0	38.129	0	5.557	0	8.37	2.429	0	0.027	2.793	1.931	0 - 12:23 hrs
0203-525	3.346	267.656	Below Link Crown	13.644	0 - 12:17 hrs	0	197.501	0	41.048	0.02	0	0	0	0	0	0	0 - 00:00 hrs
0203-526	4.192	321.738	Below Maximum Depth	1.262	0 - 13:25 hrs	0	36.844	0	5.547	0	8.297	0.692	1.262	0	0	0	0 - 00:00 hrs
0203-527	3.481	320.972	Below Link Crown	1.799	0 - 13:25 hrs	0	36.844	0	5.545	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-528	3.586	320.172	Below Link Crown	2.125	0 - 13:26 hrs	0	36.844	0	5.543	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-529	3.696	319.196	Below Link Crown	1.492	0 - 13:26 hrs	0	36.844	0	5.541	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-530	9.589	276.449	Below Maximum Depth	0.411	0 - 12:34 hrs	0	136.779	0	38.386	0.155	1.477	0.059	0.411	0	0	0	0 - 00:00 hrs
0203-531	12.424	325.158	Surcharged	-0.547	0 - 12:18 hrs	79.214	79.214	2.574	2.575	0	1.912	9.924	0	0.07	0.381	22.167	0 - 12:15 hrs
0203-532	2.77	295.6	Below Link Crown	7.25	0 - 12:38 hrs	0	112.668	0	46.089	0.037	0	0	0	0	0	0	0 - 00:00 hrs
0203-533	2.122	302.712	Below Link Crown	2.728	0 - 13:48 hrs	0	98.678	0	27.498	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-534	3.749	307.22	Below Maximum Depth	1.987	0 - 12:47 hrs	0	22.312	0	7.514	0.001	4.903	0.749	1.987	0	0	0	0 - 00:00 hrs
0203-535	3.526	306.824	Below Maximum Depth	2.144	0 - 12:45 hrs	0	23.302	0	7.514	0.001	3.838	0.526	2.144	0	0	0	0 - 00:00 hrs
0203-536	8.858	306.029	Surcharged	-0.797	0 - 12:45 hrs	233.893	253.683	7.579	15.083	0.003	6.053	5.358	0	1.429	2.577	173.304	0 - 12:15 hrs
0203-537	5.02	302.191	Below Maximum Depth	3.632	0 - 12:44 hrs	0	81.892	0	15.072	0.002	5.166	1.02	3.632	0	0	0	0 - 00:00 hrs
0203-538	1.506	301.346	Below Link Crown	4.934	0 - 13:36 hrs	0	98.678	0	27.507	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-539	4.728	299.388	Below Maximum Depth	1.212	0 - 11:57 hrs	0	81.892	0	15.071	0.002	5.159	0.728	1.212	0	0	0	0 - 00:00 hrs
0203-540	5.26	296.25	Below Maximum Depth	1.3	0 - 11:57 hrs	0	81.892	0	15.086	0.002	5.375	1.22	1.3	0	0	0	0 - 00:00 hrs
0203-541	3.124	293.264	Below Link Crown	3.176	0 - 13:33 hrs	0	81.892	0	15.089	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-542	5.441	306.323	Below Maximum Depth	1.183	0 - 12:45 hrs	0	32.31	0	7.511	0.001	5.212	1.941	1.183	0	0	0	0 - 00:00 hrs
0203-543	5.958	290.418	Below Maximum Depth	0.722	0 - 14:30 hrs	0	81.856	0	15.096	0.002	5.33	1.958	0.722	0	0	0	0 - 00:00 hrs
0203-544	5.125	288.225	Below Maximum Depth	5.625	0 - 14:32 hrs	0	81.856	0	15.091	0.003	5.45	1.085	5.625	0	0	0	0 - 00:00 hrs
0203-545	4.785	284.763	Surcharged	-0.863	0 - 15:22 hrs	0	76.664	0	15.022	0.033	24.62	0.875	0	3.802	12.308	54.093	0 - 12:26 hrs
0203-546	4.592	284.542	Below Link Crown	2.528	0 - 15:18 hrs	0	34.734	0	13.361	0.012	0	0	0	0	0	0	0 - 00:00 hrs
0203-547	4.872	299.582	Below Link Crown	3.218	0 - 12:15 hrs	0	103.972	0	27.422	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-548	4.506	284.426	Below Maximum Depth	2.854	0 - 15:15 hrs	0	34.737	0	13.349	0.01	23.83	0.616	2.854	0	0	0	0 - 00:00 hrs
0203-549	2.9	281.74	Below Link Crown	3.85	0 - 12:51 hrs	0	40.323	0	14.281	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-550	10.828	277.743	Surcharged	-0.543	0 - 12:33 hrs	0	1,074.04	0	230.956	0.178	2.126	0.568	0	0.172	1.037	59.073	0 - 12:15 hrs
0203-551	4.629	280.079	Below Link Crown	2.421	0 - 12:18 hrs	0	69.341	0	2.682	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-552	6.059	279.119	Below Maximum Depth	1.731	0 - 13:23 hrs	0	26.948	0	6.489	0.003	13.773	3.049	1.731	0	0	0	0 - 00:00 hrs
0203-553	4.073	275.093	Below Maximum Depth	5.607	0 - 13:23 hrs	0	26.948	0	6.495	0.007	8.677	0.073	5.607	0	0	0	0 - 00:00 hrs
0203-554	4.93	276.75	Surcharged	-0.71	0 - 12:15 hrs	44.832	44.832	1.301	1.302	0	0.338	1.93	0	0.003	0.131	1.495	0 - 12:11 hrs
0203-555	6.434	274.504	Below Maximum Depth	1.006	0 - 12:15 hrs	0	43.916	0	1.298	0	0.434	1.784	1.006	0	0	0	0 - 00:00 hrs
0203-556	2.37	269.22	Below Link Crown	6.98	0 - 12:17 hrs	0	72.534	0	6.72	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-557	9.882	298.902	Below Link Crown	4.198	0 - 12:15 hrs	0	480.577	0	106.408	0.022	0	0	0	0	0	0	0 - 00:00 hrs
0203-558	6.774	268.176	Below Link Crown	12.954	0 - 12:30 hrs	78.601	1,298.01	1.907	251.098	0.1	0	0	0	0	0	0	0 - 00:00 hrs
0203-559	4.92	299.63	Below Link Crown	3.17	0 - 12:15 hrs	0	101.748	0	27.432	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-560	6.14	351.36	Surcharged	-0.71	0 - 12:32 hrs	810.346	810.346	29.266	29.281	0	2.445	1.56	0	2.604	1.217	439.029	0 - 12:15 hrs
0203-561	6.86	342.52	Below Maximum Depth	0	0 - 12:03 hrs	0	247.802	0	29.297	0.016	4.739	1.86	0	0.002	0.165	7.404	0 - 12:03 hrs
0203-562	6.922	332.922	Surcharged	-1.222	0 - 17:38 hrs	0	79.803	0	16.556	0.004	18.559	1.252	0	2.927	9.273	34.334	0 - 12:30 hrs
0203-563	6.85	334.92	Surcharged	-0.84	0 - 13:12 hrs	555.523	555.523	16.522	16.531	0	13.6	1.18	0	4.929	6.792	478.58	0 - 12:15 hrs
0203-564	5.502	346.602	Surcharged	-0.902	0 - 13:15 hrs	0	377.425	0	29.353	0.019	4.622	0.922	0	3.977	2.311	138.509	0 - 12:22 hrs
0203-565	1.891	335.271	Below Link Crown	4.239	0 - 13:15 hrs	0	247.802	0	29.262	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-566	4.663	334.023	Below Link Crown	3.117	0 - 13:17 hrs	0	247.779	0	29.233	0.058	0	0	0	0	0	0	0 - 00:00 hrs
0203-567	4.852	329.262	Below Link Crown	2.928	0 - 13:18 hrs	0	247.7	0	29.173	0.016	0	0	0	0	0	0	0 - 00:00 hrs
0203-568	5.552	327.222	Below Link Crown	2.718	0 - 12:10 hrs	0	247.645	0	29.16	0.024	0	0	0	0	0	0	0 - 00:00 hrs
0203-569	4.517	324.797	Below Link Crown	2.203	0 - 14:22 hrs	0	250.65	0	29.132	0.025	0	0	0	0	0	0	0 - 00:00 hrs
0203-570	6.661	324.621	Surcharged	-0.621	0 - 14:25 hrs	0	253.015	0	29.418	0.04	5.947	1.561	0	2.45	2.858	65.588	0 - 12:19 hrs
0203-571	8.672	321.332	Surcharged	-1.132	0 - 12:38 hrs	0	217.909	0	29.051	0.212	6.111	1.142	0	0.606	3.055	157.737	0 - 12:12 hrs
0203-572	10.49	321.1	Surcharged	-0.4	0 - 12:36 hrs	0	225.665	0	28.809	0.172	2.545	0.49	0	0.27	1.167	63.316	0 - 12:15 hrs
0203-573	10.427	321.037	Surcharged	-0.337	0 - 12:33 hrs	907.438	963.527	55.902	84.498	0.122	2.296	0.427	0	0.428	1.053	107.924	0 - 12:15 hrs
0203-574	9.258	319.868	Surcharged	-0.868	0 - 13:26 hrs	0	871.764	0	84.357	0.173	7.72	0.908	0	7.735	3.859	362.282	0 - 12:19 hrs
0203-575	7.358	317.968	Surcharged	-0.868	0 - 17:27 hrs	0	556.599	0	84.35	0.259	25.222	0.918	0	43.592	12.601	448.382	0 - 13:11 hrs
0203-576	1.667	310.157	Below Link Crown	11.543	0 - 17:29 hrs	0	112.665	0	46.852	0.11	0	0	0	0	0	0	0 - 00:00 hrs
0203-577	3.451	298.51	Below Link Crown	9.693	0 - 17:34 hrs	0	112.665	0	46.742	0.066	0	0	0	0	0	0	0 - 00:00 hrs
0203-578	2.574	297.704	Below Link Crown	10.569	0 - 17:40 hrs	0	112.665	0	46.675	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-579	4.421	297.269	Below Link Crown	12.451	0 - 17:45 hrs	0	112.665	0	46.566	0.227	0	0	0	0	0	0	0 - 00:00 hrs
0203-580	4.425	295.235	Below Link Crown	7.085	0 - 12:23 hrs	0	112.67	0	46.053	0.083	0	0	0	0	0	0	0 - 00:00 hrs
0203-581	7.446	300.096	Surcharged	-0.776	0 - 12:22 hrs	133.472	133.472	3.687	3.689	0	2.019	4.446	0	0.373	0.929	73.741	0 - 12:15 hrs
0203-582	3.7	294.96	Below Link Crown	6.24	0 - 12:22 hrs	0	112.681	0	45.971	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-583	6.804	294.924	Below Link Crown	4.976	0 - 12:22 hrs	0	114.318	0	45.945	0.061	0	0	0	0	0	0	0 - 00:00 hrs
0203-584	8.74	294.92	Below Link Crown	5.28	0 - 12:22 hrs	0	563.894	0	152.268	0.119	0	0	0	0	0	0	0 - 00:00 hrs
0203-585	8.645	294.785	Below Link Crown	4.715	0 - 12:22 hrs	0	558.41	0	152.141	0.058	0	0	0	0	0	0	0 - 00:00 hrs
0203-586	8.627	294.577	Below Link Crown	5.623	0 - 12:38 hrs	0	555.541	0	152.084	0.085	0	0	0	0	0	0	0 - 00:00 hrs
0203-587	9.504	294.124	Below Link Crown	4.676	0 - 12:41 hrs	0	549.889	0	152	0.131	0	0	0	0	0	0	0 - 00:00 hrs
0203-588	11.168	293.998	Below Link Crown	4.072	0 - 12:41 hrs	0	543.243	0	151.867	0.188	0	0	0	0	0	0	0 - 00:00 hrs
0203-589	8.576	293.636	Below Link Crown	7.764	0 - 12:41 hrs	0	538.683	0	151.682	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-590	4.149	330.079	Below Link Crown	0.321	0 - 19:04 hrs	0	66.972	0	16.529	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-591	4.173	325.223	Surcharged	-1.553	0 - 19:46 hrs	0	64.557	0	16.518	0.011	13.636	1.553	0	0.274	6.813	6.255	0 - 19:00 hrs
0203-592	4.887	295.417	Below Maximum Depth	1.413	0 - 12:32 hrs	0	65.826	0	3.668	0.002	1.516	0.887	1.413	0	0	0	0 - 00:00 hrs
0203-593	1.308	317.488	Below Link Crown	2.312	0 - 19:47 hrs	0	60.872	0	16.525	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-594	4.16	313.09	Surcharged	-0.49	0 - 20:54 hrs	0	60.87	0	16.511	0.031	21.742	0.56	0	1.962	10.846	15.185	0 - 19:44 hrs
0203-595	2.956	310.946	Below Link Crown	0.154	0 - 20:55 hrs	0	46.318	0	16.475	0.01	0	0	0	0	0	0	0 - 00:00 hrs

Table B-5a. Existing System Analysis - Nodes
50-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-596	1.925	308.285	Below Link Crown	1.215	0 - 20:57 hrs	0	46.315	0	16.465	0.011	0	0	0	0	0	0	0 - 00:00 hrs
0203-597	2.963	300.493	Below Link Crown	4.207	0 - 20:58 hrs	0	46.313	0	16.453	0.009	0	0	0	0	0	0	0 - 00:00 hrs
0203-598	3.007	299.917	Below Link Crown	4.083	0 - 12:17 hrs	0	46.31	0	16.443	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-599	5.774	299.804	Below Link Crown	3.486	0 - 12:17 hrs	0	46.689	0	16.439	0.012	0	0	0	0	0	0	0 - 00:00 hrs
0203-600	7.836	299.536	Below Maximum Depth	1.324	0 - 12:15 hrs	607.034	671.459	19.941	107.355	0.027	0.259	0.286	1.324	0	0	0	0 - 00:00 hrs
0203-601	7.949	298.969	Below Link Crown	2.381	0 - 12:15 hrs	0	486.751	0	106.418	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-602	2.637	295.727	Below Link Crown	9.773	0 - 12:40 hrs	0	112.663	0	46.184	0.094	0	0	0	0	0	0	0 - 00:00 hrs
0203-603	5.4	310.14	Surcharged	-0.84	0 - 13:45 hrs	741.294	741.294	27.504	27.519	0	17.072	0.851	0	9.081	8.536	653.339	0 - 12:15 hrs
0203-604	4.724	308.769	Surcharged	-0.17	0 - 13:45 hrs	0	98.68	0	27.479	0.004	8.816	0.17	0	0.004	4.408	0.408	0 - 12:29 hrs
0203-605	4.086	308.116	Below Link Crown	0.484	0 - 13:45 hrs	0	98.678	0	27.479	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-606	2.724	304.724	Below Link Crown	1.876	0 - 13:47 hrs	0	98.678	0	27.482	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-607	2.072	303.822	Below Link Crown	1.378	0 - 13:47 hrs	0	98.678	0	27.489	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-608	2.018	300.158	Below Link Crown	4.212	0 - 12:17 hrs	0	98.682	0	27.501	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-609	4.7	299.73	Below Link Crown	3.5	0 - 12:15 hrs	0	98.666	0	27.495	0.02	0	0	0	0	0	0	0 - 00:00 hrs
0203-610	4.964	299.674	Below Link Crown	3.326	0 - 12:15 hrs	0	98.906	0	27.457	0.011	0	0	0	0	0	0	0 - 00:00 hrs
0203-611	10.798	293.148	Below Link Crown	4.352	0 - 12:41 hrs	0	782.33	0	166.33	0.114	0	0	0	0	0	0	0 - 00:00 hrs
0203-612	8.601	293.271	Below Link Crown	7.729	0 - 12:41 hrs	242.783	737.379	11.258	162.785	0.13	0	0	0	0	0	0	0 - 00:00 hrs
0203-613	10.389	292.129	Below Link Crown	3.471	0 - 12:41 hrs	0	772.312	0	166.175	0.149	0	0	0	0	0	0	0 - 00:00 hrs
0203-614	11.737	291.877	Below Link Crown	2.353	0 - 12:44 hrs	0	758.074	0	166.026	0.237	0	0	0	0	0	0	0 - 00:00 hrs
0203-615	11.439	291.579	Below Link Crown	5.221	0 - 12:44 hrs	0	739.353	0	165.793	0.302	0	0	0	0	0	0	0 - 00:00 hrs
0203-616	11.479	291.439	Below Link Crown	5.261	0 - 12:44 hrs	0	712.865	0	165.504	0.435	0	0	0	0	0	0	0 - 00:00 hrs
0203-617	11.081	291.211	Below Link Crown	0.989	0 - 12:45 hrs	0	763.345	0	175.906	0.527	0	0	0	0	0	0	0 - 00:00 hrs
0203-618	11.5	291.05	Surcharged	-0.55	0 - 12:45 hrs	0	763.128	0	175.378	0.212	2.828	0.57	0	0.157	1.404	49.321	0 - 12:29 hrs
0203-619	11.8	290.8	Below Maximum Depth	0	0 - 12:37 hrs	0	763.12	0	175.136	0.263	1.455	0.04	0	0.972	0.594	97.286	0 - 12:42 hrs
0203-620	10.969	290.399	Below Link Crown	3.431	0 - 12:37 hrs	0	680.113	0	173.87	0.157	0	0	0	0	0	0	0 - 00:00 hrs
0203-621	10.07	292.57	Below Link Crown	5.05	0 - 12:41 hrs	0	776.137	0	166.219	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-622	10.61	290.33	Below Link Crown	3.5	0 - 12:37 hrs	88.608	702.783	3.291	177.026	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-623	5.409	284.959	Below Link Crown	1.941	0 - 12:38 hrs	0	811.574	0	190.267	0.088	0	0	0	0	0	0	0 - 00:00 hrs
0203-624	4.524	285.214	Below Maximum Depth	4.806	0 - 12:38 hrs	0	113.564	0	13.352	0.006	4.395	0.514	4.806	0	0	0	0 - 00:00 hrs
0203-625	7.085	290.745	Below Link Crown	4.155	0 - 13:04 hrs	0	139.288	0	13.358	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-626	7.078	294.748	Surcharged	-0.548	0 - 12:17 hrs	128.484	211.712	3.757	13.382	0.002	0.624	0.628	0	0.05	0.309	19.382	0 - 12:15 hrs
0203-627	3.226	296.556	Below Link Crown	3.224	0 - 13:53 hrs	0	55.357	0	6.013	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-628	4.333	283.053	Below Link Crown	3.047	0 - 12:40 hrs	0	843.422	0	193.355	0.065	0	0	0	0	0	0	0 - 00:00 hrs
0203-629	5.111	282.126	Below Link Crown	3.304	0 - 12:40 hrs	103.178	943.076	2.658	206.894	0.074	0	0	0	0	0	0	0 - 00:00 hrs
0203-630	8.589	281.665	Below Link Crown	3.835	0 - 12:41 hrs	0	938.053	0	206.832	0.36	0	0	0	0	0	0	0 - 00:00 hrs
0203-631	8.231	280.306	Below Link Crown	4.194	0 - 12:37 hrs	33.245	997.476	0.988	214.746	0.373	0	0	0	0	0	0	0 - 00:00 hrs
0203-632	7.243	279.133	Below Link Crown	4.867	0 - 12:33 hrs	0	998.804	0	214.375	0.2	0	0	0	0	0	0	0 - 00:00 hrs
0203-633	2.586	281.496	Below Link Crown	2.004	0 - 12:51 hrs	0	40.321	0	14.276	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-634	2.163	280.523	Below Link Crown	2.397	0 - 12:15 hrs	0	40.313	0	14.263	0.017	0	0	0	0	0	0	0 - 00:00 hrs
0203-635	2.763	278.283	Below Link Crown	4.297	0 - 12:33 hrs	0	40.378	0	14.233	0.013	0	0	0	0	0	0	0 - 00:00 hrs
0203-636	6.382	278.212	Below Link Crown	4.908	0 - 12:33 hrs	0	40.825	0	14.221	0.04	0	0	0	0	0	0	0 - 00:00 hrs
0203-637	5.434	278.204	Below Link Crown	5.896	0 - 12:33 hrs	0	1,042.30	0	228.345	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-638	11.733	277.453	Below Link Crown	5.547	0 - 12:32 hrs	0	1,079.17	0	230.867	0.21	0	0	0	0	0	0	0 - 00:00 hrs
0203-639	8.844	276.804	Below Link Crown	8.396	0 - 12:27 hrs	371.879	1,221.12	11.132	241.789	0.18	0	0	0	0	0	0	0 - 00:00 hrs
0203-640	7.455	275.535	Below Link Crown	5.945	0 - 12:30 hrs	0	1,212.63	0	241.557	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-641	8.39	274.29	Below Link Crown	5.01	0 - 12:30 hrs	0	1,210.72	0	241.363	0.265	0	0	0	0	0	0	0 - 00:00 hrs
0203-642	7.785	272.445	Below Link Crown	9.425	0 - 12:30 hrs	73.235	1,231.77	1.962	243.055	0.365	0	0	0	0	0	0	0 - 00:00 hrs
0203-643	5.4	270.11	Below Link Crown	11.89	0 - 12:30 hrs	0	1,231.25	0	242.69	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-644	7.425	267.145	Below Link Crown	14.605	0 - 12:30 hrs	0	1,297.53	0	251.003	0.175	0	0	0	0	0	0	0 - 00:00 hrs
0203-645	9.652	265.292	Below Link Crown	13.508	0 - 12:32 hrs	0	1,296.93	0	250.831	0.336	0	0	0	0	0	0	0 - 00:00 hrs
0203-646	8.002	264.212	Below Link Crown	15.088	0 - 12:32 hrs	0	1,296.30	0	250.498	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-647	4.153	281.167	Below Link Crown	0.817	0 - 12:18 hrs	0	89.416	0	2.689	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-648	3.833	281.403	Below Maximum Depth	1.197	0 - 12:17 hrs	59.15	59.15	1.705	1.706	0	0.204	0.233	1.197	0	0	0	0 - 00:00 hrs
0203-649	3.094	281.244	Below Link Crown	2.906	0 - 12:17 hrs	35.682	35.682	0.982	0.983	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-650	4.976	287.396	Surcharged	-0.506	0 - 14:33 hrs	0	81.855	0	15.087	0.014	5.448	0.936	0	0.11	2.374	2.432	0 - 12:52 hrs
0203-651	4.517	284.317	Below Maximum Depth	1.823	0 - 15:14 hrs	0	34.738	0	13.339	0.031	20.228	0.347	1.823	0	0	0	0 - 00:00 hrs
0203-652	7.342	315.57	Surcharged	-0.816	0 - 12:56 hrs	318.31	318.31	10.813	10.818	0	7.151	4.342	0	2.372	3.568	249.393	0 - 12:15 hrs
0203-653	6.29	308.94	Surcharged	0	0 - 11:52 hrs	0	71.694	0	10.821	0.003	7.136	2.79	0	0	0.001	5.986	0 - 11:52 hrs
0203-654	2.234	300.954	Below Link Crown	1.846	0 - 11:53 hrs	0	69.994	0	10.808	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-655	7.605	302.095	Surcharged	-0.815	0 - 17:52 hrs	0	151.425	0	45.838	0.019	18.15	1.605	0	0.446	8.765	14.178	0 - 12:19 hrs
0203-656	3.332	297.152	Below Link Crown	2.928	0 - 12:32 hrs	0	69.997	0	10.801	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-657	6.959	292.559	Surcharged	-0.859	0 - 13:03 hrs	0	193.798	0	13.361	0.011	4.783	3.099	0	0.799	2.303	79.793	0 - 12:15 hrs
0203-658	7.616	290.676	Below Link Crown	4.874	0 - 13:04 hrs	0	113.549	0	13.355	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-659	4.209	286.439	Below Link Crown	7.651	0 - 12:44 hrs	0	113.557	0	13.352	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-660	6.552	279.832	Surcharged	-0.832	0 - 13:23 hrs	216.908	216.908	6.506	6.51	0	13.832	3.552	0	2.089	6.793	190.962	0 - 12:15 hrs
0203-661	7.447	301.887	Surcharged	-0.537	0 - 17:55 hrs	0	150.881	0	45.855	0.018	18.135	1.447	0	0.271	8.345	8.123	0 - 12:38 hrs
0203-662	5.721	302.911	Surcharged	-0.831	0 - 12:57 hrs	0	92.189	0	6.009	0.005	4.293	2.221	0	0.893	2.138	39.167	0 - 12:19 hrs
0203-663	4.539	300.309	Below Maximum Depth	1.351	0 - 12:57 hrs	0	55.357	0	6.009	0	4.281	1.039	1.351	0	0	0	0 - 00:00 hrs
0203-664	4.28	298.58	Below Maximum Depth	2.39	0 - 12:57 hrs	0	55.357	0	6.014	0.001	4.309	0.78	2.39	0	0	0	0 - 00:00 hrs
0203-665	6.408	298.868	Below Maximum Depth	0.002	0 - 12:56 hrs	0	150.722	0	45.818	0.016	2.992	0.408	0.002	0	0	0	0 - 00:00 hrs
0203-666	8.228	304.858	Surcharged	-0.698	0 - 12:33 hrs	94.045	94.045	3.616	3.618	0	3.082	5.228	0	0.282	1.176	47.412	0 - 12:15 hrs
0203-667	7.71	302.95	Surcharged	0	0 - 13:14 hrs	0	47.338	0	3.593	0	3.465	4.44	0	0	0	1.471	0 - 13:14 hrs
0203-668	6.166	299.606	Surcharged	-0.876	0 - 13:14 hrs	0	47.337	0	3.588	0	3.554	2.986	0	0.285	1.73	11.386	0 - 12:18 hrs
0203-669	5.49	298.17	Surcharged	0	0 - 13:45 hrs	0	38.264	0	3.624	0.001	3.683	2.49	0	0	0	2.845	0 - 13:45 hrs
0203-670	3.754	296.244	Surcharged	-0.244	0 - 13:14 hrs	0	38.264	0	3.622	0.001	2.891	0.254	0	0.002	1.434	0.262	0 - 12:15 hrs
0203-671	6.444	289.044	Below Maximum Depth	6.506	0 - 13:03 hrs	0	113.557	0	13.355	0.001	4.893	1.944	6.506	0	0	0	0 - 00:00 hrs
0203-672	5.445	287.795	Below Maximum Depth	6.295	0 - 12:59 hrs	0	113.557	0	13.355	0.001	4.709	0.945	6.295	0	0	0	0 - 00:00 hrs
0203-673	6.31	298.71	Below Maximum Depth	0	0 - 12:03 hrs	0	287.204	0	46.993	0.016	2.55	0.31	0	2.968	0.881	287.203	0 - 12:18 hrs
0203-674	7.275	289.875	Surcharged	-0.635	0 - 12:18 hrs	101.425	101.425	3.328	3.33	0	0.917	3.275	0	0.068	0.352	25.055	0 - 12:15 hrs
0203-675	5.527	288.007	Below Maximum Depth	0.763	0 - 12:18 hrs	0	78.107	0	3.307	0.011	0.793	1.527	0.763	0	0	0	0 - 00:00 hrs
0203-676	5.06	284.24	Below Link Crown	3.29	0 - 12:38 hrs	0	848.643	0	193.482	0.135	0	0	0	0	0	0	0 - 00:00 hrs
0203-677	7.05	298.98	Surcharged	0	0 - 12:11 hrs	0	219.094	0	45.343	0.037	3.528	1.05	0	0.114	0.13	56.329	0 - 12:15 hrs
0203-678	6.495	300.815	Surcharged	-0.785	0 - 12:48 hrs	238.511	238.511	8.485	8.489	0	5.377	2.995	0	1.509	2.685	171.927	0 - 12:15 hrs
0203-679	7.705	299.505	Below Maximum Depth	0.515	0 - 12:15 hrs	0	218.958	0	61.346	0.03	0.169	0.155	0.515	0	0	0	0 - 00:00 hrs
0203-680	5.55	291.433	Surcharged	-0.699	0 - 12:59 hrs	176.291	176.291	5.804	5.807	0	8.137	2.55	0	1.36	4.013	142.421	0 - 12:15 hrs

Table B-5a. Existing System Analysis - Nodes
50-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-681	4.81	289.62	Below Maximum Depth	2.83	0 - 13:15 hrs	0	38.945	0	5.78	-0.003	8.035	1.48	2.83	0	0	0	0 - 00:00 hrs
0203-682	4.98	287.98	Below Maximum Depth	0.34	0 - 13:56 hrs	0	38.954	0	5.803	0.001	7.774	0.98	0.34	0	0	0	0 - 00:00 hrs
0203-683	4.732	287.622	Below Maximum Depth	0.628	0 - 13:56 hrs	0	38.503	0	5.804	0.001	7.668	0.732	0.628	0	0	0	0 - 00:00 hrs
0203-684	5.373	287.213	Below Maximum Depth	0.757	0 - 13:56 hrs	0	37.716	0	5.804	0.001	7.887	1.373	0.757	0	0	0	0 - 00:00 hrs
0203-685	6.241	286.681	Below Maximum Depth	0.83	0 - 13:56 hrs	0	35.433	0	5.805	0.003	8.036	1.741	0.83	0	0	0	0 - 00:00 hrs
0203-686	6.293	286.457	Below Maximum Depth	0.638	0 - 13:56 hrs	0	35.396	0	5.803	0.001	8.075	1.793	0.638	0	0	0	0 - 00:00 hrs
0203-687	6.053	286.217	Below Link Crown	1.268	0 - 14:00 hrs	0	35.371	0	5.801	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-688	5.294	286.365	Surcharged	-0.697	0 - 12:17 hrs	59.508	59.508	1.831	1.832	0	0.878	2.294	0	0.034	0.31	11.889	0 - 12:15 hrs
0203-689	2.504	283.537	Below Link Crown	2.126	0 - 12:18 hrs	0	49.027	0	1.839	0.004	0	0	0	0	0	0	0 - 00:00 hrs

Table B-5b. Existing System Analysis - Pipes/Channels
50-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-001-022	3.883	345.652	0.807	142.032	Free Surface	0 - 12:18 hrs	7.705	7.882	0.411	0.829	203.62	39.249	6.648	0	0	15.553	0	0	0
0203-002-001	3	68.703	1.061	49.115	Backwater	0 - 12:15 hrs	6.948	6.948	0.715	1	19.588	1.16	2.992	11.131	11.131	20.585	0	0.227	0
0203-003-051	7.47	1,836.26	1.173	143.81	Backwater	0 - 12:10 hrs	0.973	4.255	0.078	1	1,692.45	38.413	31.255	1.01	1.01	4.149	0	0	0
0203-004-003	3.5	70.599	0.717	146.243	Exceeds Capacity	0 - 12:08 hrs	6.964	6.964	2.071	1	-75.644	38.416	6	8.356	9.881	8.356	9.99	8.356	0
0203-005-041	4	336.322	0.564	211.498	Backwater	0 - 12:17 hrs	8.26	8.26	0.629	1	124.824	28.646	7.413	7.516	8.03	7.516	0	7.516	0
0203-006-005	4.17	340.431	0.535	102.65	Backwater	0 - 12:15 hrs	3.862	3.862	0.302	1	237.781	15.723	7.017	7.28	7.28	7.85	0	0	0
0203-007-040	3.06	227.444	0.761	90.155	Free Surface	0 - 15:57 hrs	5.422	5.852	0.396	0.977	137.289	15.746	6.368	0	3.951	0	0	0	0
0203-008-007	3.75	289.554	0.703	90.155	Free Surface	0 - 15:57 hrs	4.512	4.513	0.311	0.942	199.398	15.748	6.187	0	2.856	0	0	0	0
0203-009-467	4.08	204.974	0.478	68.515	Backwater	0 - 20:28 hrs	3.65	3.678	0.334	1	136.458	15.717	5.474	8.574	9.44	8.574	0	6.593	0
0203-010-008	3.5	155.722	0.302	90.155	Backwater	0 - 15:57 hrs	3.963	3.963	0.579	1	65.567	15.748	6.5	4.643	4.702	4.643	0	4.643	0
0203-011-039	3.82	361.971	0.957	90.156	Free Surface	0 - 15:56 hrs	5.483	5.629	0.249	0.737	271.814	15.732	6.19	0	0	0	0	0	0
0203-012-011	3.4	179.651	0.437	90.157	Free Surface	0 - 15:56 hrs	4.382	4.382	0.502	0.931	89.494	15.727	6.5	0	3.053	0	0	0	0
0203-013-012	3	215.243	0.901	90.157	Backwater	0 - 15:56 hrs	4.623	4.623	0.419	1	125.087	15.726	6.5	4.683	4.691	4.685	0	4.682	0
0203-014-017	5.5	200.833	0.358	105.173	Backwater	0 - 13:04 hrs	4.427	4.427	0.524	1	95.66	15.732	5.499	3.107	3.838	3.149	0	3.065	0
0203-015-014	5.5	584.361	3.028	105.174	Backwater	0 - 13:03 hrs	4.434	4.435	0.18	1	479.187	15.734	5.5	1.35	1.35	3.838	0	0	0
0203-016-025	3.5	86.614	0.741	63.214	Backwater	0 - 12:18 hrs	6.57	6.57	0.73	1	23.4	7.916	3.499	3.218	3.218	3.231	0	3.028	0
0203-017-018	4.035	221.445	0.332	103.71	Backwater	0 - 12:36 hrs	4.553	4.553	0.468	1	117.735	15.786	6.73	4.44	4.455	4.581	0	3.907	0
0203-018-472	4.035	202.107	0.276	96.185	Backwater	0 - 14:34 hrs	4.223	4.223	0.476	1	105.921	15.738	6.73	4.382	4.581	4.494	0	4.241	0
0203-019-020	3	95.745	2.061	39.954	Backwater	0 - 14:44 hrs	5.652	5.652	0.417	1	55.791	3.563	2.963	3.174	3.174	3.184	0	0.303	0
0203-020-021	3	3.682	0.003	40.627	Exceeds Capacity	0 - 14:38 hrs	5.748	5.748	11.034	1	-36.945	3.558	2.982	3.176	3.184	3.176	7.1	3.176	0
0203-021-023	3	55.487	0.692	40.611	Backwater	0 - 14:38 hrs	5.745	5.745	0.732	1	14.876	3.554	2.948	3.176	3.177	3.195	0	0.383	0
0203-022-525	10.92	4,890.27	0.824	197.501	Free Surface	0 - 12:15 hrs	3.781	3.791	0.04	0.27	4,692.77	41.048	26.604	0	0	0	0	0	0
0203-023-024	3	58.562	0.771	54.125	Backwater	0 - 13:49 hrs	7.657	7.657	0.924	1	4.437	3.525	3	2.885	3.202	2.886	0	2.065	0
0203-024-016	3	80.465	1.455	63.215	Backwater	0 - 12:18 hrs	8.943	8.943	0.786	1	17.251	7.91	2.999	2.898	2.898	3.043	0	2.883	0
0203-025-026	3.5	111.064	1.219	61.361	Backwater	0 - 11:56 hrs	6.555	7.332	0.552	1	49.704	7.905	3.499	2.691	3.231	2.691	0	2.691	0
0203-026-027	3.5	99.78	0.984	60.061	Backwater	0 - 13:49 hrs	6.243	6.803	0.602	1	39.719	7.929	3.495	2.692	2.692	2.989	0	0	0
0203-027-028	4	133.8	0.868	60.061	Backwater	0 - 13:49 hrs	4.78	5.467	0.449	1	73.739	7.925	3.997	2.819	2.858	2.819	0	2.819	0
0203-028-029	4.5	158.864	0.653	61.074	Backwater	0 - 14:45 hrs	3.986	4.358	0.384	1	97.79	7.929	4.5	2.722	2.722	3.19	0	0	0
0203-029-030	4.5	85.729	0.19	79.999	Backwater	0 - 13:34 hrs	5.03	5.03	0.933	1	5.73	7.937	4.467	2.918	3.19	2.918	0	2.52	0
0203-030-037	7.66	386.522	0.309	80.123	Backwater	0 - 13:34 hrs	2.593	2.895	0.207	1	306.399	7.96	5.331	0.048	0.048	0.664	0	0	0
0203-031-022	4.5	22.455	0.013	62.149	Free Surface	0 - 12:15 hrs	4.864	4.864	2.768	0.749	-39.695	1.821	4.5	0	0	0	0.472	0	0
0203-032-033	2.5	83.636	4.158	41.083	Free Surface	0 - 12:22 hrs	10.441	10.441	0.491	0.747	42.553	2.6	2.5	0	1.327	0	0	0	0
0203-033-520	8.14	2,355.24	0.771	235.735	Free Surface	0 - 12:17 hrs	3.663	3.668	0.1	0.439	2,119.50	43.615	30.468	0	0	0	0	0	0
0203-034-009	4.08	269.154	0.824	67.834	Backwater	0 - 20:32 hrs	3.564	3.564	0.252	1	201.32	15.713	5.474	9.414	9.414	9.44	0	0	0
0203-035-010	5.391	1,184.67	3.322	90.156	Free Surface	0 - 15:56 hrs	4.582	5.324	0.076	0.621	1,094.51	15.748	6.459	0	0	0	0	0	0
0203-036-035	5.33	290.679	2.466	90.157	Free Surface	0 - 15:56 hrs	5.638	5.959	0.31	0.531	200.523	15.74	6.146	0	0	0	0	0	0
0203-037-038	3.923	268.973	0.973	168.188	Backwater	0 - 12:17 hrs	9.397	9.397	0.625	1	100.785	15.775	5.364	3.721	3.721	3.805	0	2.893	0
0203-038-015	5	322.127	1.53	105.186	Backwater	0 - 13:04 hrs	5.357	5.816	0.327	1	216.941	15.727	4.989	3.243	3.751	3.243	0	3.243	0
0203-039-036	3.883	682.362	3.144	90.156	Free Surface	0 - 15:56 hrs	5.005	5.005	0.132	0.803	592.205	15.739	6.456	0	0	0	0	0	0
0203-040-034	3.98	279.318	0.963	90.118	Free Surface	0 - 15:59 hrs	5.961	6.192	0.323	0.867	189.2	15.729	5.998	0	0	9.42	0	0	0
0203-041-042	4.06	499.996	0.664	110.477	Backwater	0 - 11:56 hrs	3.485	4.409	0.221	1	389.52	28.657	10.421	7.429	7.459	7.562	0	0.003	0
0203-042-043	4.16	563.61	1.528	109.163	Backwater	0 - 11:56 hrs	4.282	4.395	0.194	1	454.447	28.622	6.861	7.515	7.515	8.848	0	0	0
0203-043-044	8.63	2,960.15	2.046	106.791	Free Surface	0 - 11:56 hrs	1.315	1.592	0.036	0.857	2,853.36	28.62	37.607	0	0	0	0	0	0
0203-044-045	8.63	367.618	0.032	102.686	Free Surface	0 - 16:08 hrs	0.824	1.52	0.279	0.876	264.932	28.617	38.345	0	0	0	0	0	0
0203-045-046	10.92	3,308.14	0.377	103.273	Free Surface	0 - 16:06 hrs	0.533	0.858	0.031	0.724	3,204.86	28.606	51.228	0	0	0	0	0	0
0203-046-047	16.9	4,107.02	0.223	107.232	Free Surface	0 - 12:15 hrs	0.744	1.395	0.026	0.467	3,999.79	28.57	32.987	0	0	0	0	0	0
0203-047-048	8.14	1,396.26	0.271	122.934	Free Surface	0 - 12:15 hrs	0.53	1.185	0.088	0.959	1,273.33	28.567	51.751	0	0	0	0	0	0
0203-048-049	7.17	1,567.97	0.556	111.381	Backwater	0 - 14:44 hrs	0.544	0.747	0.071	1	1,456.59	32.023	40.93	3.378	3.378	4.853	0	0	0
0203-049-050	8.06	304.652	0.023	111.891	Backwater	0 - 14:44 hrs	0.57	0.916	0.367	1	192.761	32.034	38.362	2.534	2.534	2.542	0	0	0
0203-050-004	8.06	279.054	0.019	112.373	Backwater	0 - 14:44 hrs	0.572	0.932	0.403	1	166.681	32.034	38.362	2.542	2.542	2.561	0	0	0
0203-051-530	9.53	1,383.85	0.423	136.779	Free Surface	0 - 12:18 hrs	0.813	1.464	0.099	0.936	1,247.07	38.385	27.018	0	0	0.737	0	0	0
0203-052-053	3	63.59	0.909	35.396	Backwater	0 - 12:15 hrs	5.007	5.007	0.557	1	28.194	1.037	2.999	1.582	1.582	1.584	0	0.232	1
0203-053-054	3	48.022	0.518	35.39	Backwater	0 - 12:15 hrs	5.007	5.007	0.737	1	12.632	1.041	2.997	1.584	1.586	1.584	0	0.735	1
0203-054-055	3	84.505	1.605	35.403	Backwater	0 - 12:15 hrs	5.008	5.008	0.419	1	49.102	1.046	2.984	1.584	1.584	1.638	0	0.013	1
0203-055-056	3.5	168.299	2.798	46.721	Backwater	0 - 12:27 hrs	4.856	5.232	0.278	1	121.578	3.62	3.469	1.599	1.602	1.636	0	0.002	0
0203-056-057	3.5	83.517	0.689	45.407	Backwater	0 - 12:44 hrs	4.72	4.72	0.544	1	38.109	3.621	3.498	1.657	1.663	1.704	0	1.598	0
0203-057-058	3	74.237	1.239	44.259	Backwater	0 - 13:36 hrs	6.261	6.261	0.596	1	29.978	3.576	3	1.766	1.77	1.778	0	1.549	0
0203-058-238	3.5	90.882	0.816	49.186	Backwater	0 - 12:02 hrs	5.112	5.112	0.541	1	41.696	3.932	3.498	1.711	1.711	1.906	0	0.012	0
0203-059-058	3	54.649	0.671	8.485	Backwater	0 - 13:38 hrs	1.229	3.181	0.155	1	46.164	0.354	2.998	1.64	1.64	1.712	0	0	1
0203-060-061	3.5	142.302	2.001	37.096	Free Surface	0 - 12:18 hrs	4.07	6.908	0.261	0.99	105.206	5.537	3.497	0	0	0.192	0	0	0
0203-061-238	3.5	172.123	2.927	38.831	Backwater	0 - 13:38 hrs	5.227	6.621	0.226	1	133.292	5.537	3.491	0.192	0.192	1.906	0	0	0
0203-062-063	5	162.88	0.391	103.211	Backwater	0 - 12:15 hrs	5.256	5.256	0.634	1	59.67	11.126	4.988	1.595	1.614	1.596	0	1.594	0
0203-063-064	5	130.257	0.25	103.212	Backwater	0 - 12:15 hrs	5.257	5.317	0.792	1	27.045	11.123	5	0.98	1.624	0.98	0	0.98	0
0203-064-065	5	183.236	0.495	103.215	Backwater	0 - 12:15 hrs	5.257	5.257	0.563	1	80.021	11.132	4.996	1.297	1.297	1.724	0	0	0
0203-065-066	5	159.984	0.377	103.216	Backwater	0 - 12:15 hrs	5.257	5.257	0.645	1	56.768	11.129	4.987	0.759	1.724	0.759	0	0.759	0
0203-066-067	5	161.359	0.384	103.214	Free Surface	0 - 12:15 hrs	5.294	5.294	0.64	0.976	58.145	11.124	4.997	0	0.759	0	0	0	0
0203-067-239	5	206.753	0.63	103.015	Free Surface	0 - 12:15 hrs	5.412	5.647	0.498	0.934	103.738	11.121	4.997	0	0	0	0	0	0
0203-068-215	3.066	1,149.61	20.197	27.804	Free Surface	0 - 12:15 hrs	6.433	6.435	0.024	0.292	1,121.81	0.817	9.551	0	0	0	0	0	0
0203-069-068	2	25.455	1.266	27.799	Free Surface	0 - 12:15 hrs	5.893	5.893	0.546	0.703	-2.344	0.817	1.998	0	0.194	0	0	0	0
0203-070-325	12.854	4,967.02	0.992	232.642	Free Surface	0 - 12:19 hrs	2.531	2.586	0.047	0.367	4,734.38	30.6	24.99	0	0	0	0	0	0
0203-071-060	3.5	187.895	3.488	36.879	Free Surface	0 - 13:38 hrs	5.369	5.623	0.196	0.84	151.016	5.537	3.499	0	0	0	0	0	0
0203-072-228	4.5	186.529	0.9	15.524	Free Surface	0 - 12:15 hrs	1.454	2.883	0.083	0.712	171.005	0.682	4.494	0	0	0	0	0	0
0203-073-074	4.5	4.183	0	21.403	Exceeds Capacity	0 - 12:04 hrs	1.435	2.035	5.117	1	-17.22	0.69	4.484	1.111	1.131	1.111	1.387	1.111	0
0203-074-075	4.5	221.385	1.267	27.254	Backwater	0 - 12:03 hrs	2.039	3.72	0.123	1	194.131	0.692	4.469	1.111	1.111	3.343	0	0	0
0203-075-076	4.5	325.803	2.745	29.777	Backwater	0 - 12:03 hrs	1.875	3.533	0.091	1	296.026	0.691	4.493	3.964	3.964	4.013	0	0.001	0
0203-076-078	3.5	68.953	0.47	47.14	Backwater	0 - 12:56 hrs	4.9	4.9	0.684	1	21.813	7.989	3.499	4.171	4.22	4.171	0	4.171	0
0203-077-073	4.5	160.442	0.666	18.532	Free Surface	0 - 12:04 hrs	1.323	2.275	0.116	0.924	141.91	0.683	4.402	0	0	1.131	0	0	0
0203-078-079	3.5	93.392	0.862	47.075	Backwater	0 - 13:36 hrs	4.893	4.893	0.504	1	46.317	7.989	3.5	4.171	4.171	4.251	0	0	3
0203-079-080	3.5	54.172	0.29	47.109	Backwater	0 - 13:37 hrs	4.896	4.896	0.87	1	7.063	7.987	3.5	4.185	4.251	4.185	0	4.185	7
0203-080-081	3.5	87.521	0.757	47.076	Backwater	0 - 13:34 hrs	4.893	4.893	0.538	1	40.445	7.986	3.5	4.185	4.185	4.293	0	0.034	2
0203-081-082	3.5	69.53	0.478	47.089	Backwater	0 - 13:34 hrs	4.894	4.894	0.677	1	22.441	7.985	3.5	4.208	4.294	4.208	0	4.208	5
0203-082-083	3.5	6.926	0.005	47.079	Exceeds Capacity	0 - 13:34 hrs	4.893	4.893	6.797	1	-40.153	7.984	3.5	3.992	4.215	3.992	9.103	3.992	6

Table B-5b. Existing System Analysis - Pipes/Channels
50-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-083-084	4	131.346	0.836	47.075	Backwater	0 - 13:23 hrs	3.746	4.021	0.358	1	84.271	7.984	4	1.474	1.474	3.991	0	0	0
0203-084-256	4	101.062	0.495	47.075	Backwater	0 - 13:23 hrs	3.746	3.746	0.466	1	53.987	7.985	4	4.022	4.024	4.026	0	4.014	0
0203-085-086	4	70.749	0.243	47.076	Free Surface	0 - 13:25 hrs	4.418	4.436	0.665	0.866	23.673	7.983	3.998	0	0	0	0	0	0
0203-086-087	4	154.972	1.164	47.083	Free Surface	0 - 13:21 hrs	4.679	4.808	0.304	0.915	107.889	7.983	3.999	0	0	0.009	0	0	0
0203-087-092	4.5	84.096	0.183	59.212	Free Surface	0 - 12:15 hrs	4.171	4.172	0.704	0.836	24.883	7.539	4.496	0	0	0	0	0	0
0203-088-089	3	82.098	1.515	48.104	Backwater	0 - 12:15 hrs	6.805	6.805	0.586	1	33.994	1.862	3	0.126	0.126	0.155	0	0.095	0
0203-089-090	3	60.036	0.81	48.113	Backwater	0 - 12:15 hrs	6.807	6.807	0.801	1	11.923	1.865	2.999	0.12	0.212	0.12	0	0.12	0
0203-090-091	3	65.069	0.952	48.122	Free Surface	0 - 12:15 hrs	6.89	6.89	0.74	0.964	16.947	1.866	3	0	0.12	0	0	0	0
0203-091-087	3	88.207	1.749	14.352	Free Surface	0 - 12:15 hrs	2.048	2.87	0.163	0.971	73.856	0.443	3	0	0	0.312	0	0	0
0203-091-093	3	49.976	0.561	33.368	Free Surface	0 - 12:15 hrs	4.788	5.062	0.668	0.959	16.609	2.306	2.998	0	0	0	0	0	0
0203-092-094	5	130.84	0.252	58.845	Free Surface	0 - 12:15 hrs	5.05	5.051	0.45	0.574	71.995	7.526	5	0	0	0	0	0	0
0203-093-094	3	32.421	0.236	33.227	Free Surface	0 - 12:15 hrs	4.865	4.866	1.025	0.929	-0.806	2.305	2.994	0	0.29	0	0.057	0	0
0203-094-338	2.97	136.306	0.132	90.125	Free Surface	0 - 12:15 hrs	1.74	1.798	0.661	0.859	46.181	9.83	29.793	0	0	0	0	0	0
0203-095-096	3.5	90.975	0.818	53.911	Backwater	0 - 11:51 hrs	5.603	5.603	0.593	1	37.064	12.009	3.5	6.083	6.088	6.085	0	6.082	8
0203-096-097	3.5	101.427	1.016	53.868	Backwater	0 - 11:51 hrs	5.599	5.599	0.531	1	47.559	11.999	3.499	6.086	6.086	6.104	0	6.082	7
0203-097-098	4	103.324	0.517	53.698	Backwater	0 - 13:37 hrs	4.273	4.273	0.52	1	49.626	11.994	4	6.045	6.075	6.045	0	6.045	0
0203-098-099	4	97.211	0.458	53.698	Free Surface	0 - 13:37 hrs	4.273	4.39	0.552	1	43.512	11.992	4	0	6.058	0	0	0	0
0203-099-100	4	100.312	0.488	53.696	Backwater	0 - 13:38 hrs	4.273	4.296	0.535	1	46.616	11.991	4	1.086	1.086	2.559	0	0	0
0203-100-101	4	83.923	0.341	53.696	Free Surface	0 - 13:38 hrs	4.385	4.385	0.64	0.938	30.227	11.99	3.999	0	2.559	0	0	0	0
0203-101-102	5	90.752	1.15	53.696	Free Surface	0 - 13:38 hrs	4.052	4.09	0.592	0.639	37.056	11.988	4.991	0	0	0	0	0	0
0203-102-103	5	185.211	0.506	53.695	Free Surface	0 - 13:38 hrs	4.346	4.5	0.29	0.602	131.516	11.989	4.995	0	0	0	0	0	0
0203-103-104	5	159.475	0.375	53.693	Free Surface	0 - 13:40 hrs	4.419	4.525	0.337	0.594	105.781	11.988	4.995	0	0	0	0	0	0
0203-104-341	5.5	207.433	0.382	53.689	Free Surface	0 - 13:40 hrs	4.216	4.324	0.259	0.537	153.744	11.981	5.496	0	0	0	0	0	0
0203-105-106	2	30.06	1.766	17.643	Backwater	0 - 14:07 hrs	5.616	5.636	0.587	1	12.418	2.628	2	3.395	3.889	3.395	0	3.395	3
0203-106-336	2	28.691	1.609	17.643	Backwater	0 - 14:07 hrs	5.616	5.742	0.615	1	11.048	2.627	1.999	3.395	3.395	3.674	0	1.153	4
0203-107-108	2	28.341	1.57	17.65	Backwater	0 - 14:07 hrs	5.688	6.302	0.623	1	10.691	2.619	1.987	2.066	3.799	2.066	0	1.127	1
0203-108-353	2.5	51.358	1.568	17.734	Backwater	0 - 14:03 hrs	3.865	4.218	0.345	1	33.624	2.616	2.499	1.882	1.882	8.72	0	0	0
0203-109-001	13.779	15,450.54	0.802	340.383	Free Surface	0 - 13:34 hrs	3.531	3.531	0.022	0.143	15,110.15	54.251	59.766	0	0	0	0	0	0
0203-110-109	16.67	43,091.18	5.225	340.387	Free Surface	0 - 13:34 hrs	5.978	5.978	0.008	0.154	42,750.79	54.256	38.063	0	0	0	0	0	0
0203-111-110	16.67	32,295.05	2.935	340.392	Free Surface	0 - 13:34 hrs	5.32	5.32	0.011	0.165	31,954.66	54.267	39.039	0	0	0	0	0	0
0203-112-218	7.321	243.809	0.423	245.261	Free Surface	0 - 14:02 hrs	5.234	5.479	1.006	0.904	-1.453	43.542	8.109	0	3.119	0	0.529	0	0
0203-113-357	8.464	406.283	0.082	359.199	Backwater	0 - 12:18 hrs	5.784	5.784	0.884	1	47.084	39.757	8.717	1.893	1.939	1.893	0	1.892	0
0203-114-355	6.954	1,349.50	0.794	283.621	Free Surface	0 - 12:21 hrs	4.854	5.655	0.21	0.911	1,065.88	35.214	10.045	0	0	0	0	0	0
0203-115-353	7.03	1,566.16	1.225	267.486	Free Surface	0 - 12:18 hrs	4.657	4.657	0.171	0.939	1,298.67	32.629	9.594	0	0	0.694	0	0	0
0203-116-115	9.15	3,747.00	0.711	268.533	Free Surface	0 - 12:17 hrs	3.109	3.524	0.072	0.718	3,478.47	32.661	19.593	0	0	0	0	0	0
0203-117-116	6.945	921.659	0.399	271.002	Free Surface	0 - 12:15 hrs	5.566	5.943	0.294	0.785	650.657	32.67	9.607	0	0	0	0	0	0
0203-118-372	8.563	803.823	0.95	201.92	Free Surface	0 - 16:20 hrs	2.593	4.367	0.251	0.897	601.903	63.349	17.855	0	0	5.907	0	0	0
0203-119-366	7.336	447.07	0.386	120.647	Free Surface	0 - 15:47 hrs	1.951	3.701	0.27	0.9	326.423	32.898	21.976	0	0	3.721	0	0	0
0203-120-003	22.5	12,809.94	0.912	298.234	Free Surface	0 - 12:26 hrs	5.736	5.736	0.023	0.257	12,511.70	16.975	17.939	0	0	0	0	0	0
0203-121-120	17.772	22,770.23	2.632	298.33	Free Surface	0 - 12:25 hrs	2.693	2.721	0.013	0.303	22,471.90	16.979	34.449	0	0	0	0	0	0
0203-122-392	17.772	3,239.21	0.053	298.74	Free Surface	0 - 12:23 hrs	3.1	3.111	0.092	0.279	2,940.47	16.984	32.662	0	0	0	0	0	0
0203-123-122	20	2,602.91	0.05	298.917	Free Surface	0 - 12:22 hrs	3.059	3.06	0.115	0.271	2,303.99	16.999	18	0	0	0	0	0	0
0203-124-391	6.887	1,318.52	1.785	299.26	Free Surface	0 - 12:22 hrs	3.212	3.273	0.227	0.894	1,019.26	17.016	27.972	0	0	0	0	0	0
0203-125-124	6.724	2,774.56	11.136	117.865	Free Surface	0 - 12:22 hrs	3.046	3.126	0.042	0.606	2,656.70	3.617	18.992	0	0	0	0	0	0
0203-126-125	6.174	1,373.44	3.659	117.866	Free Surface	0 - 12:22 hrs	5.91	5.91	0.086	0.457	1,255.57	3.618	14.123	0	0	0	0	0	0
0203-127-126	4.532	720.569	2.378	117.875	Free Surface	0 - 12:21 hrs	3.699	3.725	0.164	0.648	602.694	3.619	21.592	0	0	0	0	0	0
0203-128-127	2.699	140.425	0.406	117.893	Free Surface	0 - 12:21 hrs	3.024	3.031	0.84	0.924	22.532	3.622	27.314	0	0.252	0	0	0	0
0203-128-129	4.861	7.073	0	55.645	Exceeds Capacity	0 - 12:17 hrs	0.714	1.177	7.867	1	-48.572	1.994	24.715	0.162	0.209	0.162	2.794	0.038	0
0203-129-342	4.861	498.481	0.673	76.401	Backwater	0 - 12:15 hrs	0.98	1.885	0.153	1	422.08	4.039	24.715	0.162	0.162	3.371	0	0	0
0203-130-124	7.936	627.086	0.675	181.834	Free Surface	0 - 12:22 hrs	3.27	3.994	0.29	0.739	445.253	13.403	16.416	0	0	0	0	0	0
0203-131-130	7.259	399.334	0.298	182.118	Free Surface	0 - 12:22 hrs	3.105	3.384	0.456	0.801	217.216	13.407	20.177	0	0	0	0	0	0
0203-132-131	8.018	540.547	0.563	182.935	Free Surface	0 - 12:19 hrs	3.844	3.927	0.338	0.707	357.612	13.417	15.217	0	0	0	0	0	0
0203-133-132	6.815	448.438	0.712	183.079	Free Surface	0 - 12:18 hrs	4.213	4.24	0.408	0.787	265.359	13.427	16.212	0	0	0	0	0	0
0203-134-328	4.533	193.541	0.93	130.677	Backwater	0 - 13:14 hrs	3.853	3.853	0.675	1	62.865	8.479	13.642	1.305	1.305	1.35	0	0	0
0203-135-005	9.15	3,341.27	2.172	83.709	Free Surface	0 - 12:37 hrs	7.747	10.121	0.025	0.209	3,257.56	4.966	11.26	0	0	0	0	0	2
0203-136-437	5.947	17.321	0	83.902	Free Surface	0 - 12:34 hrs	2.394	2.415	4.844	0.495	-66.581	5.003	21.112	0	0	0	2.301	0	0
0203-137-136	6.797	23.695	0	84.626	Free Surface	0 - 12:32 hrs	1.32	1.335	3.571	0.545	-60.931	5.025	30.697	0	0	0	1.733	0	0
0203-138-137	6.268	600.479	0.087	92.08	Free Surface	0 - 12:22 hrs	1.075	1.187	0.153	0.588	508.398	5.068	43.628	0	0	0	0	0	0
0203-139-432	4.941	1,402.11	2.904	30.634	Free Surface	0 - 12:27 hrs	0.334	1.042	0.022	0.974	1,371.48	0.873	30.712	0	0	0.27	0	0	0
0203-140-139	9.026	1,769.19	0.482	28.082	Free Surface	0 - 12:29 hrs	0.426	1.765	0.016	0.513	1,741.11	0.884	30.561	0	0	0	0	0	0
0203-141-140	8.612	1,878.86	0.563	24.592	Free Surface	0 - 12:25 hrs	0.369	1.108	0.013	0.486	1,854.26	0.891	30.515	0	0	0	0	0	0
0203-142-141	6.92	832.122	0.288	26.043	Free Surface	0 - 12:08 hrs	1.272	1.555	0.031	0.459	806.079	0.885	24.083	0	0	0	0	0	0
0203-143-004	17.323	21,642.13	0.992	288.179	Free Surface	0 - 13:18 hrs	3.458	3.458	0.013	0.086	21,353.95	73.312	63.841	0	0	0	0	0	0
0203-144-143	19	992.533	0	288.184	Free Surface	0 - 13:17 hrs	2.413	2.413	0.29	0.097	704.349	73.363	65	0	0	0	0	0	0
0203-145-144	18.74	4,051.12	0.094	288.2	Free Surface	0 - 13:15 hrs	4.889	4.89	0.071	0.233	3,762.92	73.411	26.969	0	0	0	0	0	0
0203-146-145	10.21	90.41	0.001	288.198	Free Surface	0 - 13:15 hrs	2.059	2.059	3.188	0.672	-197.789	73.49	37.779	0	0	0	9.279	0	0
0203-147-146	9.691	2,334.74	0.658	288.202	Free Surface	0 - 13:14 hrs	2.015	2.015	0.123	0.72	2,046.54	73.529	33.411	0	0	0	0	0	0
0203-148-147	15.381	252.174	0.002	288.205	Free Surface	0 - 13:14 hrs	2.904	2.904	1.143	0.468	-36.031	73.548	25.382	0	0	0	7.386	0	0
0203-149-148	14.554	2,720.41	0.165	288.21	Free Surface	0 - 13:14 hrs	2	2.001	0.106	0.514	2,432.20	73.568	34.225	0	0	0	0	0	0
0203-150-149	7.733	78.841	0.002	288.217	Free Surface	0 - 13:12 hrs	1.623	1.623	3.656	0.982	-209.376	73.589	45.226	0	0	0	9.558	0	0
0203-151-150	8.225	2,435.01	1.458	288.229	Free Surface	0 - 13:12 hrs	1.694	1.695	0.118	0.893	2,146.78	73.609	44.551	0	0	0	0	0	0
0203-152-151	16.837	2,557.95	0.144	288.276	Free Surface	0 - 13:11 hrs	2.767	2.769	0.113	0.426	2,269.67	73.646	28.275	0	0	0	0	0	0
0203-153-152	8.005	344.331	0.082	288.332	Free Surface	0 - 13:10 hrs	2.449	2.494	0.837	0.932	55.999	73.682	31.073	0	0	0	0	0	0
0203-154-153	7.008	33.026	0.001	288.373	Exceeds Capacity	0 - 13:08 hrs	2.247	2.247	8.732	1	-255.347	73.705	35.833	7.571	7.704	7.571	14.18	7.571	0
0203-155-154	10.079	70.597	0.001	288.457	Free Surface	0 - 13:07 hrs	1.811	1.944	4.086	0.796	-217.859	73.737	39.721	0	0	0	9.838	0	0
0203-156-155	9.089	2,711.45	2.503	288.554	Free Surface	0 - 13:07 hrs	2.341	2.451	0.106	0.865	2,422.89	73.768	24.364	0	0	0	0	0	0
0203-157-156	11.338	119.826	0.002	288.603	Free Surface	0 - 13:06 hrs	2.584	2.752	2.409	0.685	-168.777	73.781	23.916	0	0	0	8.852	0	0
0203-158-157	19.416	423.315	0.002	288.641	Free Surface	0 - 13:06 hrs	2.17	2.281	0.682	0.416	134.674	73.791	26.994	0	0	0	0	0	0
0203-159-158	9.951	100.399	0.001	288.783	Free Surface	0 - 13:04 hrs	1.22	1.347	2.876	0.829	-188.384	73.823	54.226	0	0	0	9.065	0	0
0203-160-159	7.221	2,619.35	2.339	289.015	Backwater	0 - 13:03 hrs	1.528	1.587	0.11	1	2,330.34	73.862	48.174	1.764	1.764	7.742	0	0	0
0203-161-160	7.818	3,015.45	4.818	289.164	Free Surface	0 - 13:03 hrs	3.272	3.842	0.096	0.678	2,726.29	73.887	19.176	0	0	0	0	0	0
0203-162-161	7.818	1,242.62	0.818	291.61	Free Surface	0 - 12:18 hrs	5.584	5.684	0.235	0.449	951.009	73.906	18.245	0	0	0	0	0	0

Table B-5b. Existing System Analysis - Pipes/Channels
50-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-163-428	7.946	723.967	0.687	263.966	Free Surface	0 - 17:22 hrs	4.239	4.251	0.365	0.675	460.001	68.377	13.513	0	0	0	0	0	0
0203-164-163	8.07	714.158	0.628	263.956	Free Surface	0 - 17:22 hrs	4.76	4.761	0.37	0.6	450.202	68.424	13.433	0	0	0	0	0	0
0203-165-364	8.07	2,155.64	5.723	263.956	Free Surface	0 - 17:21 hrs	4.34	4.34	0.122	0.649	1,891.69	68.458	13.581	0	0	0	0	0	0
0203-166-362	7.943	1,142.03	1.468	263.957	Free Surface	0 - 17:20 hrs	3.655	3.655	0.231	0.713	878.069	68.527	14.212	0	0	0	0	0	0
0203-167-166	8.144	114.204	0.071	263.957	Free Surface	0 - 17:20 hrs	4.58	4.58	2.311	0.964	-149.753	68.566	7.867	0	7.361	0	8.725	0	0
0203-168-167	8.144	444.795	1.081	263.959	Backwater	0 - 17:16 hrs	4.403	4.403	0.593	1	180.836	68.571	7.867	6.896	6.896	7.361	0	0	0
0203-169-168	4.473	1,222.99	4.319	263.971	Backwater	0 - 17:10 hrs	3.427	3.427	0.216	1	959.019	68.621	18.555	7.257	7.257	8.844	0	0	0
0203-170-169	4.473	203.446	0.12	215.031	Exceeds Capacity	0 - 14:15 hrs	2.792	3.274	1.057	1	-11.585	50.087	18.555	7.243	7.319	7.257	4.863	6.742	0
0203-171-410	6.907	1,099.60	0.666	215.154	Free Surface	0 - 14:14 hrs	1.624	1.764	0.196	0.972	884.45	50.104	21.197	0	0	0	0	0	0
0203-172-171	6.907	848.777	0.397	215.26	Free Surface	0 - 14:14 hrs	1.707	1.939	0.254	0.927	633.517	50.128	21.141	0	0	0	0	0	0
0203-173-403	4.414	349.406	0.283	231.182	Backwater	0 - 14:12 hrs	2.764	2.764	0.662	1	118.224	50.32	21.335	6.841	6.868	6.847	0	5.76	0
0203-174-169	4.533	21.186	0.003	136.764	Exceeds Capacity	0 - 19:32 hrs	2.511	3.196	6.455	1	-115.579	18.585	14.018	7.208	7.304	7.208	9.354	7.208	0
0203-175-426	4.526	264.171	0.399	122.668	Backwater	0 - 19:45 hrs	2.155	2.206	0.464	1	141.503	18.58	13.596	6.647	6.647	7.158	0	0	0
0203-176-175	4.505	162.954	0.141	122.296	Backwater	0 - 19:45 hrs	2.088	2.139	0.75	1	40.657	18.566	14.298	6.763	6.868	6.768	0	1.782	0
0203-177-176	4.26	265.263	0.478	111.504	Backwater	0 - 19:46 hrs	2.06	2.073	0.42	1	153.759	18.579	14.066	7.042	7.042	8.324	0	0	0
0203-178-177	4.484	537.161	2.016	162.084	Backwater	0 - 12:33 hrs	3.275	3.286	0.302	1	375.077	18.577	13.3	0.156	0.156	8.299	0	0	0
0203-179-178	4.423	225.92	0.285	163.821	Free Surface	0 - 12:33 hrs	3.093	3.123	0.725	0.937	62.099	18.598	13.891	0	0	1.2	0	0	0
0203-180-179	11.458	179.059	0.002	164.556	Free Surface	0 - 12:32 hrs	2.232	2.262	0.919	0.366	14.504	18.61	23.021	0	0	0	0	0	0
0203-181-424	7.728	54.713	0.001	168.761	Free Surface	0 - 12:29 hrs	2.429	2.627	3.085	0.507	-114.049	18.628	23.544	0	0	0	4.099	0	0
0203-182-181	8.53	826.671	0.097	170.438	Free Surface	0 - 12:27 hrs	2.138	2.332	0.206	0.496	656.232	18.635	31.647	0	0	0	0	0	0
0203-183-182	8.571	1,197.10	0.206	172.07	Free Surface	0 - 12:26 hrs	1.856	1.915	0.144	0.531	1,025.03	18.644	29.872	0	0	0	0	0	0
0203-184-183	7.568	1,253.86	3.236	172.964	Free Surface	0 - 12:26 hrs	4.54	4.643	0.138	0.638	1,080.90	18.651	12.744	0	0	0	0	0	0
0203-185-184	7.408	864.065	1.475	21.58	Free Surface	0 - 12:40 hrs	0.576	1.298	0.025	0.647	842.485	1.864	14.112	0	0	0	0	0	0
0203-186-185	6.59	1,544.80	3.044	21.002	Free Surface	0 - 12:41 hrs	0.551	1.055	0.014	0.554	1,523.80	1.865	16.362	0	0	0	0	0	0
0203-187-246	7.439	443.039	0.112	159.005	Free Surface	0 - 12:22 hrs	2.322	2.999	0.359	0.68	284.033	16.797	28.046	0	0	0	0	0	0
0203-188-380	9.535	234.929	0.033	167.513	Free Surface	0 - 12:18 hrs	2.511	2.532	0.713	0.686	67.416	16.825	20.495	0	0	0	0	0	0
0203-189-188	10.121	1,440.98	1.382	170.67	Free Surface	0 - 12:15 hrs	2.8	2.836	0.118	0.685	1,270.31	16.838	17.738	0	0	0	0	0	0
0203-190-189	9.496	1,159.96	1.946	26.485	Free Surface	0 - 12:22 hrs	0.71	2.794	0.023	0.639	1,133.48	1.886	13.122	0	0	0	0	0	0
0203-191-190	11.035	1,486.19	4.607	25.357	Free Surface	0 - 12:36 hrs	2.451	3.257	0.017	0.327	1,460.83	1.887	6.682	0	0	0	0	0	0
0203-192-419	6.08	388.922	0.56	33.972	Free Surface	0 - 12:25 hrs	0.685	1.923	0.087	0.864	354.95	1.876	14.856	0	0	1.417	0	0	0
0203-193-192	4.437	919.169	2.701	21.665	Free Surface	0 - 12:15 hrs	1.418	3.007	0.024	0.492	897.504	1.071	20.274	0	0	0	0	0	0
0203-194-193	3.615	209.313	0.967	21.889	Free Surface	0 - 12:15 hrs	3.054	3.054	0.105	0.27	187.424	1.071	8.366	0	0	0	0	0	0
0203-195-402	4.497	425.77	0.454	457.878	Exceeds Capacity	0 - 12:18 hrs	5.626	5.626	1.075	1	-32.107	50.321	18.833	4.145	4.145	6.943	0.348	1.054	0
0203-196-401	3.568	232.948	0.404	144.322	Backwater	0 - 12:12 hrs	3.177	3.375	0.62	1	88.626	8.957	20.359	0.226	0.226	0.803	0	0	1
0203-197-196	3.568	505.968	1.907	91.297	Free Surface	0 - 12:15 hrs	3.003	3.416	0.18	0.828	414.671	7.298	19.833	0	0	0.226	0	0	0
0203-198-330	2.169	48.278	0.68	49.426	Exceeds Capacity	0 - 12:07 hrs	3.5	3.5	1.024	1	-1.148	4.671	10.228	0.896	0.934	0.917	0.036	0.832	0
0203-199-197	5.362	628.759	0.855	94.327	Free Surface	0 - 12:19 hrs	4.125	4.41	0.15	0.415	534.432	7.305	15.837	0	0	0	0	0	0
0203-200-199	6.864	525.155	0.561	20.716	Free Surface	0 - 12:15 hrs	0.992	0.992	0.039	0.388	504.439	0.692	10.458	0	0	0	0	0	0
0203-201-202	14.057	1,337.49	0.537	20.376	Free Surface	0 - 12:04 hrs	2.31	2.871	0.015	0.31	1,317.11	3.742	6.085	0	0	0	0	0	0
0203-202-204	4.551	38.21	0.033	29.817	Backwater	0 - 12:18 hrs	0.883	1.532	0.78	1	8.393	3.741	10.685	0.159	0.162	0.159	0	0.159	0
0203-203-204	4.685	59.632	0.106	49.833	Free Surface	0 - 12:19 hrs	2.064	2.826	0.836	0.918	9.798	3.905	10.631	0	0	0	0	0	0
0203-204-205	4.769	902.174	3.745	155.032	Backwater	0 - 12:15 hrs	2.287	2.535	0.172	1	747.142	12.418	24.737	0.101	0.101	0.147	0	0	0
0203-205-394	4.769	274.159	0.346	155.017	Backwater	0 - 12:15 hrs	2.287	2.669	0.565	1	119.142	12.409	24.737	0.113	0.147	0.113	0	0.113	1
0203-206-207	5.829	866.55	1.228	145.748	Free Surface	0 - 12:18 hrs	2.289	2.57	0.168	0.824	720.802	12.325	35.108	0	0	11.93	0	0	0
0203-207-209	8.65	1,034.29	0.319	139.489	Free Surface	0 - 12:18 hrs	0.941	1.03	0.135	0.976	894.796	11.887	40.053	0	0	10.968	0	0	0
0203-208-212	1.777	31.788	0.523	24.627	Backwater	0 - 17:15 hrs	2.035	2.035	0.775	1	7.161	8.999	14.184	1.666	1.666	11.91	0	0	0
0203-209-208	1.163	9.217	1.556	24.627	Exceeds Capacity	0 - 17:14 hrs	8.478	8.478	2.672	1	-15.41	9.006	4.297	12.338	13.872	12.338	12.874	12.338	0
0203-210-209	5.187	692.46	5.419	114.231	Backwater	0 - 12:18 hrs	2.649	2.797	0.165	1	578.229	2.381	14.214	11.931	11.931	12.018	0	0	0
0203-211-210	3.936	59.684	0.584	29.462	Backwater	0 - 12:11 hrs	1.973	1.973	0.494	1	30.222	0.212	6.01	11.992	11.992	12	0	0.109	0
0203-212-213	1.777	27.411	0.389	24.627	Backwater	0 - 17:16 hrs	1.933	1.938	0.898	1	2.784	8.977	14.184	3.135	11.91	3.187	0	1.972	0
0203-213-217	5.579	277.504	0.202	46.257	Free Surface	0 - 12:18 hrs	1.451	2.095	0.167	0.547	231.247	9.767	15.132	0	0	0	0	0	0
0203-214-213	6.004	529.609	0.526	27.333	Free Surface	0 - 12:15 hrs	0.981	1.024	0.052	0.486	502.276	0.812	15.035	0	0	0	0	0	0
0203-215-214	6.004	1,441.56	3.896	27.787	Free Surface	0 - 12:15 hrs	1.856	1.879	0.019	0.322	1,413.77	0.817	11.705	0	0	0	0	0	0
0203-216-069	3.066	755.983	8.734	29.142	Free Surface	0 - 12:15 hrs	1.292	3.109	0.039	0.684	726.841	0.817	21.929	0	0	0	0	0	0
0203-217-397	4	240.254	2.091	46.242	Free Surface	0 - 12:18 hrs	1.482	1.864	0.192	0.867	194.012	9.756	9	0	0	0	0	0	0
0203-218-360	8	616.736	0.931	340.397	Free Surface	0 - 13:34 hrs	6.917	6.917	0.552	0.513	276.339	54.299	12	0	0	0	0	0	0
0203-219-218	15.742	3,098.77	0.197	100.535	Free Surface	0 - 13:15 hrs	1.438	1.591	0.032	0.376	2,998.24	10.786	23.949	0	0	0	0	0	0
0203-220-219	7.957	1,410.25	0.559	100.747	Free Surface	0 - 13:14 hrs	1.319	1.813	0.071	0.587	1,309.51	10.835	26.984	0	0	0	0	0	0
0203-221-352	6	472.126	0.361	273.009	Backwater	0 - 12:15 hrs	5.688	5.702	0.578	1	199.117	32.692	8	0.168	0.472	0.168	0	0.168	0
0203-222-107	2	27.207	1.446	17.647	Backwater	0 - 14:07 hrs	5.617	5.676	0.649	1	9.56	2.622	2	2.992	2.992	3.799	0	0.129	4
0203-223-358	6	781.339	0.561	268.431	Backwater	0 - 12:45 hrs	4.474	4.474	0.344	1	512.908	39.755	10	2.09	2.135	2.09	0	2.09	0
0203-224-475	3	31.878	0.228	33.027	Exceeds Capacity	0 - 15:17 hrs	4.672	4.672	1.036	1	-1.149	3.877	3	3.525	3.525	3.531	0.128	3.524	0
0203-225-422	2.5	28.674	0.489	22.568	Backwater	0 - 12:15 hrs	4.597	4.597	0.787	1	6.106	1.073	2.499	0.054	0.11	0.054	0	0.054	0
0203-226-227	3.5	48.818	0.235	77.388	Exceeds Capacity	0 - 12:17 hrs	8.044	8.044	1.585	1	-28.57	7.25	3.5	4.255	4.27	4.258	0.905	3.758	6
0203-227-076	3.5	40.108	0.159	74.985	Exceeds Capacity	0 - 12:03 hrs	7.794	7.794	1.87	1	-34.877	7.297	3.5	4.22	4.258	4.22	1.696	4.216	4
0203-228-077	4.5	123.55	0.395	15.463	Free Surface	0 - 12:04 hrs	1.272	2.931	0.125	0.809	108.087	0.681	4.364	0	0	0	0	0	0
0203-229-511	2.25	27.334	0.779	20.355	Backwater	0 - 14:00 hrs	5.119	5.119	0.745	1	6.979	3.75	2.249	5.178	5.189	5.18	0	5.173	0
0203-230-512	2.5	22.565	0.303	20.355	Free Surface	0 - 14:00 hrs	4.79	4.79	0.902	0.808	2.21	3.746	2.499	0	5.178	0	0	0	0
0203-231-514	3	56.333	0.713	20.355	Free Surface	0 - 14:02 hrs	4.287	4.427	0.361	0.637	35.978	3.742	3	0	0	0	0	0	0
0203-232-233	3.5	113.931	1.282	20.355	Free Surface	0 - 14:03 hrs	6.16	6.16	0.179	0.376	93.576	3.743	3.39	0	0	0	0	0	0
0203-233-516	3.5	100.268	0.993	20.355	Free Surface	0 - 14:03 hrs	5.049	5.324	0.203	0.436	79.913	3.745	3.471	0	0	0	0	0	0
0203-234-529	4	56.772	0.156	36.844	Free Surface	0 - 13:25 hrs	2.976	2.976	0.649	0.957	19.928	5.541	3.99	0	0	0	0	0	0
0203-235-236	3.5	54.672	0.295	36.844	Free Surface	0 - 13:26 hrs	5.143	5.143	0.674	0.697	17.828	5.539	3.496	0	0	0	0	0	0
0203-236-237	3.5	140.904	1.961	36.844	Free Surface	0 - 13:26 hrs	6.712	6.738	0.261	0.555	104.06	5.539	3.498	0	0	0	0	0	0
0203-237-071	3.5	113.012	1.262	36.843	Free Surface	0 - 13:26 hrs	5.335	5.431	0.326	0.7	76.169	5.538	3.486	0	0	0	0	0	0
0203-238-062	5	380.356	2.133	103.21	Backwater	0 - 12:15 hrs	5.256	5.256	0.271	1	277.146	11.125	4.998	1.539	1.617	1.539	0	1.539	0
0203-239-245	5	163.665	0.393	146.566	Free Surface	0 - 12:18 hrs	3.31	3.311	0.896	0.886	17.099	20.849	10	0	0	0	0	0	0
0203-240-494	4	124.539	0.752	64.123	Backwater	0 - 13:26 hrs	5.103	5.103	0.515	1	60.416	4.594	3.973	1.502	1.549	2.114	0	0.016	0
0203-241-254	3	38.818	0.339	39.741	Exceeds Capacity	0 - 12:15 hrs	5.622	5.622	1.024	1	-0.923	1.452	3	1.142	1.142	2.973	0.125	0.319	0
0203-242-243	4.333	114.727	0.416	101.013	Backwater	0 - 13:12 hrs	6.849	6.849	0.88	1	13.715	10.841	4.333	2.562	2.636	2.603	0	2.533	1
0203-243-361	4.333	74.203	0.174	102.761	Free Surface	0 - 13:36 hrs	7.218	7.218	1.385	0.954	-28.558	10.852	4.333	0	2.603	0	2.563	0	0
0203-244-462	5.737	112.706	0.521	103.834	Backwater	0 - 15:45 hrs	3.773	3.773	0.921	1	8.872	32.9	6.184	5.761	10.027	5.761	0	5.761	0

Table B-5b. Existing System Analysis - Pipes/Channels
50-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-245-070	5	39.928	0.023	146.537	Free Surface	0 - 12:18 hrs	4.402	4.408	3.67	0.666	-106.609	20.834	10	0	0	0	5.185	0	0
0203-246-417	7.439	3,676.70	7.719	155.51	Free Surface	0 - 12:22 hrs	1.933	4.376	0.042	0.728	3,521.19	16.795	30.019	0	0	0	0	0	0
0203-247-602	12.356	1,517.96	0.118	112.663	Free Surface	0 - 17:37 hrs	2.729	2.73	0.074	0.242	1,405.30	46.184	19.156	0	0	0	0	0	0
0203-248-318	3	67.56	1.026	34.74	Backwater	0 - 17:02 hrs	4.915	4.915	0.514	1	32.82	13.278	3	12.507	12.687	12.507	0	12.507	0
0203-249-196	2.151	129.724	3.804	56.499	Free Surface	0 - 12:15 hrs	4.861	4.861	0.436	0.832	73.225	1.634	9.321	0	0	0.917	0	0	0
0203-250-545	3.91	89.055	0.375	76.664	Backwater	0 - 13:26 hrs	2.979	2.979	0.861	1	12.391	15.022	7.382	8.755	8.755	12.31	0	2.795	0
0203-251-546	5.09	136.033	0.361	34.734	Free Surface	0 - 17:06 hrs	1.084	1.252	0.255	0.905	101.299	13.361	7.782	0	0	0	0	0	0
0203-252-626	6.45	1,853.34	4.54	93.23	Free Surface	0 - 13:03 hrs	2.258	4.12	0.05	0.682	1,760.11	9.623	21.613	0	0	0.312	0	0	0
0203-253-434	5.141	97.055	0.011	44.695	Backwater	0 - 12:26 hrs	0.344	0.344	0.461	1	52.359	1.888	45.615	0.327	0.329	0.327	0	0.303	0
0203-254-335	10.591	74.207	0	149.782	Free Surface	0 - 12:18 hrs	2.973	3.258	2.018	0.405	-75.575	14.214	24.665	0	0	0	1.642	0	2
0203-255-635	4.56	164.413	1.087	40.378	Free Surface	0 - 12:52 hrs	2.985	3.971	0.246	0.614	124.036	14.233	6.563	0	0	0	0	0	0
0203-256-085	4	33.719	0.055	47.075	Free Surface	0 - 13:25 hrs	3.82	3.82	1.396	0.964	-13.357	7.984	4	0	0	4.026	4.231	0	0
0203-257-321	4.392	206.69	0.099	29.826	Free Surface	0 - 13:42 hrs	1.013	1.154	0.144	0.536	176.864	5.447	25.025	0	0	0	0	0	0
0203-258-257	3	2.934	0.002	29.826	Free Surface	0 - 13:42 hrs	4.435	4.457	10.167	0.905	-26.893	5.45	3	0	4.448	0	16.01	0	0
0203-259-258	3	44.007	0.435	29.826	Backwater	0 - 13:42 hrs	4.22	4.22	0.678	1	14.181	5.453	3	4.387	4.387	4.448	0	4.371	0
0203-260-259	3	40.111	0.214	29.837	Backwater	0 - 11:59 hrs	4.221	4.221	0.744	1	10.274	5.45	2.999	4.377	4.383	4.387	0	4.372	1
0203-261-260	3	38.498	0.333	31.474	Backwater	0 - 11:57 hrs	4.534	4.535	0.818	1	7.024	5.449	3	4.382	4.405	4.383	0	4.378	8
0203-262-261	2.5	26.97	0.432	31.638	Exceeds Capacity	0 - 11:56 hrs	6.445	6.445	1.173	1	-4.669	5.45	2.5	4.45	4.485	4.455	4.43	4.44	1
0203-263-262	3	37.42	0.315	31.721	Backwater	0 - 12:30 hrs	4.488	4.488	0.848	1	5.699	5.452	2.999	4.422	4.424	4.436	0	4.411	0
0203-264-265	2	19.5	0.743	18.276	Backwater	0 - 12:03 hrs	5.836	5.837	0.937	1	1.225	1.022	2	0.798	0.806	0.814	0	0.798	0
0203-265-266	3	22.859	0.117	18.033	Backwater	0 - 12:21 hrs	2.551	2.551	0.789	1	4.825	1.024	2.998	0.785	0.799	0.785	0	0.785	0
0203-266-267	3	53.494	0.643	18.032	Backwater	0 - 12:21 hrs	2.551	2.551	0.337	1	35.461	1.021	2.998	0.638	0.798	0.638	0	0.638	0
0203-267-318	3	49.041	0.541	18.029	Backwater	0 - 12:22 hrs	2.551	2.551	0.368	1	31.012	1.015	3	0.638	0.638	12.507	0	0	0
0203-268-631	12.401	4,258.40	0.223	973.994	Free Surface	0 - 12:42 hrs	2.936	2.987	0.229	0.654	3,284.41	211.923	64.37	0	0	0	0	0	0
0203-269-268	3.496	26.348	0.192	35.246	Free Surface	0 - 12:41 hrs	3.491	3.635	1.338	0.766	-8.897	5.787	4.257	0	4.144	0	4.054	0	0
0203-270-658	12.11	5,684.14	1.865	113.549	Free Surface	0 - 13:07 hrs	0.732	1.466	0.02	0.652	5,570.59	13.355	32.86	0	0	0	0	0	0
0203-271-662	2.89	97.449	1.376	92.189	Backwater	0 - 12:22 hrs	5.75	5.75	0.946	1	5.26	6.009	6.37	0.923	0.923	2.221	0	0.853	0
0203-272-273	4	127.985	0.794	70.928	Free Surface	0 - 12:11 hrs	8.416	8.679	0.554	0.847	57.057	10.812	3.993	0	0	1.098	0	0	0
0203-273-617	10.9	5,582.39	1.231	74.48	Free Surface	0 - 13:52 hrs	0.368	1.352	0.013	0.699	5,507.91	10.831	39.614	0	0	0.837	0	0	0
0203-274-275	3.92	107.358	0.572	75.262	Free Surface	0 - 13:27 hrs	7.412	7.412	0.701	0.89	32.096	10.945	3.177	0	3.726	0	0	0	0
0203-275-276	4	208.467	0.182	75.26	Free Surface	0 - 13:27 hrs	3.358	3.358	0.361	0.8	133.207	10.944	7	0	0	0	0	0	0
0203-276-277	4.1	200.517	0.198	75.257	Free Surface	0 - 13:27 hrs	4.973	4.973	0.375	0.624	125.26	10.936	6.752	0	0	0	0	0	0
0203-277-629	4.23	291.179	3.455	75.257	Free Surface	0 - 13:27 hrs	4.069	4.738	0.258	0.709	215.922	10.934	6.991	0	0	2.421	0	0	0
0203-278-274	4	56.829	0.054	30.461	Backwater	0 - 12:26 hrs	1.523	1.523	0.536	1	26.368	2.476	5	3.415	3.415	3.653	0	1.175	1
0203-279-278	3.5	88.814	0.779	30.461	Backwater	0 - 12:26 hrs	3.166	3.166	0.343	1	58.353	2.471	3.499	1.495	1.495	3.756	0	0	0
0203-280-279	3.5	56.3	0.313	30.461	Backwater	0 - 12:26 hrs	3.166	3.614	0.541	1	25.838	2.47	3.461	1.478	1.478	1.495	0	0.752	0
0203-281-280	3	43.759	0.43	30.462	Backwater	0 - 12:26 hrs	4.309	4.309	0.696	1	13.297	2.469	3	1.493	1.493	1.512	0	1.477	0
0203-282-281	3	33.701	0.255	30.462	Backwater	0 - 12:26 hrs	4.31	4.31	0.904	1	3.239	2.468	2.999	1.481	1.494	1.482	0	1.481	0
0203-283-274	3.5	66.952	0.443	59.149	Backwater	0 - 14:40 hrs	6.148	6.148	0.883	1	7.802	8.468	3.5	3.732	3.732	3.771	0	3.124	0
0203-284-297	3.5	2.371	0.001	98.027	Exceeds Capacity	0 - 12:26 hrs	10.189	10.189	41.339	1	-95.655	7.546	3.499	4.051	4.105	4.051	19.759	4.05	0
0203-285-534	3	77.681	1.356	22.312	Backwater	0 - 14:33 hrs	3.514	3.582	0.287	1	55.369	7.514	3	1.042	1.042	2.451	0	0	0
0203-286-285	3	90.715	1.85	20.809	Free Surface	0 - 14:33 hrs	4.448	4.926	0.229	0.852	69.906	7.514	2.999	0	0	1.042	0	0	0
0203-287-286	3	68.923	1.068	20.725	Free Surface	0 - 16:01 hrs	5.312	5.331	0.301	0.602	48.198	7.515	3	0	0	0	0	0	0
0203-288-287	3	52.782	0.626	20.725	Free Surface	0 - 16:01 hrs	4.259	4.415	0.393	0.65	32.057	7.515	2.999	0	0	0	0	0	0
0203-289-288	3	35.822	0.288	20.725	Free Surface	0 - 16:00 hrs	3.487	3.487	0.579	0.784	15.097	7.518	3	0	0	0	0	0	0
0203-290-304	2.5	33.019	0.648	20.725	Free Surface	0 - 16:00 hrs	5	5	0.628	0.787	12.293	7.52	2.499	0	11.103	0	0	0	0
0203-291-305	2.5	38.403	0.877	20.726	Backwater	0 - 15:59 hrs	4.222	4.222	0.54	1	17.677	7.521	2.5	11.234	11.234	11.331	0	11.101	3
0203-292-291	2	28.481	1.585	20.726	Backwater	0 - 15:59 hrs	6.597	6.597	0.728	1	7.755	7.524	2	11.118	11.118	11.407	0	0	1
0203-293-292	2	27.328	1.459	20.726	Backwater	0 - 15:59 hrs	6.597	6.597	0.758	1	6.602	7.529	2	11.118	11.384	11.118	0	11.118	5
0203-294-306	3.5	111.399	1.226	45.51	Free Surface	0 - 13:11 hrs	4.908	4.908	0.409	0.95	65.889	7.528	3.498	0	0	11.099	0	0	0
0203-295-294	3.5	77.262	0.59	45.542	Free Surface	0 - 13:11 hrs	4.912	5.17	0.589	0.948	31.72	7.523	3.5	0	2.421	0	0	0	0
0203-296-295	3.5	26.661	0.07	45.541	Exceeds Capacity	0 - 13:11 hrs	4.733	4.733	1.708	1	-18.88	7.522	3.5	2.421	4.101	2.421	4.151	2.421	0
0203-297-296	3.5	149.798	2.217	45.541	Backwater	0 - 13:11 hrs	4.733	4.733	0.304	1	104.257	7.522	3.499	4.051	4.051	4.101	0	0	0
0203-298-314	4.5	229.799	0.808	101.599	Backwater	0 - 13:22 hrs	6.388	7.261	0.442	1	128.2	20.042	4.499	4.234	4.234	6.595	0	0	1
0203-299-298	3	50.348	0.57	49.269	Backwater	0 - 11:51 hrs	6.999	6.999	0.979	1	1.079	5.69	3	2.848	2.854	4.247	0	2.846	0
0203-300-307	3	70.727	1.124	52.898	Backwater	0 - 12:26 hrs	7.483	7.483	0.748	1	17.83	10.785	3	5.196	5.65	5.196	0	5.195	0
0203-301-317	5	253.25	0.946	123.93	Backwater	0 - 16:15 hrs	6.312	6.312	0.489	1	129.32	30.68	4.999	8.649	8.649	8.741	0	6.093	0
0203-302-333	5.08	39.693	0.032	158.323	Exceeds Capacity	0 - 12:26 hrs	4.396	4.396	3.989	1	-118.63	45.944	7.536	9.216	9.727	9.217	11.227	8.878	0
0203-303-334	3	67.685	1.03	30.648	Backwater	0 - 11:48 hrs	4.336	4.38	0.453	1	37.036	5.275	3	8.686	8.686	8.697	0	3.426	0
0203-304-289	2.5	50.953	1.543	20.725	Free Surface	0 - 16:00 hrs	5.039	5.127	0.407	0.781	30.228	7.52	2.499	0	0	0	0	0	0
0203-305-290	2.5	28.637	0.487	20.725	Backwater	0 - 16:00 hrs	4.222	4.222	0.724	1	7.911	7.521	2.5	11.103	11.331	11.103	0	11.103	0
0203-306-293	2.5	45.114	1.21	20.726	Backwater	0 - 15:59 hrs	4.222	4.222	0.459	1	24.389	7.531	2.5	11.124	11.251	11.124	0	11.124	6
0203-307-308	3.5	108.726	1.168	52.895	Backwater	0 - 12:26 hrs	5.498	5.628	0.486	1	55.831	10.783	3.499	5.079	5.132	5.081	0	2.609	0
0203-308-309	3.5	95.984	0.91	52.888	Backwater	0 - 12:26 hrs	5.497	5.522	0.551	1	43.096	10.775	3.499	4.912	5.081	4.915	0	3.915	0
0203-309-310	3.5	106.384	1.118	52.879	Backwater	0 - 12:26 hrs	5.524	6.287	0.497	1	53.505	10.77	3.499	4.488	5.047	4.489	0	4.485	0
0203-310-311	3.5	121.546	1.459	53.691	Backwater	0 - 11:51 hrs	7.118	8.055	0.442	1	67.855	10.76	3.495	4.719	4.719	5.641	0	0	0
0203-311-301	4	119.146	0.688	52.832	Backwater	0 - 12:29 hrs	4.204	4.204	0.443	1	66.315	10.769	3.999	5.488	5.488	8.733	0	0	0
0203-312-301	5	184.133	0.5	85.232	Backwater	0 - 11:51 hrs	4.341	4.621	0.463	1	98.901	20.077	4.998	7.207	7.209	8.65	0	0.004	0
0203-313-312	5	227.511	0.763	100.907	Backwater	0 - 12:59 hrs	5.139	5.818	0.444	1	126.603	19.966	5	6.996	6.998	7.209	0	0.003	2
0203-314-313	5	209.24	0.645	100.907	Backwater	0 - 12:59 hrs	5.139	5.732	0.482	1	108.333	20.054	4.998	5.972	5.972	6.998	0	3.148	2
0203-315-340	3.5	106.06	1.111	69.509	Backwater	0 - 11:48 hrs	7.225	7.225	0.655	1	36.551	14.319	3.499	5.863	5.863	5.893	0	0.201	0
0203-316-315	3.5	69.433	0.476	74.417	Exceeds Capacity	0 - 11:48 hrs	7.748	7.748	1.072	1	-4.983	14.328	3.499	5.86	5.913	5.86	0.016	5.859	0
0203-317-302	5.08	262.51	1.382	121.809	Backwater	0 - 17:47 hrs	3.382	3.382	0.464	1	140.7	30.791	7.536	8.714	8.714	9.727	0	0.001	0
0203-318-549	3	67.552	1.026	40.323	Free Surface	0 - 12:51 hrs	5.728	5.728	0.597	0.983	27.229	14.281	3	0	12.507	0	0	0	0
0203-319-556	4	56.408	0.154	72.534	Free Surface	0 - 12:15 hrs	6.905	7.113	1.286	0.796	-16.126	6.72	4	0	0.292	0	0.237	0	0
0203-320-319	3	48.238	4.952	29.825	Free Surface	0 - 13:48 hrs	5.014	5.014	0.618	0.784	18.413	5.427	3	0	0	3.188	0	0	0
0203-321-320	4.392	162.289	0.061	29.826	Free Surface	0 - 13:45 hrs	1.414	1.487	0.184	0.453	132.463	5.431	21.183	0	0	0	0	0	0
0203-322-323	4	194.09	1.826	26.948	Backwater	0 - 13:23 hrs	2.144	3.035	0.139	1	167.142	6.478	4	7.22	7.22	20.565	0	0	0
0203-323-324	6	498.726	0.855	26.948	Free Surface	0 - 13:25 hrs	1.291	1.291	0.054	0.58	471.778	6.445	6	0	0	0	0	0	0
0203-324-008	11.346	4,998.01	0.94	26.948	Free Surface	0 - 13:26 hrs	3.561	3.561	0.005	0.092	4,971.07	6.436	12.332	0	0	0	0	0	2
0203-325-329	9.647	578.421	0.106	221.899	Free Surface	0 - 12:23 hrs	2.307	2.529	0.384	0.728	356.522	30.374	29.003	0	0	0	0	0	0
0203-326-327	6.218	1,235.41	1.437	181.629	Free Surface	0 - 12:15 hrs	4.487	4.488	0.147	0.505	1,053.78	4.99	20.498	0	0	0	0	0	0

Table B-5b. Existing System Analysis - Pipes/Channels
50-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-327-328	10	2,249.26	1.211	178.868	Free Surface	0 - 12:15 hrs	3.313	3.317	0.08	0.503	2,070.39	4.989	20.193	0	0	0	0	0	0
0203-328-133	4.533	193.213	0.927	183.148	Backwater	0 - 12:18 hrs	5.4	5.4	0.948	1	10.064	13.441	13.642	1.35	1.35	1.42	0	0.977	0
0203-329-195	9.647	621.526	0.122	219.625	Free Surface	0 - 12:30 hrs	2.315	2.661	0.353	0.724	401.9	30.229	28.688	0	0	0	0	0	0
0203-330-199	2.169	73.922	1.595	74.371	Exceeds Capacity	0 - 12:23 hrs	5.266	5.325	1.006	1	-0.449	6.622	10.228	0.791	0.917	0.848	0.048	0.756	0
0203-331-332	5.08	73.265	0.108	150.677	Exceeds Capacity	0 - 17:47 hrs	4.419	4.502	2.057	1	-77.413	45.814	7.536	1.758	9.376	1.758	9.815	1.758	0
0203-332-665	6	917.899	0.494	150.722	Free Surface	0 - 17:45 hrs	2.54	2.758	0.164	0.962	767.177	45.818	12	0	0	1.496	0	0	0
0203-333-655	6	240.786	0.322	151.425	Backwater	0 - 15:07 hrs	2.103	2.103	0.629	1	89.362	45.838	12	9.059	9.059	9.075	0	0.002	0
0203-334-302	3.5	153.045	2.314	30.628	Backwater	0 - 11:48 hrs	3.183	3.183	0.2	1	122.417	5.279	3.5	8.7	8.7	11.413	0	0	0
0203-335-009	10.591	5,438.11	2.093	266.711	Free Surface	0 - 13:07 hrs	12.727	14.365	0.049	0.317	5,171.40	14.018	17.9	0	0	0	0	0	3
0203-336-222	2	26.059	1.327	17.643	Backwater	0 - 14:07 hrs	5.616	5.91	0.677	1	8.416	2.625	1.996	2.99	3.674	2.992	0	1.843	5
0203-337-486	4.5	213.147	1.175	62.046	Free Surface	0 - 13:15 hrs	7.371	8.064	0.291	0.523	151.102	17.967	4.5	0	0	0	0	0	0
0203-338-070	4.647	318.699	0.132	87.206	Free Surface	0 - 12:18 hrs	1.891	1.894	0.274	0.532	231.494	9.817	25.361	0	0	0	0	0	0
0203-339-189	4.819	2,243.90	2.013	162.054	Free Surface	0 - 12:15 hrs	1.602	1.602	0.072	0.636	2,081.84	15.015	60.08	0	0	2.484	0	0	0
0203-340-298	4	132.209	0.847	79.386	Backwater	0 - 15:03 hrs	6.317	6.317	0.6	1	52.822	14.333	3.999	5.23	5.888	5.23	0	5.229	1
0203-341-345	8	1,383.33	0.495	255.032	Free Surface	0 - 16:24 hrs	7.313	7.476	0.184	0.363	1,128.30	78.784	12	0	0	0	0	0	0
0203-342-350	3	84.516	1.606	53.293	Backwater	0 - 12:15 hrs	7.539	7.539	0.631	1	31.223	10.145	3	4.934	4.934	5.162	0	0.513	0
0203-343-344	6	212.05	0.251	241.481	Exceeds Capacity	0 - 12:15 hrs	8.541	8.541	1.139	1	-29.431	7.56	5.997	6.231	6.231	8.54	0.046	1.052	2
0203-344-382	2	14.788	0.427	29.548	Free Surface	0 - 14:45 hrs	9.753	9.755	1.998	0.929	-14.76	8.09	1.999	0	9.478	0	8.878	0	0
0203-345-002	10.792	35,212.01	40.439	299.05	Free Surface	0 - 16:08 hrs	9.009	9.009	0.008	0.178	34,912.96	88.852	27.464	0	0	0	0	0	0
0203-346-345	7.846	738.424	0.86	47.493	Free Surface	0 - 12:36 hrs	2.241	2.242	0.064	0.242	690.931	10.107	11.858	0	0	0	0	0	0
0203-347-346	3	53.584	0.645	47.494	Free Surface	0 - 12:36 hrs	8.801	8.801	0.886	0.714	6.091	10.112	3	0	5.327	0	0	0	0
0203-348-347	7.265	454.602	0.802	47.855	Free Surface	0 - 12:15 hrs	1.049	1.7	0.105	0.734	406.747	10.119	9.501	0	0	0	0	0	0
0203-349-348	3	31.929	0.229	49.624	Exceeds Capacity	0 - 12:15 hrs	7.02	7.02	1.554	1	-17.695	10.124	3	4.873	5.636	4.873	5.271	4.873	0
0203-350-349	7.191	473.764	1.015	55.148	Free Surface	0 - 12:15 hrs	0.897	1.257	0.116	0.952	418.616	10.141	9.642	0	0	0.834	0	0	0
0203-351-551	7.04	318.643	0.203	69.341	Free Surface	0 - 12:17 hrs	1.709	4.277	0.218	0.665	249.302	2.682	15.121	0	0	0	0	0	0
0203-352-363	6.945	878.302	0.362	272.118	Free Surface	0 - 12:15 hrs	4.676	4.815	0.31	0.926	606.185	32.689	9.615	0	0	0	0	0	0
0203-353-354	7.03	983.531	0.483	283.285	Free Surface	0 - 12:19 hrs	7.233	7.238	0.288	0.667	700.246	35.236	9.502	0	0	0	0	0	0
0203-354-114	7.03	1,353.80	0.915	282.971	Free Surface	0 - 12:19 hrs	7.448	8.03	0.209	0.649	1,070.83	35.227	9.497	0	0	0	0	0	0
0203-355-356	6	934.066	0.802	284.306	Backwater	0 - 12:22 hrs	4.738	5.343	0.304	1	649.76	35.208	10	0.28	0.381	0.28	0	0.28	0
0203-356-113	8.464	2,294.28	2.604	378.362	Free Surface	0 - 12:15 hrs	7.17	7.183	0.165	0.88	1,915.92	38.584	8.717	0	0	1.939	0	0	0
0203-357-223	6	829.961	0.633	268.519	Backwater	0 - 12:44 hrs	4.475	4.475	0.324	1	561.442	39.763	10	2.135	2.168	2.135	0	2.135	0
0203-358-359	7.321	274.216	0.535	268.225	Free Surface	0 - 12:48 hrs	5.371	5.373	0.978	0.941	5.991	39.726	8.139	0	1.902	0	0	0	0
0203-359-112	7.321	466.386	1.548	290.945	Free Surface	0 - 12:49 hrs	5.824	5.827	0.624	0.941	175.441	43.563	8.124	0	0	3.119	0	0	0
0203-360-111	16.67	50,175.86	7.084	340.395	Free Surface	0 - 13:34 hrs	6.566	6.566	0.007	0.146	49,835.47	54.279	37.342	0	0	0	0	0	0
0203-361-220	7.957	146.481	0.006	100.963	Free Surface	0 - 13:12 hrs	2	2.588	0.689	0.454	45.517	10.825	22.239	0	0	0	0	0	0
0203-362-165	7.943	1,483.04	2.475	263.956	Free Surface	0 - 17:21 hrs	3.729	3.729	0.178	0.7	1,219.08	68.51	14.2	0	0	0	0	0	0
0203-363-117	6.945	873.512	0.358	271.385	Free Surface	0 - 12:15 hrs	4.781	4.841	0.311	0.904	602.127	32.676	9.613	0	0	0	0	0	0
0203-364-164	8.07	2,005.71	4.955	263.956	Free Surface	0 - 17:22 hrs	5.938	5.938	0.132	0.497	1,741.75	68.449	13.124	0	0	0	0	0	0
0203-365-461	5.5	515.198	2.354	178.894	Backwater	0 - 13:07 hrs	7.53	7.53	0.347	1	336.304	32.947	5.5	4.454	4.454	10.341	0	0	0
0203-366-367	6	500.191	1.395	222.154	Backwater	0 - 12:15 hrs	7.857	7.857	0.444	1	278.038	32.864	5.938	10.8	10.8	15.331	0	2.754	0
0203-367-368	3.377	255.263	2.077	312.816	Exceeds Capacity	0 - 12:15 hrs	9.152	9.152	1.225	1	-57.553	63.382	19.528	7.022	7.022	9.306	1.346	4.031	0
0203-368-370	6	157.161	0.804	206.872	Backwater	0 - 15:48 hrs	5.746	5.746	1.316	1	-49.711	63.301	6	11.366	11.366	12.988	9.148	0	0
0203-369-427	4	474.879	0.305	122.936	Backwater	0 - 19:45 hrs	2.195	2.195	0.259	1	351.943	18.567	14	7.516	7.579	7.524	0	0.895	0
0203-370-118	4.513	345.587	0.998	200.397	Backwater	0 - 16:21 hrs	3.722	4.189	0.58	1	145.191	63.335	21.428	6.98	6.98	9.947	0	0	0
0203-372-373	8.563	802.787	0.948	218.14	Backwater	0 - 13:22 hrs	2.337	4.332	0.272	1	584.647	66.927	19.12	5.907	5.907	9.791	0	0	0
0203-373-377	7	177.398	0.45	217.843	Exceeds Capacity	0 - 13:22 hrs	4.446	4.446	1.228	1	-40.445	66.915	7	12.05	12.098	12.051	9.04	12.042	0
0203-374-375	3.862	144.305	0.401	202.68	Exceeds Capacity	0 - 17:57 hrs	5.259	5.259	1.405	1	-58.375	66.859	17.32	10.66	10.66	11.307	10.109	10.369	0
0203-375-376	7.377	166.742	0.058	202.679	Free Surface	0 - 17:57 hrs	3.501	3.501	1.216	0.802	-35.937	66.828	14.78	0	0	0	9.88	0	0
0203-376-341	11.182	2,080.21	1.59	202.679	Free Surface	0 - 17:57 hrs	6.974	7.713	0.097	0.394	1,877.53	66.819	11.766	0	0	0	0	0	0
0203-377-374	7	43.345	0.027	215.068	Exceeds Capacity	0 - 13:26 hrs	4.389	4.389	4.962	1	-171.723	66.816	7	11.801	12.051	11.801	13.55	11.801	0
0203-378-379	3	78.635	1.39	71.323	Backwater	0 - 13:40 hrs	10.09	10.09	0.907	1	7.312	7.383	3	2.707	2.707	2.74	0	2.689	0
0203-379-242	4	89.876	0.391	71.269	Backwater	0 - 13:40 hrs	5.671	5.671	0.793	1	18.607	7.381	3.999	2.7	2.7	2.729	0	2.607	0
0203-380-187	9.535	663.228	0.26	165.644	Free Surface	0 - 12:19 hrs	3.491	3.562	0.25	0.58	497.585	16.808	17.487	0	0	0	0	0	0
0203-381-134	4.101	493.715	1.219	239.023	Free Surface	0 - 12:15 hrs	4.08	4.08	0.484	0.883	254.693	8.468	35.274	0	0	1.336	0	0	0
0203-382-339	9	320.398	0.393	29.545	Free Surface	0 - 14:42 hrs	6.148	6.298	0.092	0.153	290.853	8.087	4	0	0	0	0	0	0
0203-383-384	4.91	116.495	0.091	112.665	Backwater	0 - 17:28 hrs	2.09	2.09	0.967	1	3.83	47.606	12.036	12.669	12.669	12.742	0	9.3	0
0203-384-576	4.91	75.684	0.038	112.665	Free Surface	0 - 17:28 hrs	3.243	3.243	1.489	0.67	-36.981	46.852	11.735	0	12.742	0	13.551	0	0
0203-385-057	1.5	12.834	1.493	5.259	Backwater	0 - 12:33 hrs	2.976	2.976	0.41	1	7.575	0.018	1.5	1.848	1.848	2.386	0	0.001	0
0203-386-385	1.25	8.204	1.613	4.681	Backwater	0 - 12:00 hrs	1.907	3.161	0.285	1	3.523	0.074	1.249	1.765	1.765	1.895	0	0	0
0203-387-059	1.5	11.672	1.235	8.433	Backwater	0 - 12:00 hrs	4.772	4.772	0.722	1	3.239	0.354	1.499	1.739	1.739	1.828	0	0.059	1
0203-388-387	1.25	7.721	1.429	8.435	Backwater	0 - 12:00 hrs	3.437	3.437	0.546	1	-0.713	0.36	1.247	1.695	1.695	1.772	0	0	1
0203-389-113	1.75	11.978	0.571	14.453	Exceeds Capacity	0 - 11:52 hrs	6.009	6.009	1.207	1	-2.475	1.137	1.747	11.401	11.401	21.364	0.192	0.377	1
0203-390-389	1.25	5.902	0.835	14.454	Exceeds Capacity	0 - 11:52 hrs	5.889	5.889	1.225	1	-8.552	1.138	1.25	11.639	11.639	15.815	0.2	0.797	7
0203-391-123	6.887	598.08	0.367	299.128	Free Surface	0 - 12:22 hrs	3.451	3.537	0.5	0.859	298.952	17.016	27.062	0	0	0	0	0	0
0203-392-121	17.772	12,618.16	0.808	298.617	Free Surface	0 - 12:23 hrs	3.974	4.312	0.024	0.241	12,319.54	16.981	29.813	0	0	0	0	0	0
0203-393-201	14.057	3,408.70	3.486	20.355	Free Surface	0 - 14:03 hrs	3.155	3.407	0.006	0.252	3,388.34	3.745	4.061	0	0	0	0	0	0
0203-394-395	4	77.157	0.289	78.761	Free Surface	0 - 12:17 hrs	6.298	6.298	1.021	0.98	-1.605	6.46	3.994	0	2.095	0	0.091	0	0
0203-395-206	5.829	807.214	1.066	148.316	Free Surface	0 - 12:17 hrs	3.845	4.013	0.184	0.615	658.898	12.389	22.244	0	0	0	0	0	0
0203-396-211	1.807	81.029	6.177	32.911	Backwater	0 - 12:15 hrs	3.473	3.473	0.406	1	48.118	0.789	9.996	11.912	11.912	12.15	0	0	0
0203-397-398	4	5.609	0.001	46.342	Free Surface	0 - 12:19 hrs	1.396	1.755	8.262	0.924	-40.733	9.747	9	0	0	0	14.268	0	0
0203-398-239	4	56.247	0.115	46.469	Free Surface	0 - 12:19 hrs	1.442	2.677	0.826	0.898	9.778	9.739	9	0	0	0	0	0	0
0203-399-400	3	59.881	0.806	38.148	Backwater	0 - 12:15 hrs	5.397	5.397	0.637	1	21.733	1.958	3	0.012	0.012	1.019	0	0	0
0203-400-330	3.82	39.41	0.21	36.547	Free Surface	0 - 12:15 hrs	2.195	2.621	0.927	0.982	2.863	1.958	9.049	0	0.006	0	0	0	0
0203-401-195	4	182.264	1.61	115.268	Backwater	0 - 12:25 hrs	9.173	9.173	0.632	1	66.996	8.918	4	0.665	0.665	4.684	0	0.001	0
0203-402-173	4.497	396.477	0.394	306.485	Backwater	0 - 12:37 hrs	3.766	3.766	0.773	1	89.992	50.301	18.833	6.827	6.943	6.827	0	6.376	0
0203-403-404	4	36.617	0.007	231.18	Exceeds Capacity	0 - 14:12 hrs	2.752	2.752	6.313	1	-194.563	50.307	21	6.918	6.98	6.918	12.452	6.918	1
0203-404-405	6.83	653.514	0.416	231.126	Free Surface	0 - 14:12 hrs	2.562	3.426	0.354	0.824	422.388	50.294	17.392	0	0	0	0	0	0
0203-405-406	4	1,076.74	0.63	231.043	Backwater	0 - 14:12 hrs	2.751	2.751	0.215	1	845.694	50.278	21	6.872	6.879	6.888	0	5.29	0
0203-406-407	6.363	925.76	0.729	230.93	Free Surface	0 - 14:14 hrs	2.074	2.591	0.249	0.935	694.83	50.255	19.343	0	0	3.776	0	0	0
0203-407-408	4	686.455	0.256	229.912	Backwater	0 - 14:27 hrs	2.737	2.737	0.335	1	456.543	50.225	21	7.372	7.38	7.478	0	7.006	0
0203-408-409	6.078	408.194	0.133	224.071	Backwater	0 - 14:33 hrs	1.839	2.184	0.549	1	184.123	50.237	20.919	3.796	4.764	3.796	0	3.796	0
0203-409-172	6.078	295.612	0.07	215.484	Backwater	0 - 14:14 hrs	1.771	2.175	0.729	1	80.128	50.184	20.919	3.389	3.796	3.393	0	3.389	0

Table B-5b. Existing System Analysis - Pipes/Channels
50-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-410-170	8	246.927	0.244	215.112	Free Surface	0 - 14:14 hrs	4.293	4.932	0.436	0.806	31.815	50.094	4	0	0	0	0	0	0
0203-411-412	3	112.659	2.853	46.387	Backwater	0 - 12:15 hrs	6.562	6.562	0.412	1	66.272	2.216	2.999	0.236	0.236	0.25	0	0.21	0
0203-412-413	3	98.132	2.165	46.388	Backwater	0 - 12:15 hrs	6.562	6.562	0.473	1	51.745	2.22	2.999	0.173	0.25	0.173	0	0.173	0
0203-413-414	3	75.537	1.283	46.389	Free Surface	0 - 12:15 hrs	7.09	7.091	0.614	0.873	29.147	2.233	2.999	0	0.173	0	0	0	0
0203-414-339	3	94.644	2.014	46.317	Free Surface	0 - 12:17 hrs	10.062	10.062	0.489	0.62	48.328	2.234	2.984	0	0	0	0	0	0
0203-415-416	2	17.553	0.602	25.358	Free Surface	0 - 12:33 hrs	8.798	8.798	1.445	0.863	-7.805	1.885	2	0	1.879	0	1.531	0	0
0203-416-191	4.928	659.285	2.587	25.357	Free Surface	0 - 12:34 hrs	3.19	3.269	0.038	0.354	633.928	1.885	9.124	0	0	0	0	0	0
0203-417-418	6	304.449	4.893	154.74	Free Surface	0 - 12:23 hrs	5.655	5.662	0.508	0.93	149.709	16.794	6	0	0	0	0	0	0
0203-418-184	6.773	478.547	0.151	154.235	Free Surface	0 - 12:25 hrs	1.731	1.752	0.322	0.752	324.312	16.789	24.655	0	0	0	0	0	0
0203-419-420	2	21.115	8.248	20.56	Free Surface	0 - 13:02 hrs	8.874	8.874	0.974	0.703	0.556	1.867	1.995	0	2.543	0	0	0	0
0203-420-186	6.59	1,773.95	4.014	20.596	Free Surface	0 - 12:29 hrs	1.318	3.39	0.012	0.26	1,753.35	1.866	12.468	0	0	0	0	0	0
0203-421-192	5.831	443.929	2.958	24.26	Free Surface	0 - 12:15 hrs	3.245	4.386	0.055	0.466	419.668	0.799	6.493	0	0	0	0	0	0
0203-422-423	3	49.047	0.541	22.426	Free Surface	0 - 12:15 hrs	3.685	3.685	0.457	0.804	26.621	1.073	3	0	0	0	0	0	0
0203-423-501	3	108.54	2.648	22.341	Free Surface	0 - 12:15 hrs	6.98	6.98	0.206	0.463	86.199	1.073	2.991	0	0	0	0	0	0
0203-424-425	5	849.536	0.219	167.448	Free Surface	0 - 12:30 hrs	2.267	2.34	0.197	0.749	682.088	18.625	20	0	0	0	0	0	0
0203-425-180	11.155	5,446.72	0.483	165.621	Free Surface	0 - 12:30 hrs	1.242	1.397	0.03	0.363	5,281.10	18.617	48.321	0	0	0	0	0	0
0203-426-369	4	471.649	0.301	122.876	Backwater	0 - 19:45 hrs	2.194	2.194	0.261	1	348.773	18.57	14	7.571	7.643	7.579	0	2.125	0
0203-427-174	4.533	224.617	0.327	123.478	Backwater	0 - 19:46 hrs	2.433	2.64	0.55	1	101.139	18.558	14.018	7.064	7.064	7.304	0	0	0
0203-428-507	8	1,551.51	0.228	264.003	Free Surface	0 - 17:23 hrs	2.513	2.522	0.17	0.749	1,287.50	68.327	18	0	0	0	0	0	0
0203-429-162	12.147	1,032.00	0.184	289.295	Free Surface	0 - 13:00 hrs	4.297	4.297	0.28	0.394	742.704	73.968	17.437	0	0	0	0	0	0
0203-430-240	3	42.608	0.408	45.375	Exceeds Capacity	0 - 13:29 hrs	6.419	6.419	1.065	1	-2.767	4.609	2.998	2.274	2.949	2.501	0.057	0.664	0
0203-431-513	2	29.241	1.671	20.356	Backwater	0 - 13:55 hrs	6.479	6.479	0.696	1	8.885	3.753	2	5.172	5.207	5.173	0	5.172	0
0203-432-433	5	128.573	0.244	30.671	Backwater	0 - 12:29 hrs	1.562	1.562	0.239	1	97.902	0.873	4.999	0.251	0.251	0.324	0	0	0
0203-433-253	4.946	221.964	0.118	31.321	Backwater	0 - 12:32 hrs	0.36	0.36	0.141	1	190.643	0.872	27.325	0.347	0.347	0.4	0	0	0
0203-434-435	5	107.609	0.171	102.457	Free Surface	0 - 12:19 hrs	6.065	6.101	0.952	0.822	5.152	5.076	5	0	0	0.38	0	0	0
0203-435-138	6.268	2,359.30	1.346	101.316	Free Surface	0 - 12:19 hrs	1.455	1.655	0.043	0.536	2,257.98	5.077	42.425	0	0	0	0	0	0
0203-437-438	5.5	449.896	1.795	83.752	Free Surface	0 - 12:37 hrs	9.194	9.194	0.186	0.408	366.144	5	5.402	0	0	0	0	0	0
0203-438-135	9.15	6,022.25	7.055	83.757	Free Surface	0 - 12:37 hrs	4.842	4.939	0.014	0.256	5,938.50	5.005	13.95	0	0	0	0	0	2
0203-439-440	3	87.529	1.722	62.718	Backwater	0 - 12:41 hrs	8.873	8.873	0.717	1	24.811	9.269	2.999	3.77	3.77	8.887	0	3.31	0
0203-440-441	3	80.476	1.456	32.006	Backwater	0 - 15:37 hrs	4.528	4.528	0.398	1	48.47	9.289	2.999	8.907	8.907	9.135	0	0	0
0203-441-442	3	14.501	0.047	31.566	Exceeds Capacity	0 - 15:48 hrs	4.466	4.466	2.177	1	-17.065	9.287	3	8.883	9.135	8.883	9.624	8.883	0
0203-442-443	3	43.012	0.416	31.566	Free Surface	0 - 15:48 hrs	4.503	4.503	0.734	0.972	11.445	9.288	2.999	0	8.883	0	0	0	0
0203-443-444	3	81.077	1.478	31.567	Free Surface	0 - 15:48 hrs	5.427	5.427	0.389	0.772	49.51	9.289	2.999	0	3.393	0	0	0	0
0203-444-445	3	93.201	1.953	31.667	Free Surface	0 - 15:25 hrs	8.876	9.094	0.34	0.505	61.534	9.29	3	0	0	0	0	0	0
0203-445-446	3	81.206	1.482	31.57	Free Surface	0 - 15:48 hrs	5.533	5.58	0.389	0.755	49.636	9.289	2.999	0	0	8.883	0	0	0
0203-446-447	3	51.337	0.592	31.571	Free Surface	0 - 15:47 hrs	5.499	5.658	0.615	0.897	19.766	9.286	3	0	8.889	0	0	0	0
0203-447-448	3	125.519	3.541	35.284	Free Surface	0 - 15:23 hrs	6.089	7.411	0.281	0.897	90.235	9.286	2.999	0	0	3.588	0	0	0
0203-448-452	4	240.383	2.801	72.868	Backwater	0 - 14:32 hrs	5.799	6.248	0.303	1	167.515	15.41	4	2.578	3.196	2.578	0	2.578	0
0203-449-450	3	160.418	5.785	53.823	Backwater	0 - 12:32 hrs	7.614	7.614	0.336	1	106.595	6.141	2.963	2.619	2.674	2.62	0	2.619	0
0203-450-451	3	71.197	1.139	53.823	Backwater	0 - 12:32 hrs	7.614	7.614	0.756	1	17.374	6.135	3	2.62	2.62	3.612	0	0	0
0203-451-448	3.5	31.481	0.098	43.971	Exceeds Capacity	0 - 11:55 hrs	4.57	4.57	1.397	1	-12.491	6.118	3.5	3.563	3.589	3.567	3.586	3.563	0
0203-452-453	4	164.465	1.311	76.319	Backwater	0 - 11:52 hrs	7.367	7.613	0.464	1	88.146	15.42	3.999	2.846	2.846	3.496	0	0	0
0203-453-454	4	184.959	1.658	72.868	Backwater	0 - 14:32 hrs	5.799	7.471	0.394	1	112.092	15.414	3.993	3.509	3.509	4.173	0	0	0
0203-454-455	4.5	211.484	1.157	72.738	Backwater	0 - 14:37 hrs	4.573	5.17	0.344	1	138.746	15.412	4.499	4.161	4.162	4.178	0	0.001	0
0203-455-457	4.5	164.682	0.701	115.639	Backwater	0 - 15:53 hrs	7.271	7.271	0.702	1	49.043	17.875	4.499	4.187	4.187	4.352	0	1.601	0
0203-456-455	2	39.779	3.092	25.893	Backwater	0 - 16:15 hrs	8.242	8.242	0.651	1	13.886	2.473	2	4.403	4.403	7.432	0	0.003	0
0203-457-458	5.5	268.326	0.638	151.102	Backwater	0 - 12:25 hrs	6.36	6.36	0.563	1	117.224	27.233	5.5	4.163	4.163	4.485	0	0	0
0203-458-365	5.5	112.891	0.113	154.916	Exceeds Capacity	0 - 14:15 hrs	6.52	6.52	1.372	1	-42.025	27.232	5.5	4.452	4.485	4.454	4.337	4.451	0
0203-459-460	3.5	120.316	1.43	56.814	Backwater	0 - 12:25 hrs	5.905	5.905	0.472	1	63.501	5.709	3.411	2.516	2.521	3.682	0	2.374	0
0203-460-365	3.5	92.077	0.838	56.813	Backwater	0 - 12:25 hrs	5.905	5.905	0.617	1	35.264	5.702	3.5	4.364	4.364	4.482	0	1.308	0
0203-461-244	5.737	36.296	0.054	175.737	Exceeds Capacity	0 - 13:36 hrs	6.385	6.385	4.842	1	-139.441	32.96	6.184	9.856	10.061	10.027	10.242	9.032	0
0203-462-119	5.737	112.77	0.521	103.821	Backwater	0 - 15:45 hrs	3.97	4.449	0.921	1	8.95	32.9	6.184	0.398	5.761	1.528	0	0.142	0
0203-463-465	3.5	87.513	0.757	63.382	Free Surface	0 - 13:41 hrs	6.929	7.328	0.724	0.904	24.131	15.554	3.5	0	6.998	0	0	0	1
0203-464-463	3	66.062	0.981	63.382	Backwater	0 - 13:41 hrs	8.967	8.967	0.959	1	2.68	15.561	3	7	7	7.016	0	6.999	0
0203-465-466	4	108.88	0.575	64.068	Free Surface	0 - 12:15 hrs	6.257	7.553	0.588	0.778	44.813	15.536	3.996	0	0	0.021	0	0	0
0203-466-367	4	154.166	1.152	71.779	Backwater	0 - 12:21 hrs	5.933	7.848	0.466	1	82.387	15.531	3.995	0.038	0.038	4.216	0	0	0
0203-467-485	3.94	223.265	0.212	74.808	Backwater	0 - 19:39 hrs	2.764	2.764	0.335	1	148.457	15.699	8.105	8.59	8.611	8.597	0	4.35	0
0203-468-469	3	124.699	3.495	25.032	Backwater	0 - 11:53 hrs	3.541	4.269	0.201	1	99.667	3.823	2.951	4.416	4.417	4.417	0	0.074	5
0203-469-470	3	45.052	0.456	25.031	Backwater	0 - 11:53 hrs	3.541	3.886	0.556	1	20.02	3.818	2.999	4.417	4.417	9.143	0	0.001	4
0203-470-471	3	35.858	0.289	25.03	Backwater	0 - 11:53 hrs	3.541	3.541	0.698	1	10.828	3.818	3	9.143	9.143	9.413	0	2.781	8
0203-471-473	3	98.839	2.196	25.027	Backwater	0 - 11:53 hrs	3.541	3.545	0.253	1	73.812	3.817	2.996	9.413	9.413	9.876	0	0.001	9
0203-472-013	4.033	172.862	0.159	92.187	Backwater	0 - 15:44 hrs	3.682	3.761	0.533	1	80.675	15.732	7.053	1.267	4.497	1.267	0	1.267	0
0203-473-372	3	49.747	0.556	25.019	Backwater	0 - 11:53 hrs	3.539	3.539	0.503	1	24.728	3.816	3	9.876	9.876	9.962	0	0.007	5
0203-474-242	3	65.121	0.953	51.845	Backwater	0 - 12:23 hrs	7.335	7.335	0.796	1	13.276	3.398	3	2.597	2.597	2.831	0	1.358	0
0203-475-476	3	58.078	0.758	33.027	Backwater	0 - 15:17 hrs	4.672	4.672	0.569	1	25.051	3.878	3	3.539	3.544	3.542	0	3.535	0
0203-476-359	3	24.18	0.131	33.027	Exceeds Capacity	0 - 15:17 hrs	4.672	4.672	1.366	1	-8.847	3.876	3	3.54	3.557	3.606	1.928	3.526	0
0203-477-478	3	55.864	0.702	45.707	Backwater	0 - 11:52 hrs	6.466	6.466	0.818	1	10.157	6.2	2.981	4.518	4.52	4.53	0	0.006	0
0203-478-479	3	52.374	0.617	39.587	Backwater	0 - 11:52 hrs	5.6	5.6	0.756	1	12.787	6.211	2.999	4.537	4.537	5.022	0	0.015	1
0203-479-480	3	4.209	0.004	39.576	Exceeds Capacity	0 - 11:52 hrs	5.599	5.599	9.403	1	-35.368	6.176	3	5.024	5.073	5.024	9.889	5.024	8
0203-480-342	3	3.562	0.003	39.625	Exceeds Capacity	0 - 11:52 hrs	5.621	5.621	11.126	1	-36.064	6.12	3	4.934	5.024	4.934	12.251	4.934	5
0203-481-482	3	74.134	1.235	62.026	Backwater	0 - 13:33 hrs	8.775	8.775	0.837	1	12.109	17.987	3	8.403	8.403	8.489	0	8.358	0
0203-482-483	3	65.191	0.955	62.026	Free Surface	0 - 13:33 hrs	9.255	9.255	0.951	0.9	3.166	17.97	3	0	8.489	0	0	0	0
0203-483-484	3.5	127.295	1.601	62.026	Free Surface	0 - 13:33 hrs	9.375	9.461	0.487	0.65	65.269	17.959	3.499	0	0	0	0	0	0
0203-484-337	4.5	186.418	0.899	62.026	Free Surface	0 - 13:34 hrs	7.985	7.985	0.333	0.491	124.393	17.966	4.498	0	0	0	0	0	0
0203-485-006	3.9	296.101	0.613	98.189	Backwater	0 - 12:17 hrs	4.32	4.32	0.332	1	197.912	15.715	6.636	7.823	8.607	7.832	0	4.714	0
0203-486-487	5	258.438	0.985	63.002	Free Surface	0 - 12:02 hrs	6.798	7.478	0.244	0.584	195.436	17.974	5	0	0	0	0	0	0
0203-487-488	5	256.983	0.974	66.245	Free Surface	0 - 12:30 hrs	3.735	5.959	0.258	0.887	190.738	17.976	4.999	0	0	1.993	0	0	0
0203-488-491	6	195.36	0.213	217.442	Exceeds Capacity	0 - 12:06 hrs	7.754	7.771	1.113	1	-22.082	30.526	6	0.186	1.794	0.186	0.527	0.186	0
0203-489-488	3.5	167.486	2.771	52.959	Backwater	0 - 12:06 hrs	5.504	5.504	0.316	1	114.527	0.632	3.5	1.854	1.854	1.923	0	0.762	0
0203-490-489	3.5	116.974	1.352	28.342	Backwater	0 - 12:15 hrs	2.946	3.492	0.242	1	88.632	0.635	3.499	1.573	1.573	1.854	0	0	0
0203-491-221	6	442.205	1.09	213.183	Backwater	0 - 12:26 hrs	7.573	7.777	0.482	1	229.022	30.521	6	0.186	0.186	0.413	0	0	0
0203-492-221	3.5	68.221	0.46	76.421	Exceeds Capacity	0 - 12:15 hrs	7.943	7.943	1.12	1	-8.2	2.17	3.5	0.413	0.489	0.413	0.111	0.413	0

Table B-5b. Existing System Analysis - Pipes/Channels
50-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-493-421	3	95.492	2.05	24.512	Free Surface	0 - 12:15 hrs	5.068	5.068	0.257	0.647	70.98	0.798	2.999	0	0	0	0	0	0
0203-494-254	4	74.23	0.267	113.687	Exceeds Capacity	0 - 12:36 hrs	9.047	9.047	1.532	1	-39.456	12.779	4	1.486	2.114	1.502	1.52	1.479	0
0203-495-241	2.5	20.372	0.247	39.741	Exceeds Capacity	0 - 12:15 hrs	8.096	8.096	1.951	1	-19.369	1.456	2.499	0.877	0.886	1.046	0.448	0.767	0
0203-496-497	3	50.948	0.583	21.073	Free Surface	0 - 12:15 hrs	2.984	2.984	0.414	0.997	29.875	0.694	2.998	0	0	0.088	0	0	0
0203-497-498	3	15.612	0.055	21.074	Free Surface	0 - 12:15 hrs	3.013	3.013	1.35	0.968	-5.461	0.695	3	0	0.088	0	0.198	0	0
0203-498-499	3	24.975	0.14	21.025	Free Surface	0 - 12:15 hrs	3.311	3.312	0.842	0.842	3.95	0.695	2.999	0	0	0	0	0	0
0203-499-500	3	51.689	0.601	20.892	Free Surface	0 - 12:15 hrs	5.537	5.537	0.404	0.527	30.797	0.695	2.996	0	0	0	0	0	0
0203-500-200	6.864	1,240.30	3.132	20.863	Free Surface	0 - 12:15 hrs	1.704	1.704	0.017	0.257	1,219.44	0.695	8.825	0	0	0	0	0	0
0203-501-194	3.615	519.532	5.96	22.325	Free Surface	0 - 12:15 hrs	3.584	3.587	0.043	0.239	497.207	1.073	8.218	0	0	0	0	0	0
0203-502-503	3.5	74.926	0.555	70.1	Backwater	0 - 12:15 hrs	7.286	7.286	0.936	1	4.827	4.367	3.5	0.162	0.257	0.162	0	0.162	0
0203-503-504	3.5	106.95	1.13	70.128	Free Surface	0 - 12:17 hrs	7.717	7.965	0.656	0.914	36.822	4.381	3.499	0	0.162	0	0	0	0
0203-504-198	3.075	230.775	0.995	75.676	Free Surface	0 - 12:15 hrs	1.976	2.361	0.328	0.972	155.099	4.674	23.313	0	0	0.798	0	0	0
0203-505-504	3	58.702	0.775	7.947	Free Surface	0 - 12:15 hrs	1.372	1.962	0.135	0.837	50.754	0.289	2.991	0	0	0	0	0	0
0203-506-430	2.5	30.24	0.544	37.227	Exceeds Capacity	0 - 13:30 hrs	7.584	7.584	1.231	1	-6.987	4.616	2.499	4.23	4.303	4.235	2.629	2.651	0
0203-507-429	8	765.468	0.056	289.33	Free Surface	0 - 13:00 hrs	2.793	2.816	0.378	0.719	476.139	74.019	18	0	0	0	0	0	0
0203-508-509	7.34	1,006.51	1.616	134.731	Free Surface	0 - 12:15 hrs	1.401	2.955	0.134	0.994	871.782	3.493	26.622	0	0	2.159	0	0	0
0203-509-517	7.66	974.388	1.962	129.63	Backwater	0 - 12:11 hrs	3.338	3.338	0.133	1	844.758	3.467	5.331	1.25	1.25	2.965	0	0	0
0203-510-095	3	255.354	14.657	53.92	Backwater	0 - 11:51 hrs	7.628	7.628	0.211	1	201.434	12.018	3	6.089	6.089	6.12	0	0	7
0203-511-230	2.5	96.373	5.521	20.355	Backwater	0 - 14:00 hrs	4.147	4.147	0.211	1	76.018	3.748	2.5	5.16	5.16	5.178	0	0	0
0203-512-231	2.5	51.032	1.548	20.355	Free Surface	0 - 14:00 hrs	6.327	6.365	0.399	0.623	30.677	3.745	2.498	0	0	0	0	0	0
0203-513-229	2	34.719	2.355	20.355	Backwater	0 - 14:00 hrs	6.479	6.479	0.586	1	14.364	3.751	2	5.173	5.173	5.189	0	5.169	0
0203-514-515	3	39.502	0.351	20.355	Free Surface	0 - 14:02 hrs	4.4	4.4	0.515	0.623	19.147	3.742	2.998	0	0	0	0	0	0
0203-515-232	3	84.046	1.588	20.355	Free Surface	0 - 14:03 hrs	5.724	5.73	0.242	0.502	63.691	3.741	3	0	0	0	0	0	0
0203-516-393	3.5	136.994	1.854	20.355	Free Surface	0 - 14:03 hrs	3.116	3.116	0.149	0.643	116.639	3.745	3.483	0	0	0	0	0	0
0203-517-048	8.92	861.063	0.529	128.287	Free Surface	0 - 12:12 hrs	1.268	1.299	0.149	0.925	732.776	3.464	25.528	0	0	0	0	0	0
0203-518-519	2.4	58.661	0.743	41.894	Backwater	0 - 12:42 hrs	5.731	5.731	0.714	1	16.767	3.915	3.797	2.409	2.409	2.496	0	2.31	0
0203-519-203	5.134	201.594	1.52	41.893	Free Surface	0 - 12:42 hrs	4.366	4.393	0.208	0.73	159.701	3.908	10.267	0	0	0	0	0	0
0203-520-006	7.17	2,505.53	1.421	235.269	Free Surface	0 - 12:18 hrs	4.067	4.067	0.094	0.407	2,270.26	43.614	27.441	0	0	0	0	0	0
0203-521-526	3.5	87.303	0.753	36.844	Backwater	0 - 13:25 hrs	3.829	3.829	0.422	1	50.459	5.547	3.499	4.148	4.166	4.148	0	4.148	1
0203-522-521	3.5	35.258	0.123	36.844	Exceeds Capacity	0 - 13:25 hrs	3.829	3.829	1.045	1	-1.586	5.55	3.499	4.165	4.178	4.166	3.44	4.164	2
0203-523-524	3.5	68.693	0.466	38.129	Backwater	0 - 12:26 hrs	3.963	3.963	0.555	1	30.564	5.557	3.499	4.184	4.19	4.184	0	4.184	1
0203-524-522	3.5	51.644	0.263	36.844	Backwater	0 - 13:25 hrs	3.829	3.829	0.713	1	14.801	5.554	3.5	4.177	4.184	4.178	0	4.176	2
0203-525-033	16.9	11,949.49	1.886	195.165	Free Surface	0 - 12:17 hrs	5.31	5.312	0.016	0.197	11,754.32	41.024	16.927	0	0	0	0	0	0
0203-526-527	3.5	30.056	0.089	36.844	Free Surface	0 - 13:25 hrs	3.832	3.883	1.226	0.997	-6.788	5.545	3.491	0	4.148	0	4.168	0	0
0203-527-528	3.5	101.622	1.02	36.844	Free Surface	0 - 13:25 hrs	3.832	4.224	0.363	0.997	64.779	5.543	3.491	0	0	2.665	0	0	0
0203-528-234	4	131.535	0.839	36.844	Free Surface	0 - 13:25 hrs	3	3.248	0.28	0.943	94.692	5.542	3.999	0	0	0	0	0	0
0203-529-235	4	77.78	0.293	36.844	Free Surface	0 - 13:26 hrs	3.12	3.12	0.474	0.89	40.937	5.539	4	0	0	0	0	0	0
0203-530-001	9.53	528.594	0.062	133.209	Backwater	0 - 13:19 hrs	0.695	0.735	0.252	1	395.386	38.242	27.563	0.737	0.737	2.695	0	0	0
0203-531-055	2.5	55.941	1.86	57.146	Exceeds Capacity	0 - 12:17 hrs	11.642	11.642	1.022	1	-1.205	2.572	2.499	0.956	0.956	1.66	0.334	0.432	0
0203-532-580	9.45	2,462.51	1.34	112.67	Free Surface	0 - 17:36 hrs	3.054	3.066	0.046	0.381	2,349.84	46.053	21.108	0	0	0	0	0	0
0203-533-538	3	287.313	0.382	98.678	Free Surface	0 - 13:48 hrs	4.534	4.634	0.343	0.605	188.635	27.507	12	0	0	0	0	0	0
0203-534-535	3	63.109	0.895	23.302	Backwater	0 - 14:32 hrs	3.919	4.608	0.369	1	39.807	7.514	2.999	1.919	2.451	1.919	0	1.919	0
0203-535-542	3	89.294	1.792	32.31	Backwater	0 - 14:32 hrs	5.036	6.945	0.362	1	56.983	7.511	2.986	1.919	1.919	2.635	0	0	0
0203-536-537	3.5	3.806	0.001	81.892	Exceeds Capacity	0 - 12:45 hrs	8.512	8.512	21.518	1	-78.086	15.072	3.5	2.635	3.026	2.635	20.527	2.635	0
0203-537-539	4	126.979	0.781	81.892	Backwater	0 - 12:45 hrs	6.517	6.989	0.645	1	45.087	15.071	3.993	2.577	2.582	2.579	0	2.576	0
0203-538-608	4.87	3,433.72	7.246	98.682	Free Surface	0 - 13:48 hrs	5.779	5.919	0.029	0.331	3,335.04	27.501	12.289	0	0	0	0	0	0
0203-539-540	4	145.306	1.023	81.892	Backwater	0 - 12:45 hrs	6.517	6.517	0.564	1	63.414	15.086	4	2.579	2.579	2.688	0	0	0
0203-540-541	4	152.206	1.123	81.892	Free Surface	0 - 12:45 hrs	6.987	7.696	0.538	0.891	70.314	15.089	4	0	2.694	0	0	0	0
0203-541-543	4	189.82	1.746	81.856	Free Surface	0 - 12:47 hrs	6.98	7.262	0.431	0.891	107.964	15.096	3.995	0	0	2.665	0	0	0
0203-542-536	3.5	129.193	1.649	41.352	Backwater	0 - 14:32 hrs	4.467	4.503	0.32	1	87.841	7.501	3.499	2.606	2.606	3.026	0	0	0
0203-543-544	4	159.361	1.231	81.856	Backwater	0 - 12:47 hrs	6.514	6.514	0.514	1	77.505	15.091	4	2.631	2.665	2.742	0	2.618	0
0203-544-650	4.04	121.062	0.856	81.855	Backwater	0 - 12:47 hrs	3.508	3.508	0.676	1	39.207	15.087	7.247	2.708	2.725	2.724	0	2.579	0
0203-545-251	3.91	3.866	0.001	34.729	Exceeds Capacity	0 - 16:23 hrs	1.349	1.349	8.984	1	-30.864	13.381	7.382	11.922	12.31	11.922	20.32	11.922	0
0203-546-548	3.5	28.097	0.056	34.737	Exceeds Capacity	0 - 17:06 hrs	1.241	1.241	1.236	1	-6.64	13.349	8	12.367	12.388	12.367	11.391	12.367	0
0203-547-600	6.67	1,344.78	0.969	112.946	Free Surface	0 - 12:18 hrs	0.978	1.757	0.084	0.865	1,231.83	27.398	37.406	0	0	0.361	0	0	0
0203-548-651	3.89	111.91	0.698	34.738	Backwater	0 - 17:02 hrs	1.448	1.448	0.31	1	77.172	13.339	7.177	11.915	11.915	11.963	0	0	0
0203-549-633	4.49	145.474	0.523	40.321	Free Surface	0 - 12:51 hrs	2.078	2.078	0.277	0.611	105.153	14.276	7.815	0	0	0	0	0	0
0203-550-638	10.26	9,226.24	2.917	1,079.17	Backwater	0 - 12:37 hrs	2.438	2.438	0.117	1	8,147.07	230.805	69.83	1.063	1.063	2.634	0	0	0
0203-551-550	3.5	380.538	14.306	68.75	Backwater	0 - 12:18 hrs	7.146	7.146	0.181	1	311.788	2.681	3.5	0.337	0.337	18.832	0	0	0
0203-552-553	3	16.916	0.609	26.948	Exceeds Capacity	0 - 13:23 hrs	3.812	3.812	1.593	1	-10.032	6.495	3	6.802	6.889	6.803	6.957	6.801	0
0203-553-322	4	109.183	0.578	26.948	Backwater	0 - 13:23 hrs	2.144	2.988	0.247	1	82.235	6.488	3.996	4.334	4.334	7.22	0	0	0
0203-554-555	3	91.986	1.902	43.916	Backwater	0 - 12:15 hrs	6.213	6.324	0.477	1	48.07	1.298	3	0.169	0.169	0.217	0	0.058	0
0203-555-319	4	59.203	0.17	43.932	Backwater	0 - 12:15 hrs	3.496	3.496	0.742	1	15.271	1.301	3.995	0.273	0.273	0.292	0	0.221	0
0203-556-558	4.5	250.472	1.622	69.59	Free Surface	0 - 12:15 hrs	5.366	5.752	0.278	0.763	180.882	6.719	4.5	0	0	4.026	0	0	0
0203-557-584	14	1,993.65	1.603	476.291	Free Surface	0 - 12:15 hrs	8.62	8.639	0.239	0.66	1,517.36	106.384	6	0	0	0	0	0	0
0203-558-644	17.29	23,504.65	1.58	1,297.53	Free Surface	0 - 12:29 hrs	4.465	4.595	0.055	0.411	22,207.12	251.003	57.117	0	0	0	0	0	0
0203-559-547	8.04	86.352	0.001	103.972	Free Surface	0 - 12:21 hrs	1.31	2.926	1.204	0.609	-17.619	27.422	32.53	0	0	0	6.596	0	0
0203-560-564	4.58	457.706	1.81	377.425	Backwater	0 - 12:23 hrs	7.33	7.33	0.825	1	80.281	29.353	19.156	1.223	1.223	2.311	0	1.184	0
0203-561-565	5	246.32	1.547	247.802	Free Surface	0 - 13:15 hrs	7.648	7.648	1.006	0.81	-1.483	29.262	8	0	2.369	0	0.345	0	11
0203-562-590	4.43	15.809	0.103	66.972	Free Surface	0 - 18:59 hrs	5.334	7.554	4.236	0.968	-51.162	16.529	11.06	0	9.96	0	11.159	0	0
0203-563-562	5.67	87.661	1.863	79.803	Backwater	0 - 12:34 hrs	4.906	4.906	0.91	1	7.858	16.556	3.577	6.8	6.8	9.279	0	3.081	0
0203-564-561	4.58	331.093	0.947	247.802	Backwater	0 - 13:15 hrs	4.813	4.817	0.748	1	83.291	29.297	19.156	2.311	2.311	2.42	0	0	10
0203-565-566	6.13	3,871.66	1.408	247.779	Free Surface	0 - 13:15 hrs	1.861	1.861	0.064	0.535	3,623.89	29.233	69.388	0	0	0	0	0	8
0203-566-567	4.89	320.067	1.093	247.7	Free Surface	0 - 13:18 hrs	5.378	5.395	0.774	0.973	72.367	29.173	18.198	0	0	0	0	0	0
0203-567-568	7.77	909.854	0.572	247.645	Free Surface	0 - 13:18 hrs	4.112	4.112	0.272	0.66	662.209	29.16	21.727	0	0	0	0	0	0
0203-568-569	6.66	552.088	0.267	250.65	Free Surface	0 - 12:15 hrs	4.045	4.298	0.454	0.715	301.439	29.132	24.652	0	0	0	0	0	0
0203-569-570	5.1	1,171.14	0.51	253.015	Free Surface	0 - 15:08 hrs	1.522	2.165	0.216	0.943	918.126	29.418	83.572	0	0	2.973	0	0	0
0203-570-571	4.54	290.106	1.015	217.909	Backwater	0 - 14:29 hrs	4.834	4.834	0.751	1	72.197	29.051	17.729	3.09	3.09	12.643	0	0	0
0203-571-572	7.53	767.629	0.506	225.665	Backwater	0 - 14:33 hrs	2.027	2.027	0.294	1	541.964	28.794	20.731	3.055	3.055	5.148	0	0	0
0203-572-573	10	155.838	0.002	246.967	Exceeds Capacity	0 - 13:15 hrs	1.646	1.646	1.585	1	-91.129	28.545	15	1.148	1.272	1.148	2.771	1.118	0
0203-573-574	8.35	39.275	0	871.764	Exceeds Capacity	0 - 12:22 hrs	5.031	5.031	22.197	1	-832.49	84.357	35.504	3.86	3.899	3.86	17.303	3.86	0
0203-574-575	6.44	19.662	0.001	556.599	Exceeds Capacity	0 - 13:12 hrs	5.935	5.935	28.309	1	-536.937	84.35	18.158	12.611	12.648	12.611	19.601	12.611	0

Table B-5b. Existing System Analysis - Pipes/Channels
50-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-575-383	4.91	96.731	0.063	116.957	Backwater	0 - 11:19 hrs	2.17	2.17	1.209	1	-20.226	48.245	12.036	12.669	12.669	13.717	13.047	0	0
0203-576-577	13.143	8,486.87	3.432	112.665	Free Surface	0 - 17:29 hrs	4.123	4.123	0.013	0.195	8,374.21	46.742	15.06	0	0	0	0	0	0
0203-577-578	13.143	1,842.63	0.162	112.665	Free Surface	0 - 17:30 hrs	3.27	3.286	0.061	0.229	1,729.97	46.675	16.406	0	0	0	0	0	0
0203-578-579	12.6	3,409.35	0.426	112.665	Free Surface	0 - 17:31 hrs	1.761	1.761	0.033	0.278	3,296.69	46.566	23.359	0	0	0	0	0	0
0203-579-247	16	13,470.77	1.049	112.664	Free Surface	0 - 17:35 hrs	1.147	1.147	0.008	0.246	13,358.11	46.336	25	0	0	0	0	0	0
0203-580-582	9.94	1,281.46	0.17	112.681	Free Surface	0 - 17:31 hrs	2.588	3.062	0.088	0.409	1,168.77	45.971	24.443	0	0	0	0	0	0
0203-581-592	3	67.993	1.039	65.826	Backwater	0 - 12:03 hrs	9.358	9.5	0.968	1	2.167	3.668	2.999	0.884	1.009	0.898	0	0.884	0
0203-582-583	8.81	4,032.92	2.092	114.318	Free Surface	0 - 20:29 hrs	1.836	3.832	0.028	0.596	3,918.60	45.937	32.625	0	0	0	0	0	0
0203-583-584	11.75	15,533.00	2.768	117.684	Free Surface	0 - 21:04 hrs	0.622	0.975	0.008	0.661	15,415.32	45.876	60.446	0	0	0	0	0	0
0203-584-585	13.35	2,358.24	0.069	558.41	Free Surface	0 - 12:15 hrs	1.716	1.799	0.237	0.651	1,799.83	152.141	54.29	0	0	0	0	0	0
0203-585-586	13.32	3,869.75	0.284	555.541	Free Surface	0 - 12:17 hrs	2.169	2.297	0.144	0.648	3,314.21	152.084	44.216	0	0	0	0	0	0
0203-586-587	14.17	4,356.39	0.461	549.889	Free Surface	0 - 12:18 hrs	2.767	3.194	0.126	0.64	3,806.50	152	43.983	0	0	0	0	0	0
0203-587-588	13.84	7,989.37	1.179	543.243	Free Surface	0 - 12:19 hrs	1.733	1.866	0.068	0.747	7,446.13	151.867	48.377	0	0	0	0	0	0
0203-588-589	15.24	7,355.74	0.878	538.683	Free Surface	0 - 12:21 hrs	2.2	2.541	0.073	0.648	6,817.05	151.682	44.899	0	0	0	0	0	0
0203-589-612	16.27	3,369.78	0.088	532.203	Free Surface	0 - 12:22 hrs	2.175	2.972	0.158	0.528	2,837.58	151.521	47.769	0	0	0	0	0	0
0203-590-591	2.03	69.27	1.283	64.557	Backwater	0 - 19:00 hrs	4.496	4.496	0.932	1	4.712	16.518	10.387	2.561	2.561	9.656	0	0.554	0
0203-591-593	2.62	73.4	1.343	60.872	Free Surface	0 - 19:46 hrs	6.515	6.515	0.829	0.75	12.528	16.525	6.743	0	6.814	0	0	0	0
0203-592-611	4	95.093	0.438	61.72	Backwater	0 - 12:04 hrs	5.182	5.218	0.649	1	33.373	3.671	4	0.758	0.758	3.64	0	0	0
0203-593-594	3.6	453.849	1.331	60.87	Free Surface	0 - 19:47 hrs	1.775	1.775	0.134	0.682	392.979	16.511	20.167	0	0	10.87	0	0	0
0203-594-595	2.19	35.906	0.524	46.318	Exceeds Capacity	0 - 20:54 hrs	3.528	3.528	1.29	1	-10.412	16.475	11.638	11.754	11.754	11.909	11.329	11.614	0
0203-595-596	3.06	64.797	0.373	46.315	Free Surface	0 - 20:55 hrs	3.09	3.09	0.715	0.798	18.482	16.465	8.198	0	0	0	0	0	0
0203-596-597	2.33	73.112	1.685	46.313	Free Surface	0 - 20:57 hrs	3.956	3.956	0.633	0.913	26.799	16.453	10.101	0	0	11.767	0	0	0
0203-597-598	7.08	393.884	0.474	46.31	Free Surface	0 - 20:58 hrs	3.351	3.351	0.118	0.421	347.574	16.443	9.101	0	0	0	0	0	0
0203-598-599	6.15	520.803	0.782	46.689	Free Surface	0 - 12:22 hrs	1.269	2.431	0.09	0.714	474.114	16.439	15.756	0	0	0	0	0	0
0203-599-679	4.583	13.78	0.012	51.915	Exceeds Capacity	0 - 12:22 hrs	1.812	3.211	3.767	1	-38.135	16.423	6.25	0.545	0.964	0.545	13.848	0.545	0
0203-600-601	6.67	1,189.60	0.758	486.751	Backwater	0 - 12:15 hrs	3.175	5.001	0.409	1	702.848	106.418	38.079	0.778	0.778	1.117	0	0	0
0203-601-557	9.29	10,571.93	4.543	480.577	Free Surface	0 - 12:15 hrs	1.277	4.24	0.045	0.928	10,091.35	106.408	71.013	0	0	0.3	0	0	0
0203-602-532	9	3,094.64	0.323	112.668	Free Surface	0 - 17:36 hrs	1.919	1.921	0.036	0.3	2,981.98	46.089	24	0	0	0	0	0	0
0203-603-604	4.549	95.959	0.384	98.68	Exceeds Capacity	0 - 13:44 hrs	3.709	3.709	1.028	1	-2.721	27.479	7.32	4.408	8.536	4.408	3.063	4.408	0
0203-604-605	4.539	43.632	0.049	98.678	Free Surface	0 - 13:45 hrs	3.242	3.242	2.262	0.95	-55.046	27.479	7.865	0	4.501	0	9.236	0	0
0203-605-606	4.52	148.955	0.689	98.678	Free Surface	0 - 13:45 hrs	4.517	4.517	0.662	0.753	50.277	27.482	7.236	0	0	0	0	0	0
0203-606-607	3.356	295.43	1.499	98.678	Free Surface	0 - 13:47 hrs	3.737	3.737	0.334	0.715	196.752	27.489	12.919	0	0	0	0	0	0
0203-607-533	3.063	600.121	1.062	98.678	Free Surface	0 - 13:47 hrs	4.67	4.67	0.164	0.685	501.443	27.498	11.439	0	0	0	0	0	0
0203-608-609	6.23	920.531	0.657	98.666	Free Surface	0 - 13:48 hrs	5.236	5.372	0.107	0.537	821.865	27.495	8.534	0	0	0	0	0	0
0203-609-610	8.2	2,600.98	0.173	98.906	Free Surface	0 - 13:40 hrs	1.773	1.914	0.038	0.589	2,502.07	27.457	26.977	0	0	0	0	0	0
0203-610-559	8.04	117.505	0.003	101.748	Free Surface	0 - 12:21 hrs	1.237	2.106	0.866	0.615	15.757	27.432	32.725	0	0	0	0	0	0
0203-611-621	15.12	3,023.71	0.281	776.137	Free Surface	0 - 12:19 hrs	3.912	4.044	0.257	0.69	2,247.57	166.219	34.531	0	0	0	0	0	0
0203-612-611	11.76	7,994.65	1.202	723.22	Free Surface	0 - 12:18 hrs	1.901	1.95	0.09	0.825	7,271.43	162.659	60.49	0	0	0	0	0	0
0203-613-614	13.8	4,726.46	0.449	758.074	Free Surface	0 - 12:21 hrs	2.498	2.646	0.16	0.802	3,968.38	166.026	51.019	0	0	0	0	0	0
0203-614-615	14.09	134.302	0	739.353	Free Surface	0 - 12:22 hrs	2.706	2.896	5.505	0.822	-605.052	165.793	44.171	0	0	0	15.119	0	0
0203-615-616	16.66	3,218.90	0.047	712.865	Free Surface	0 - 12:22 hrs	1.702	1.835	0.221	0.688	2,506.03	165.501	68.447	0	0	0	0	0	0
0203-616-617	12.01	1,156.69	0.039	693.386	Free Surface	0 - 12:44 hrs	1.725	2.149	0.599	0.939	463.304	165.073	59.78	0	0	0	0	0	0
0203-617-618	10.93	4,117.66	0.453	763.128	Backwater	0 - 12:45 hrs	1.741	1.78	0.185	1	3,354.54	175.378	53.824	0.779	0.779	1.414	0	0	0
0203-618-619	10.66	2,216.36	0.228	763.12	Backwater	0 - 12:45 hrs	1.993	1.993	0.344	1	1,453.24	175.136	60.711	1.682	1.682	2.057	0	0	0
0203-619-620	11.76	1,212.85	0.102	680.113	Free Surface	0 - 13:12 hrs	2.333	3.451	0.561	0.966	532.736	173.863	40.71	0	0	0.728	0	0	0
0203-620-622	13.9	5,243.80	0.147	680.26	Free Surface	0 - 13:12 hrs	1.136	1.435	0.13	0.776	4,563.54	173.724	64.651	0	0	0	0	0	0
0203-621-613	13.58	3,962.39	0.558	772.312	Free Surface	0 - 12:19 hrs	3.535	3.733	0.195	0.753	3,190.08	166.175	39.221	0	0	0	0	0	0
0203-622-623	1.76	230.845	0.512	698.02	Exceeds Capacity	0 - 13:12 hrs	9.053	9.053	3.024	1	-467.176	176.919	64.23	18.05	18.05	18.29	10.89	16.014	0
0203-623-676	7.33	4,490.61	0.149	811.686	Free Surface	0 - 13:12 hrs	3.73	3.735	0.181	0.714	3,678.93	190.185	57.247	0	0	0	0	0	0
0203-624-623	4.01	549.756	2.467	113.566	Backwater	0 - 13:08 hrs	2.123	2.123	0.207	1	436.19	13.346	20.41	2.197	2.197	5.543	0	0	0
0203-625-270	11.2	3,720.17	1.794	120.189	Free Surface	0 - 12:03 hrs	1.531	1.801	0.032	0.682	3,599.98	13.357	26.388	0	0	0	0	0	0
0203-626-657	3.86	270.391	1.937	193.798	Backwater	0 - 12:15 hrs	5.881	5.881	0.717	1	76.592	13.361	13.226	2.332	2.333	2.392	0	0.296	0
0203-627-252	6.45	380.355	0.191	55.336	Free Surface	0 - 13:00 hrs	2.737	2.8	0.145	0.411	325.02	6.012	14.078	0	0	0	0	0	0
0203-628-629	6.99	10,583.69	1.162	843.025	Free Surface	0 - 12:40 hrs	4.73	6.016	0.08	0.675	9,740.67	193.301	50.383	0	0	0	0	0	0
0203-629-630	8.41	10,075.58	0.756	938.053	Free Surface	0 - 12:40 hrs	3.842	4.196	0.093	0.804	9,137.52	206.832	50.366	0	0	0.996	0	0	0
0203-630-268	12.401	1,060.03	0.014	937.948	Free Surface	0 - 12:41 hrs	2.728	2.755	0.885	0.668	122.082	206.467	65.402	0	0	0	0	0	0
0203-631-632	12.016	1,549.05	0.035	998.804	Free Surface	0 - 12:42 hrs	3.371	3.465	0.645	0.644	550.246	214.37	62.825	0	0	0	0	0	0
0203-632-637	9.93	7,174.33	1.141	1,000.86	Free Surface	0 - 12:42 hrs	3.734	4.126	0.14	0.638	6,173.47	214.167	60.974	0	0	0	0	0	0
0203-633-634	4.51	102.646	0.306	40.313	Free Surface	0 - 12:51 hrs	2.67	2.678	0.393	0.526	62.334	14.263	7.084	0	0	0	0	0	0
0203-634-255	4.56	151.447	0.923	40.278	Free Surface	0 - 12:52 hrs	3.297	3.389	0.266	0.546	111.169	14.246	6.333	0	0	0	0	0	0
0203-635-636	6.75	673.062	1.181	40.825	Free Surface	0 - 12:52 hrs	1.007	2.092	0.061	0.677	632.237	14.221	13.207	0	0	0	0	0	0
0203-636-637	11.29	4,138.85	0.961	41.727	Free Surface	0 - 12:52 hrs	0.376	1.057	0.01	0.523	4,097.12	14.172	31.591	0	0	0	0	0	0
0203-637-550	10.26	9,217.28	2.911	1,044.20	Free Surface	0 - 12:44 hrs	3.687	3.938	0.113	0.765	8,173.08	228.267	60.249	0	0	1.063	0	0	0
0203-638-639	17.23	13,754.19	1.014	1,080.91	Free Surface	0 - 12:38 hrs	3.039	3.101	0.079	0.597	12,673.29	230.598	48.756	0	0	0	0	0	0
0203-639-640	11.92	1,425.16	0.041	1,212.63	Free Surface	0 - 12:26 hrs	4.069	4.283	0.851	0.684	212.528	241.557	48.986	0	0	0	0	0	0
0203-640-641	13.4	6,157.15	0.482	1,210.72	Free Surface	0 - 12:27 hrs	3.922	4.251	0.197	0.591	4,946.43	241.363	60.971	0	0	0	0	0	0
0203-641-642	7.11	1,605.32	0.414	1,209.70	Backwater	0 - 12:30 hrs	4.949	4.949	0.754	1	395.614	241.092	49.661	1.723	1.815	1.723	0	1.723	0
0203-642-643	17.21	1,925.72	0.009	1,231.25	Free Surface	0 - 12:30 hrs	4.393	4.403	0.639	0.383	694.469	242.69	59.383	0	0	0	0	0	0
0203-643-558	17.29	19,135.11	1.047	1,231.02	Free Surface	0 - 12:30 hrs	5.243	5.261	0.064	0.352	17,904.09	242.471	53.261	0	0	0	0	0	0
0203-644-645	22.03	20,938.12	0.668	1,296.93	Free Surface	0 - 12:30 hrs	4.684	4.75	0.062	0.388	19,641.18	250.831	51.084	0	0	0	0	0	0
0203-645-646	23.07	16,084.02	0.29	1,296.30	Free Surface	0 - 12:32 hrs	3.91	3.911	0.081	0.383	14,787.72	250.498	54.342	0	0	0	0	0	0
0203-646-007	23.07	17,808.79	0.355	1,296.22	Free Surface	0 - 12:32 hrs	7.191	7.191	0.073	0.249	16,512.57	250.339	43.703	0	0	0	0	0	0
0203-647-351	3.6	105.916	0.448	76.401	Backwater	0 - 12:10 hrs	2.897	2.94	0.721	1	29.515	2.687	12.757	0.191	0.191	0.355	0	0	0
0203-648-647	3.6	105.904	0.448	58.367	Backwater	0 - 12:15 hrs	2.092	2.222	0.551	1	47.537	1.706	12.757	0.102	0.102	0.191	0	0	0
0203-649-647	4.97	241.168	0.392	31.245	Free Surface	0 - 12:12 hrs	1.17	1.439	0.13	0.729	209.922	0.983	15.587	0	0	0	0	0	0
0203-650-250	4.04	90.812	0.482	80.856	Backwater	0 - 12:19 hrs	3.465	3.465	0.89	1	9.956	15.055	7.247	2.724	2.724	6.681	0	2.613	0
0203-651-248	4.17	61.813	0.13	34.739	Backwater	0 - 17:02 hrs	1.201	1.216	0.562	1	27.074	13.308	8.005	10.113	10.113	11.939	0	0	0
0203-652-653	3	89.924	1.818	71.694	Backwater	0 - 11:52 hrs	10.143	10.143	0.797	1	18.229	10.821	2.999	3.576	3.576	3.595	0	3.572	0
0203-653-654	3.5	89.147	0.785	69.994	Free Surface	0 - 12:55 hrs	8.421	8.425	0.785	0.819	19.153	10.808	3.473	0	3.568	0	0	0	0
0203-654-656	4	192.782	1.801	69.997	Free Surface	0 - 12:56 hrs	7.757	8.169	0.363	0.677	122.785	10.801	3.989	0	0	0	0	0	0
0203-655-661	6	544.482	0.174	150.881	Backwater	0 - 17:05 hrs	2.096	2.096	0.277	1	393.6	45.855	12	9.067	9.075	9.067	0	9.067	0
0203-656-272	4	136.969	0.538	69.989	Free Surface	0 - 12:56 hrs	6.857	7.038	0.511	0.838	66.98	10.81	3.998	0	0	0	0	0	0

Table B-5b. Existing System Analysis - Pipes/Channels
50-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-657-625	3.86	140.903	0.526	139.288	Backwater	0 - 12:03 hrs	4.227	4.227	0.989	1	1.615	13.358	13.226	2.392	2.392	2.53	0	0.122	0
0203-658-671	4.5	115.357	1.52	113.557	Backwater	0 - 13:08 hrs	5.047	5.047	0.984	1	1.8	13.355	5	2.447	2.494	2.447	0	2.447	0
0203-659-624	3.98	491.176	1.802	113.564	Backwater	0 - 13:08 hrs	4.988	5.174	0.231	1	377.612	13.352	5.812	1.593	1.593	2.224	0	0	0
0203-660-552	3	65.969	0.978	26.948	Backwater	0 - 13:23 hrs	3.812	3.812	0.408	1	39.021	6.489	2.999	6.885	6.915	6.886	0	6.885	0
0203-661-331	6	229.475	0.292	150.683	Backwater	0 - 17:45 hrs	2.093	2.093	0.657	1	78.791	45.848	12	9.067	9.067	9.09	0	0.002	0
0203-662-663	3.5	64.069	0.406	55.357	Backwater	0 - 12:57 hrs	5.754	5.773	0.864	1	8.712	6.009	3.498	2.139	2.146	2.14	0	2.138	0
0203-663-664	3.5	155.483	2.388	55.357	Backwater	0 - 12:57 hrs	5.754	5.754	0.356	1	100.126	6.014	3.499	2.14	2.14	2.154	0	2.138	0
0203-664-627	3.5	130.884	1.692	55.357	Free Surface	0 - 12:57 hrs	6.111	6.111	0.423	0.898	75.527	6.013	3.5	0	2.154	0	0	0	0
0203-665-673	6	506.09	0.15	150.75	Backwater	0 - 17:45 hrs	2.413	2.646	0.298	1	355.34	45.804	12	1.275	1.496	1.275	0	1.275	0
0203-666-667	3	55.113	0.683	47.338	Backwater	0 - 12:25 hrs	6.697	6.697	0.859	1	7.775	3.593	2.994	1.539	1.541	1.732	0	1.216	0
0203-667-668	3	70.995	1.133	47.337	Backwater	0 - 12:25 hrs	6.697	6.697	0.667	1	23.658	3.588	2.999	1.736	1.738	1.777	0	1.213	0
0203-668-669	3	88.178	1.748	38.264	Backwater	0 - 13:14 hrs	5.413	5.413	0.434	1	49.914	3.624	3	1.81	1.81	1.841	0	1.741	0
0203-669-670	3	23.852	0.128	38.264	Exceeds Capacity	0 - 13:14 hrs	5.413	5.413	1.604	1	-14.412	3.622	3	1.741	1.841	1.741	1.787	1.739	0
0203-670-252	3.5	2.598	0.001	38.24	Free Surface	0 - 13:14 hrs	4.866	4.866	14.719	0.835	-35.642	3.619	3.5	0	1.445	0	11.461	0	0
0203-671-672	4.5	224.625	0.609	113.557	Backwater	0 - 13:08 hrs	5.047	5.047	0.506	1	111.068	13.355	5	2.354	2.447	2.354	0	2.354	0
0203-672-659	4.5	193.383	0.451	113.557	Free Surface	0 - 13:08 hrs	5.226	5.37	0.587	0.968	79.825	13.352	5	0	2.354	0	0	0	0
0203-673-677	6	624.338	0.228	162.763	Backwater	0 - 12:18 hrs	2.261	2.71	0.261	1	461.575	42.844	12	1.275	1.275	1.763	0	0	0
0203-674-675	4	103.697	0.521	78.107	Backwater	0 - 12:18 hrs	6.216	6.216	0.753	1	25.59	3.307	4	0.396	0.458	0.397	0	0.396	0
0203-675-676	4	75.888	0.279	78.108	Free Surface	0 - 12:18 hrs	6.973	6.973	1.029	0.834	-2.219	3.297	4	0	0.397	0	0.176	0	0
0203-676-628	7.33	4,266.06	0.134	843.422	Free Surface	0 - 12:38 hrs	4.441	4.61	0.198	0.641	3,422.64	193.355	57.058	0	0	0	0	0	0
0203-677-679	6	286.566	0.048	219.094	Backwater	0 - 12:15 hrs	3.043	3.043	0.765	1	67.471	42.688	12	1.57	1.763	1.571	0	0.828	0
0203-678-283	3.5	73.608	0.535	67.458	Backwater	0 - 12:32 hrs	7.011	7.011	0.916	1	6.151	8.512	3.478	2.689	2.689	3.732	0	2.448	0
0203-679-600	7.55	1,792.78	0.744	203.709	Backwater	0 - 20:25 hrs	2.246	2.554	0.114	1	1,589.07	59.08	49.189	0.084	0.084	0.129	0	0	0
0203-680-681	3	36.722	0.303	38.945	Exceeds Capacity	0 - 11:52 hrs	5.51	5.51	1.061	1	-2.223	5.78	2.999	4.017	4.068	4.018	0.122	4.016	0
0203-681-682	3	60.903	0.834	38.954	Backwater	0 - 11:52 hrs	5.511	5.511	0.64	1	21.949	5.803	3	4.028	4.028	4.071	0	0.146	0
0203-682-683	4	80.161	0.311	38.503	Backwater	0 - 11:53 hrs	3.743	3.83	0.48	1	41.658	5.804	4	3.834	3.887	3.834	0	3.834	1
0203-683-684	4	120.044	0.698	37.716	Backwater	0 - 11:53 hrs	3.926	4.131	0.314	1	82.328	5.804	3.994	3.834	3.834	3.944	0	0	6
0203-684-685	4	88.644	0.381	35.433	Backwater	0 - 12:00 hrs	2.82	2.947	0.4	1	53.212	5.805	3.999	3.944	3.944	4.1	0	0	7
0203-685-686	4.5	201.454	1.049	35.396	Backwater	0 - 12:00 hrs	2.226	2.226	0.176	1	166.058	5.803	4.5	4.018	4.018	4.038	0	0	9
0203-686-687	4.5	8.888	0.002	35.371	Exceeds Capacity	0 - 12:00 hrs	2.224	2.224	3.98	1	-26.483	5.801	4.5	4.011	4.038	4.011	5.273	4.011	8
0203-687-269	7.321	16.942	0.011	35.27	Free Surface	0 - 12:44 hrs	1.605	2.444	2.082	0.82	-18.327	5.8	4.814	0	0	0	4.228	0	1
0203-688-689	3	20.487	0.094	49.027	Free Surface	0 - 12:17 hrs	7.222	7.223	2.393	0.917	-28.54	1.839	2.999	0	0.439	0	0.546	0	0
0203-689-631	3.333	69.94	0.627	49.035	Free Surface	0 - 12:18 hrs	6.219	6.736	0.701	0.853	20.905	1.834	3.333	0	0	0.883	0	0	0
CDT-395	3.75	65.819	0.296	69.575	Exceeds Capacity	0 - 12:17 hrs	6.299	6.299	1.057	1	-3.756	5.935	3.723	0.141	2.282	0.141	0.144	0.141	0

Table B-6a. Existing System Analysis - Nodes
100-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-001	10.182	276.572	Below Maximum Depth	1.608	0 - 12:19 hrs	0	161.917	0	43.418	0.165	6.308	0.652	1.608	0	0	0	0 - 00:00 hrs
0203-002	11.819	280.179	Surcharged	-2.719	0 - 12:15 hrs	56.578	56.578	1.305	1.305	0	25.415	8.819	0	0.011	0.265	6.161	0 - 12:18 hrs
0203-003	7.724	276.684	Below Maximum Depth	2.146	0 - 12:19 hrs	0	144.686	0	42.326	0.002	2.922	0.254	2.146	0	0	0	0 - 00:00 hrs
0203-004	8.63	278.97	Surcharged	0	0 - 12:14 hrs	227.688	268.625	7.573	43.506	0.019	5.989	0.57	0	1.026	1.226	132.581	0 - 12:15 hrs
0203-005	8.464	282.814	Surcharged	-4.214	0 - 12:18 hrs	535.379	535.379	14.457	33.507	0.003	17.283	4.294	0	1.694	8.637	205.822	0 - 12:10 hrs
0203-006	6.994	281.944	Surcharged	-2.824	0 - 12:19 hrs	0	116.142	0	20.398	0.002	16.342	2.824	0	0.07	8.171	8.761	0 - 12:15 hrs
0203-007	3.341	284.921	Below Link Crown	0.409	0 - 16:37 hrs	0	90.793	0	17.679	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-008	3.945	286.025	Below Maximum Depth	2.025	0 - 16:36 hrs	0	90.793	0	17.681	0.001	7.235	0.195	2.025	0	0	0	0 - 00:00 hrs
0203-009	5.37	280.97	Surcharged	-1.03	0 - 17:09 hrs	0	68.744	0	18.561	0.002	21.421	1.29	0	0.033	10.132	2.176	0 - 11:52 hrs
0203-010	4.607	286.807	Below Link Crown	0.793	0 - 16:36 hrs	0	90.794	0	17.685	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-011	2.948	292.658	Below Link Crown	0.972	0 - 16:34 hrs	0	90.795	0	17.702	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-012	3.597	293.737	Below Maximum Depth	1.953	0 - 16:32 hrs	0	90.795	0	17.688	0.002	7.549	0.197	1.953	0	0	0	0 - 00:00 hrs
0203-013	4.097	294.857	Surcharged	-0.057	0 - 16:32 hrs	0	93.533	0	17.677	0.001	4.476	0.064	0	0.106	2.171	3.077	0 - 15:52 hrs
0203-014	6.616	298.226	Below Maximum Depth	0.584	0 - 15:12 hrs	0	106.373	0	17.729	0.002	8.932	1.116	0.584	0	0	0	0 - 00:00 hrs
0203-015	5.65	299.15	Below Maximum Depth	2.59	0 - 14:33 hrs	0	106.382	0	17.7	-0.001	5.06	0.15	2.59	0	0	0	0 - 00:00 hrs
0203-016	7.08	314.56	Below Maximum Depth	5.24	0 - 13:08 hrs	0	63.691	0	8.903	-0.001	6.996	3.15	5.24	0	0	0	0 - 00:00 hrs
0203-017	5.928	297.338	Surcharged	-0.428	0 - 15:26 hrs	0	106.372	0	17.74	0.001	7.617	0.428	0	0.218	3.807	4.54	0 - 13:03 hrs
0203-018	5.294	296.414	Surcharged	-0.914	0 - 15:56 hrs	0	104.005	0	17.717	0.002	10.582	1.259	0	0.717	5.102	21.801	0 - 11:52 hrs
0203-019	6.402	322.322	Surcharged	-1.002	0 - 12:48 hrs	134.893	134.893	4.009	4.01	0	7.541	3.402	0	0.887	3.769	104.824	0 - 12:15 hrs
0203-020	7.183	321.693	Surcharged	-0.833	0 - 13:22 hrs	0	40.904	0	4.007	0.001	7.56	4.183	0	0.143	3.18	9.502	0 - 12:22 hrs
0203-021	6.716	321.156	Surcharged	-0.496	0 - 13:21 hrs	0	41.541	0	4.031	0.001	7.543	3.646	0	0.021	2.447	2.037	0 - 12:26 hrs
0203-022	2.648	271.638	Below Link Crown	8.362	0 - 12:15 hrs	0	214.638	0	45.329	0.025	0	0	0	0	0	0	0 - 00:00 hrs
0203-023	7.929	320.339	Surcharged	-1.139	0 - 13:11 hrs	0	41.542	0	4.133	0	7.573	4.779	0	0.511	3.311	38.524	0 - 12:17 hrs
0203-024	8.215	320.105	Surcharged	-0.935	0 - 12:22 hrs	172.979	172.979	4.917	9.028	0.004	6.837	5.005	0	0.592	2.346	94.358	0 - 12:15 hrs
0203-025	6.115	312.045	Surcharged	-1.175	0 - 13:22 hrs	0	63.691	0	8.905	0.001	7.635	2.615	0	0.145	3.238	7.014	0 - 12:22 hrs
0203-026	4.683	310.163	Below Maximum Depth	0.537	0 - 13:11 hrs	0	61.686	0	8.91	0.001	6.384	1.173	0.537	0	0	0	0 - 00:00 hrs
0203-027	6.469	306.649	Below Maximum Depth	1.061	0 - 12:53 hrs	0	60.267	0	8.919	0.003	6.728	2.469	1.061	0	0	0	0 - 00:00 hrs
0203-028	5.771	305.601	Below Maximum Depth	1.919	0 - 12:48 hrs	0	60.268	0	8.917	0.001	6.478	1.271	1.919	0	0	0	0 - 00:00 hrs
0203-029	7.719	304.609	Surcharged	-1.269	0 - 12:44 hrs	0	113.059	0	9.373	0.003	7.556	3.219	0	1.267	3.313	113.059	0 - 12:17 hrs
0203-030	7.967	304.777	Surcharged	-0.277	0 - 12:18 hrs	0	80.694	0	9.816	0.002	0.438	0.307	0	0.037	0.216	24.193	0 - 12:15 hrs
0203-031	4.494	273.494	Below Link Crown	3.836	0 - 12:15 hrs	69.971	69.971	2.046	2.047	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-032	7.225	275.355	Surcharged	-1.095	0 - 12:22 hrs	117.464	117.464	2.928	2.929	0	3.055	4.725	0	0.477	1.376	76.454	0 - 12:15 hrs
0203-033	3.41	265.42	Below Link Crown	13.58	0 - 12:17 hrs	0	252.006	0	48.221	0.014	0	0	0	0	0	0	0 - 00:00 hrs
0203-034	5.124	281.494	Surcharged	-1.044	0 - 17:17 hrs	0	115.339	0	18.125	0.002	21.352	1.044	0	7.608	10.675	115.339	0 - 12:40 hrs
0203-035	2.158	287.348	Below Link Crown	3.233	0 - 16:36 hrs	0	90.795	0	17.688	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-036	3.557	289.977	Below Link Crown	1.783	0 - 16:34 hrs	0	90.795	0	17.694	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-037	8.948	304.888	Surcharged	-1.288	0 - 12:17 hrs	334.409	334.409	8.788	18.174	0.002	1.764	1.288	0	0.521	0.882	103.117	0 - 12:12 hrs
0203-038	5.903	300.573	Surcharged	-0.873	0 - 14:00 hrs	0	173.378	0	17.689	0.004	8.74	0.903	0	1.73	4.37	70.799	0 - 12:15 hrs
0203-039	2.719	290.969	Below Link Crown	1.164	0 - 16:34 hrs	0	90.795	0	17.704	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-040	3.034	283.394	Below Link Crown	1.086	0 - 16:55 hrs	0	90.792	0	17.676	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-041	5.855	280.055	Surcharged	-1.795	0 - 13:08 hrs	0	226.665	0	32.11	0.002	16.473	1.795	0	1.573	8.236	134.102	0 - 12:17 hrs
0203-042	5.99	279.67	Surcharged	-1.83	0 - 13:30 hrs	0	173.906	0	32.558	0.002	16.577	1.83	0	2.044	8.288	173.905	0 - 12:15 hrs
0203-043	7.223	279.093	Below Link Crown	1.407	0 - 13:22 hrs	0	107.91	0	33.04	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-044	7.599	279.079	Below Link Crown	1.071	0 - 13:15 hrs	0	105.551	0	33.081	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-045	7.552	279.062	Below Link Crown	3.368	0 - 13:15 hrs	0	102.792	0	33.155	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-046	8.284	279.054	Below Link Crown	8.646	0 - 13:15 hrs	0	116.955	0	33.275	0.046	0	0	0	0	0	0	0 - 00:00 hrs
0203-047	7.543	279.033	Below Link Crown	9.367	0 - 12:15 hrs	0	136.613	0	33.417	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-048	8.1	279.03	Below Link Crown	0.92	0 - 12:15 hrs	0	150.293	0	36.626	0.021	0	0	0	0	0	0	0 - 00:00 hrs
0203-049	8.63	279.02	Surcharged	-0.57	0 - 12:15 hrs	0	111.417	0	35.96	0.021	5.936	0.57	0	0.102	2.968	44.491	0 - 12:11 hrs
0203-050	8.634	279.004	Surcharged	-0.574	0 - 12:15 hrs	0	112.338	0	36.059	0.025	5.951	0.574	0	0.044	2.976	20.172	0 - 12:11 hrs
0203-051	8.474	276.654	Below Link Crown	1.056	0 - 12:19 hrs	0	142.363	0	42.322	0.032	0	0	0	0	0	0	0 - 00:00 hrs
0203-052	8.385	318.178	Surcharged	-0.378	0 - 12:15 hrs	40.453	40.453	1.179	1.179	0	4.021	5.385	0	0.002	0.09	2.125	0 - 12:15 hrs
0203-053	7.549	316.562	Below Maximum Depth	0.138	0 - 12:15 hrs	0	38.474	0	1.176	0	4.026	4.419	0.138	0	0	0	0 - 00:00 hrs
0203-054	6.212	315.112	Below Maximum Depth	0.577	0 - 12:15 hrs	0	38.473	0	1.177	0	4.027	3.212	0.577	0	0	0	0 - 00:00 hrs
0203-055	6.452	313.919	Surcharged	-0.919	0 - 12:37 hrs	0	96.296	0	4.127	0	4.163	2.952	0	0.567	2.008	50.997	0 - 12:15 hrs
0203-056	6.757	312.707	Surcharged	-0.407	0 - 12:47 hrs	0	47.709	0	4.153	0	4.247	3.086	0	0.029	1.506	3.313	0 - 12:18 hrs
0203-057	6.651	311.249	Surcharged	-0.599	0 - 12:45 hrs	0	46.463	0	4.328	0.001	4.335	3.001	0	0.137	2.059	17.512	0 - 12:12 hrs
0203-058	6.829	310.45	Surcharged	-0.181	0 - 12:15 hrs	0	49.04	0	4.399	0	4.345	3.329	0	0.001	0.122	0.504	0 - 12:11 hrs
0203-059	5.67	310.44	Below Maximum Depth	0.16	0 - 12:15 hrs	0	7.816	0	0.374	0	4.211	2.613	0.16	0	0	0	0 - 00:00 hrs
0203-060	3.773	311.683	Below Maximum Depth	5.798	0 - 12:15 hrs	0	37.499	0	6.372	0	0.13	0.18	5.798	0	0	0	0 - 00:00 hrs
0203-061	4.6	310.968	Below Maximum Depth	3.833	0 - 12:14 hrs	0	37.481	0	6.371	0	0.539	1.1	3.833	0	0	0	0 - 00:00 hrs
0203-062	7.889	308.779	Below Maximum Depth	6.536	0 - 12:14 hrs	0	104.438	0	12.696	0.003	4.071	2.679	6.536	0	0	0	0 - 00:00 hrs
0203-063	7.638	306.903	Below Maximum Depth	16.111	0 - 12:14 hrs	0	104.425	0	12.698	0.007	4.083	2.32	16.111	0	0	0	0 - 00:00 hrs
0203-064	6.651	305.025	Below Maximum Depth	15.555	0 - 12:14 hrs	0	104.416	0	12.691	-0.001	3.014	1.538	15.555	0	0	0	0 - 00:00 hrs
0203-065	6.914	302.945	Below Maximum Depth	7.355	0 - 12:15 hrs	0	104.422	0	12.697	0.003	4.354	1.914	7.355	0	0	0	0 - 00:00 hrs
0203-066	5.751	301.507	Below Maximum Depth	7.034	0 - 12:15 hrs	0	104.421	0	12.694	0.001	2.406	0.751	7.034	0	0	0	0 - 00:00 hrs
0203-067	4.852	299.896	Below Link Crown	4.004	0 - 12:15 hrs	0	104.417	0	12.694	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-068	0.848	304.591	Below Link Crown	2.309	0 - 12:15 hrs	0	30.937	0	0.936	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-069	3.112	307.6	Surcharged	0	0 - 12:14 hrs	0	37.537	0	0.937	0	0.094	0.046	0	0.002	0.032	6.578	0 - 12:15 hrs
0203-070	2.472	295.449	Below Link Crown	10.451	0 - 12:19 hrs	0	243.744	0	34.354	0.053	0	0	0	0	0	0	0 - 00:00 hrs
0203-071	2.858	312.369	Below Link Crown	1.617	0 - 12:15 hrs	0	37.491	0	6.373	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-072	3.446	311.975	Below Link Crown	3.725	0 - 13:59 hrs	17.731	17.731	0.802	0.802	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-073	5.07	311.965	Below Maximum Depth	3.501	0 - 14:00 hrs	0	19.278	0	0.818	0	6.567	0.57	3.501	0	0	0	0 - 00:00 hrs
0203-074	5.066	311.961	Below Maximum Depth	2.051	0 - 14:00 hrs	0	25.826	0	0.832	0	6.545	0.566	2.051	0	0	0	0 - 00:00 hrs
0203-075	6.266	311.958	Below Maximum Depth	1.706	0 - 14:00 hrs	0	28.526	0	0.852	0	9.73	1.119	1.706	0	0	0	0 - 00:00 hrs
0203-076	8.644	311.955	Surcharged	-1.345	0 - 14:00 hrs	0	94.184	0	9.534	0.001	10.887	2.554	0	1.352	5.392	48.82	0 - 12:03 hrs
0203-077	4.317	311.968	Below Link Crown	2.632	0 - 14:00 hrs	0	17.509	0	0.812	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-078	7.601	310.673	Surcharged	-0.601	0 - 14:02 hrs	0	48.135	0	9.514	0	11.211	4.101	0	0.004	3.626	0.21	0 - 12:45 hrs
0203-079	7.672	309.061	Below Maximum Depth	0.8	0 - 14:00 hrs	0	48.125	0	9.512	0.001	11.337	4.172	0.8	0	0	0	0 - 00:00 hrs
0203-080	6.526	307.819	Below Maximum Depth	1.504	0 - 14:00 hrs	0	48.125	0	9.512	0.001	11.231	3.026	1.504	0	0	0	0 - 00:00 hrs

Table B-6a. Existing System Analysis - Nodes
100-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-081	6.474	306.174	Below Maximum Depth	1.08	0 - 14:00 hrs	0	48.125	0	9.512	0.001	11.405	2.968	1.08	0	0	0	0 - 00:00 hrs
0203-082	5.402	304.949	Below Maximum Depth	1.474	0 - 14:00 hrs	0	48.125	0	9.51	0	11.266	1.872	1.474	0	0	0	0 - 00:00 hrs
0203-083	4.189	303.736	Below Maximum Depth	0.764	0 - 13:59 hrs	0	48.125	0	9.51	0.001	7.152	0.189	0.764	0	0	0	0 - 00:00 hrs
0203-084	4.643	302.896	Below Maximum Depth	3.848	0 - 13:56 hrs	0	48.125	0	9.509	0	10.834	0.517	3.848	0	0	0	0 - 00:00 hrs
0203-085	3.797	301.434	Below Link Crown	5.416	0 - 12:17 hrs	0	48.126	0	9.506	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-086	3.46	300.538	Below Link Crown	4.697	0 - 12:17 hrs	0	48.126	0	9.505	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-087	4.346	299.829	Below Link Crown	2.771	0 - 12:17 hrs	0	61.887	0	9.818	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-088	7.05	310.162	Surcharged	-0.854	0 - 12:15 hrs	55.213	55.213	2.159	2.159	0	0.405	4.05	0	0.007	0.136	4.969	0 - 12:15 hrs
0203-089	6.628	306.916	Below Maximum Depth	0.719	0 - 12:15 hrs	0	50.508	0	2.149	0	0.438	3.143	0.719	0	0	0	0 - 00:00 hrs
0203-090	4.603	303.696	Below Maximum Depth	2.649	0 - 12:15 hrs	0	50.522	0	2.153	0.002	0.401	1.603	2.649	0	0	0	0 - 00:00 hrs
0203-091	3.042	300.122	Below Link Crown	4.215	0 - 12:15 hrs	0	50.511	0	3.182	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-092	3.429	298.818	Below Link Crown	4.382	0 - 12:17 hrs	0	61.871	0	8.789	0.011	0	0	0	0	0	0	0 - 00:00 hrs
0203-093	3.791	298.21	Below Maximum Depth	2.19	0 - 12:17 hrs	0	33.691	0	2.868	-0.001	0.09	0.013	2.19	0	0	0	0 - 00:00 hrs
0203-094	2.661	296.714	Below Link Crown	3.986	0 - 12:18 hrs	0	95.455	0	11.651	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-095	5.59	273.39	Below Maximum Depth	1.91	0 - 13:45 hrs	0	54.085	0	13.394	0.002	14.001	2.09	1.91	0	0	0	0 - 00:00 hrs
0203-096	5.034	271.434	Below Maximum Depth	1.666	0 - 13:45 hrs	0	54.085	0	13.418	0	13.994	1.504	1.666	0	0	0	0 - 00:00 hrs
0203-097	4.814	269.464	Below Maximum Depth	1.836	0 - 13:45 hrs	0	54.085	0	13.446	0.002	13.972	0.814	1.836	0	0	0	0 - 00:00 hrs
0203-098	4.529	268.409	Below Maximum Depth	2.091	0 - 13:45 hrs	0	54.085	0	13.441	0.002	13.912	0.459	2.091	0	0	0	0 - 00:00 hrs
0203-099	4.056	267.376	Below Maximum Depth	2.224	0 - 13:45 hrs	0	54.085	0	13.432	0.002	5.028	0.046	2.224	0	0	0	0 - 00:00 hrs
0203-100	4.058	266.158	Below Maximum Depth	2.742	0 - 13:45 hrs	0	54.085	0	13.425	0.003	7.494	0.058	2.742	0	0	0	0 - 00:00 hrs
0203-101	3.533	264.963	Below Link Crown	3.537	0 - 13:45 hrs	0	54.085	0	13.42	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-102	2.924	263.584	Below Link Crown	3.716	0 - 13:48 hrs	0	54.085	0	13.416	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-103	3.133	262.523	Below Link Crown	4.247	0 - 13:52 hrs	0	54.085	0	13.412	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-104	2.842	261.289	Below Link Crown	4.551	0 - 14:30 hrs	0	54.085	0	13.409	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-105	3.889	292.909	Surcharged	-1.009	0 - 13:00 hrs	117.221	117.221	2.923	2.924	0	8.877	1.889	0	0.955	4.409	101.4	0 - 12:15 hrs
0203-106	3.007	291.425	Below Maximum Depth	1.855	0 - 12:37 hrs	0	17.737	0	2.919	0	7.991	1.007	1.855	0	0	0	0 - 00:00 hrs
0203-107	4.021	285.411	Below Maximum Depth	0.179	0 - 12:18 hrs	0	17.741	0	2.915	0	8.597	2.021	0.179	0	0	0	0 - 00:00 hrs
0203-108	4.213	283.583	Below Maximum Depth	1.117	0 - 12:18 hrs	0	17.744	0	2.917	0	4.315	1.713	1.117	0	0	0	0 - 00:00 hrs
0203-109	2.216	245.449	Below Link Crown	18.651	0 - 13:52 hrs	0	342.899	0	60.421	0.009	0	0	0	0	0	0	0 - 00:00 hrs
0203-110	2.931	247.75	Below Link Crown	17.95	0 - 13:52 hrs	0	342.901	0	60.429	0.009	0	0	0	0	0	0	0 - 00:00 hrs
0203-111	2.581	249.978	Below Link Crown	14.122	0 - 13:52 hrs	0	342.903	0	60.436	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-112	7.781	262.883	Surcharged	-0.383	0 - 14:15 hrs	0	295.419	0	48.415	0.024	7.107	0.46	0	2.7	3.551	58.991	0 - 12:47 hrs
0203-113	10.826	272.592	Surcharged	-1.992	0 - 12:23 hrs	0	403.747	0	44.202	0.018	4.394	2.362	0	0.307	2.175	64.383	0 - 12:07 hrs
0203-114	6.317	276.724	Below Link Crown	0.713	0 - 12:18 hrs	0	287.753	0	39.183	0.014	0	0	0	0	0	0	0 - 00:00 hrs
0203-115	8.166	283.973	Below Link Crown	0.984	0 - 12:18 hrs	0	273.288	0	36.3	0.03	0	0	0	0	0	0	0 - 00:00 hrs
0203-116	5.142	284.272	Below Link Crown	4.818	0 - 12:18 hrs	0	275.554	0	36.311	0.01	0	0	0	0	0	0	0 - 00:00 hrs
0203-117	5.949	286.015	Below Link Crown	0.996	0 - 12:17 hrs	0	275.916	0	36.321	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-118	6.824	273.487	Below Link Crown	1.779	0 - 17:28 hrs	0	202.645	0	71.159	0.026	0	0	0	0	0	0	0 - 00:00 hrs
0203-119	6.019	286.274	Below Link Crown	1.317	0 - 13:00 hrs	0	105.679	0	36.966	0.038	0	0	0	0	0	0	0 - 00:00 hrs
0203-120	6.945	255.727	Below Link Crown	15.573	0 - 12:26 hrs	0	302.866	0	19.106	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-121	3.923	256.008	Below Link Crown	13.892	0 - 12:26 hrs	0	302.968	0	19.116	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-122	5.275	257.575	Below Link Crown	20.065	0 - 12:26 hrs	0	303.082	0	19.135	0.016	0	0	0	0	0	0	0 - 00:00 hrs
0203-123	5.668	258.068	Below Link Crown	19.572	0 - 12:26 hrs	0	303.165	0	19.146	0.014	0	0	0	0	0	0	0 - 00:00 hrs
0203-124	6.136	259.269	Below Link Crown	1.831	0 - 12:25 hrs	0	303.404	0	19.148	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-125	2.059	266.089	Below Link Crown	4.665	0 - 12:25 hrs	0	117.899	0	4.148	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-126	3.586	268.484	Below Link Crown	2.588	0 - 12:25 hrs	0	117.899	0	4.146	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-127	2.286	270.064	Below Link Crown	2.245	0 - 12:25 hrs	0	117.9	0	4.146	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-128	4.96	272.5	Below Maximum Depth	0	0 - 12:11 hrs	206.402	264.8	6.486	7.018	0	0.559	0.099	0	0.38	0.219	147.26	0 - 12:15 hrs
0203-129	5.462	273	Below Maximum Depth	0	0 - 12:12 hrs	72.851	103.623	2.378	4.811	0.024	0.592	0.601	0	0.002	0.01	15.453	0 - 12:12 hrs
0203-130	5.696	260.182	Below Link Crown	2.24	0 - 12:23 hrs	0	185.682	0	15.004	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-131	6.041	260.977	Below Link Crown	2.123	0 - 12:22 hrs	0	186.197	0	15.016	0.011	0	0	0	0	0	0	0 - 00:00 hrs
0203-132	5.407	263.309	Below Link Crown	2.691	0 - 12:21 hrs	0	186.523	0	15.029	0.009	0	0	0	0	0	0	0 - 00:00 hrs
0203-133	5.401	265.491	Below Link Crown	1.414	0 - 12:18 hrs	0	186.757	0	15.043	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-134	5.474	270.174	Surcharged	-0.941	0 - 12:36 hrs	0	278.5	0	9.527	0.013	3.129	0.941	0	1.871	1.564	278.498	0 - 12:15 hrs
0203-135	2.667	265.907	Below Link Crown	6.493	0 - 12:37 hrs	0	93.866	0	5.629	-0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-136	3.696	273.836	Below Link Crown	3.164	0 - 12:33 hrs	0	95.023	0	5.647	0.023	0	0	0	0	0	0	0 - 00:00 hrs
0203-137	4.033	274.173	Below Link Crown	2.827	0 - 12:33 hrs	0	102.624	0	5.692	0.045	0	0	0	0	0	0	0 - 00:00 hrs
0203-138	3.672	274.352	Below Link Crown	2.648	0 - 12:30 hrs	0	112.26	0	5.704	0.01	0	0	0	0	0	0	0 - 00:00 hrs
0203-139	5.222	277.272	Below Link Crown	3.828	0 - 12:19 hrs	0	32.588	0	1.121	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-140	5.113	277.273	Below Link Crown	3.927	0 - 12:19 hrs	0	28.44	0	1.06	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-141	4.335	277.275	Below Link Crown	4.325	0 - 12:18 hrs	0	35.182	0	1.018	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-142	3.079	277.287	Below Link Crown	5.523	0 - 12:19 hrs	36.019	36.019	0.992	0.993	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-143	1.68	252.95	Below Link Crown	24.662	0 - 13:11 hrs	0	296.558	0	84.966	0.063	0	0	0	0	0	0	0 - 00:00 hrs
0203-144	2.063	253.333	Below Link Crown	24.279	0 - 13:11 hrs	0	296.581	0	85.038	0.064	0	0	0	0	0	0	0 - 00:00 hrs
0203-145	6.764	258.374	Below Link Crown	11.976	0 - 13:10 hrs	0	296.575	0	85.122	0.091	0	0	0	0	0	0	0 - 00:00 hrs
0203-146	7.061	258.671	Below Link Crown	3.149	0 - 13:10 hrs	0	296.579	0	85.167	0.047	0	0	0	0	0	0	0 - 00:00 hrs
0203-147	7.022	258.882	Below Link Crown	8.518	0 - 13:10 hrs	0	296.584	0	85.188	0.023	0	0	0	0	0	0	0 - 00:00 hrs
0203-148	7.518	259.378	Below Link Crown	8.022	0 - 13:08 hrs	0	296.591	0	85.213	0.025	0	0	0	0	0	0	0 - 00:00 hrs
0203-149	7.604	259.614	Below Link Crown	7.49	0 - 13:08 hrs	0	296.602	0	85.239	0.027	0	0	0	0	0	0	0 - 00:00 hrs
0203-150	7.747	259.757	Below Link Crown	0.643	0 - 13:08 hrs	0	296.619	0	85.264	0.025	0	0	0	0	0	0	0 - 00:00 hrs
0203-151	7.106	259.896	Below Link Crown	10.004	0 - 13:08 hrs	0	296.681	0	85.313	0.048	0	0	0	0	0	0	0 - 00:00 hrs
0203-152	7.393	260.643	Below Link Crown	9.444	0 - 13:07 hrs	0	296.746	0	85.357	0.044	0	0	0	0	0	0	0 - 00:00 hrs
0203-153	7.694	261.024	Below Link Crown	0.314	0 - 13:07 hrs	0	296.789	0	85.386	0.028	0	0	0	0	0	0	0 - 00:00 hrs
0203-154	8.024	261.354	Below Link Crown	2.146	0 - 13:07 hrs	0	296.872	0	85.424	0.039	0	0	0	0	0	0	0 - 00:00 hrs
0203-155	8.24	261.57	Below Link Crown	2.03	0 - 13:07 hrs	0	296.961	0	85.459	0.037	0	0	0	0	0	0	0 - 00:00 hrs
0203-156	7.695	261.825	Below Link Crown	3.675	0 - 13:06 hrs	0	297.674	0	85.474	0.016	0	0	0	0	0	0	0 - 00:00 hrs
0203-157	8.061	262.191	Below Link Crown	11.409	0 - 13:04 hrs	0	298.492	0	85.486	0.013	0	0	0	0	0	0	0 - 00:00 hrs
0203-158	8.315	262.445	Below Link Crown	11.155	0 - 13:04 hrs	0	302.444	0	85.52	0.038	0	0	0	0	0	0	0 - 00:00 hrs
0203-159	8.407	262.537	Below Link Crown	1.563	0 - 13:04 hrs	0	309.012	0	85.563	0.046	0	0	0	0	0	0	0 - 00:00 hrs
0203-160	7.428	262.666	Below Link Crown	0.434	0 - 13:04 hrs	0	313.152	0	85.591	0.03	0	0	0	0	0	0	0 - 00:00 hrs

Table B-6a. Existing System Analysis - Nodes
100-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-161	3.429	263.027	Below Link Crown	4.473	0 - 13:03 hrs	0	321.036	0	85.623	0.024	0	0	0	0	0	0	0 - 00:00 hrs
0203-162	4.165	267.776	Below Link Crown	8.024	0 - 12:15 hrs	0	317.098	0	85.694	0.07	0	0	0	0	0	0	0 - 00:00 hrs
0203-163	4.843	272.845	Below Link Crown	3.715	0 - 17:45 hrs	0	268.391	0	79.139	0.052	0	0	0	0	0	0	0 - 00:00 hrs
0203-164	4.954	275.456	Below Link Crown	3.116	0 - 18:07 hrs	0	268.391	0	79.172	0.029	0	0	0	0	0	0	0 - 00:00 hrs
0203-165	7.408	278.408	Below Link Crown	4.342	0 - 18:07 hrs	0	268.391	0	79.231	0.053	0	0	0	0	0	0	0 - 00:00 hrs
0203-166	7.619	280.53	Below Link Crown	0.57	0 - 18:06 hrs	0	268.391	0	79.281	0.042	0	0	0	0	0	0	0 - 00:00 hrs
0203-167	9.121	282.121	Surcharged	-0.921	0 - 18:05 hrs	0	268.393	0	79.318	0.03	17.717	0.977	0	0.057	8.836	3.077	0 - 12:37 hrs
0203-168	9	283.658	Surcharged	-0.758	0 - 18:04 hrs	0	268.405	0	79.353	0.027	16.818	0.856	0	0.065	8.355	4.598	0 - 12:48 hrs
0203-169	5.919	284.409	Surcharged	-0.687	0 - 18:02 hrs	0	290.303	0	79.336	0.008	17.412	1.383	0	2.811	8.225	33.718	0 - 13:52 hrs
0203-170	6.297	284.946	Below Link Crown	4.054	0 - 17:42 hrs	0	217.21	0	57.266	0.016	0	0	0	0	0	0	0 - 00:00 hrs
0203-171	6.805	285.955	Below Link Crown	0.145	0 - 17:17 hrs	0	217.291	0	57.305	0.026	0	0	0	0	0	0	0 - 00:00 hrs
0203-172	6.347	286.119	Below Link Crown	0.581	0 - 17:15 hrs	0	217.41	0	57.347	0.043	0	0	0	0	0	0	0 - 00:00 hrs
0203-173	6.574	288.948	Surcharged	-2.048	0 - 14:47 hrs	0	320.954	0	57.479	0.015	16.282	2.077	0	4.323	8.13	123.89	0 - 12:33 hrs
0203-174	5.97	284.463	Surcharged	-1.363	0 - 17:54 hrs	0	130.958	0	22.097	0.005	17.623	1.437	0	0.186	8.773	10.845	0 - 12:40 hrs
0203-175	5.045	284.723	Surcharged	-0.519	0 - 16:15 hrs	0	129.514	0	22.109	0.004	16.657	0.519	0	0.394	8.328	8.367	0 - 13:15 hrs
0203-176	5.031	284.795	Surcharged	-0.526	0 - 15:49 hrs	0	115.556	0	22.167	0	17.197	0.526	0	1.328	8.598	29.822	0 - 13:10 hrs
0203-177	6.077	284.966	Surcharged	-1.566	0 - 15:03 hrs	0	175.89	0	22.132	0.019	19.874	1.593	0	2.024	9.936	107.753	0 - 12:32 hrs
0203-178	4.665	285.191	Surcharged	-0.181	0 - 14:11 hrs	0	177.8	0	22.154	0.01	6.199	0.181	0	0.094	3.098	4.648	0 - 13:02 hrs
0203-179	4.297	285.973	Below Link Crown	7.227	0 - 12:37 hrs	0	178.626	0	22.168	0.013	0	0	0	0	0	0	0 - 00:00 hrs
0203-180	4.58	286.256	Below Link Crown	6.944	0 - 12:36 hrs	0	179.741	0	22.177	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-181	4.365	286.994	Below Link Crown	4.206	0 - 12:33 hrs	0	184.284	0	22.197	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-182	4.558	287.33	Below Link Crown	4.013	0 - 12:32 hrs	0	185.808	0	22.207	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-183	4.99	287.553	Below Link Crown	3.581	0 - 12:30 hrs	0	186.644	0	22.216	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-184	5.123	288.666	Below Link Crown	2.445	0 - 12:29 hrs	0	187.081	0	22.22	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-185	4.906	288.679	Below Link Crown	2.502	0 - 12:29 hrs	0	23.026	0	2.186	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-186	2.84	288.688	Below Link Crown	3.812	0 - 12:29 hrs	0	22.659	0	2.185	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-187	5.503	291.346	Below Link Crown	4.054	0 - 12:25 hrs	0	179.75	0	20.057	0.013	0	0	0	0	0	0	0 - 00:00 hrs
0203-188	7.141	294.307	Below Link Crown	2.993	0 - 12:18 hrs	0	185.132	0	20.096	0.014	0	0	0	0	0	0	0 - 00:00 hrs
0203-189	7.144	294.71	Below Link Crown	2.99	0 - 12:18 hrs	0	198.883	0	20.163	0.071	0	0	0	0	0	0	0 - 00:00 hrs
0203-190	5.422	294.728	Below Link Crown	5.672	0 - 12:18 hrs	0	26.546	0	2.193	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-191	2.068	300.504	Below Link Crown	8.996	0 - 12:47 hrs	0	26.546	0	2.183	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-192	4.953	297.033	Below Link Crown	1.167	0 - 13:11 hrs	0	53.348	0	2.189	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-193	0.871	298.762	Below Link Crown	3.566	0 - 12:15 hrs	0	25.631	0	1.26	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-194	1.267	302.629	Below Link Crown	2.348	0 - 12:15 hrs	0	26.138	0	1.262	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-195	7.582	292.179	Below Link Crown	2.121	0 - 12:26 hrs	288.453	529.875	13.212	57.592	0.04	0	0	0	0	0	0	0 - 00:00 hrs
0203-196	4.86	299.98	Surcharged	0	0 - 12:15 hrs	0	163.653	0	10.546	0.001	1.051	1.292	0	0.074	0.224	47.443	0 - 12:17 hrs
0203-197	2.985	300.367	Below Link Crown	2.433	0 - 12:17 hrs	0	120.661	0	8.666	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-198	4.341	310.946	Surcharged	-1.246	0 - 12:26 hrs	0	79.346	0	5.578	0.003	2.754	1.266	0	0.255	1.376	38.547	0 - 12:15 hrs
0203-199	2.627	303.403	Below Link Crown	4.297	0 - 12:14 hrs	0	99.505	0	8.692	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-200	2.793	303.473	Below Link Crown	4.127	0 - 12:15 hrs	0	23.93	0	0.797	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-201	4.436	312.334	Below Link Crown	9.666	0 - 17:22 hrs	0	20.784	0	4.462	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-202	5.224	310.724	Below Link Crown	8.876	0 - 12:15 hrs	0	20.735	0	4.463	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-203	4.582	310.808	Below Link Crown	0.592	0 - 12:15 hrs	0	44.512	0	4.516	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-204	5.214	310.705	Below Link Crown	0.195	0 - 12:15 hrs	118.796	171.633	5.608	14.567	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-205	5.316	310.416	Below Maximum Depth	0.264	0 - 12:15 hrs	0	170.438	0	14.559	0.008	0.589	0.547	0.264	0	0	0	0 - 00:00 hrs
0203-206	3.963	307.633	Below Link Crown	1.866	0 - 18:37 hrs	0	153.368	0	14.561	0.075	0	0	0	0	0	0	0 - 00:00 hrs
0203-207	8.427	307.619	Below Link Crown	0.223	0 - 18:37 hrs	0	150.764	0	14.487	0.412	0	0	0	0	0	0	0 - 00:00 hrs
0203-208	2.401	300.005	Surcharged	-0.505	0 - 12:25 hrs	0	24.894	0	9.202	0.01	4.249	0.624	0	0.012	1.75	2.395	0 - 12:14 hrs
0203-209	9.339	307.617	Surcharged	-0.617	0 - 18:40 hrs	0	144.476	0	15.01	0.227	22.369	0.689	0	3.664	11.122	62.698	0 - 13:19 hrs
0203-210	7.818	307.618	Surcharged	-2.118	0 - 18:43 hrs	0	134.401	0	4.32	0.017	23.932	2.631	0	3.623	11.942	134.401	0 - 12:11 hrs
0203-211	7.666	307.618	Surcharged	-1.718	0 - 18:44 hrs	0	37.962	0	1.203	0.009	24.059	3.73	0	0.854	11.844	29.911	0 - 12:22 hrs
0203-212	2.898	299.348	Below Maximum Depth	4.732	0 - 12:21 hrs	0	24.893	0	9.191	0.018	23.875	1.121	4.732	0	0	0	0 - 00:00 hrs
0203-213	3.058	298.879	Below Link Crown	2.946	0 - 12:18 hrs	0	50.264	0	10.106	0.022	0	0	0	0	0	0	0 - 00:00 hrs
0203-214	3.026	298.926	Below Link Crown	3.021	0 - 12:18 hrs	0	30.931	0	0.937	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-215	1.028	299.625	Below Link Crown	5.075	0 - 12:15 hrs	0	30.965	0	0.936	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-216	1.958	307.658	Below Link Crown	1.109	0 - 12:15 hrs	35.15	35.15	0.937	0.938	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-217	3.29	298.63	Below Link Crown	2.659	0 - 12:18 hrs	0	49.519	0	10.082	0.011	0	0	0	0	0	0	0 - 00:00 hrs
0203-218	5.95	259.88	Below Link Crown	9.915	0 - 13:52 hrs	0	342.909	0	60.459	0.013	0	0	0	0	0	0	0 - 00:00 hrs
0203-219	6.072	260.002	Below Link Crown	9.67	0 - 13:45 hrs	0	101.231	0	12.099	0.038	0	0	0	0	0	0	0 - 00:00 hrs
0203-220	3.325	260.206	Below Link Crown	4.632	0 - 13:34 hrs	0	101.447	0	12.109	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-221	7.239	290.239	Below Maximum Depth	2.381	0 - 12:15 hrs	0	277.554	0	36.341	0.003	0.964	1.039	2.381	0	0	0	0 - 00:00 hrs
0203-222	3.54	287.46	Below Maximum Depth	3.52	0 - 12:18 hrs	0	17.738	0	2.916	0	7.578	1.54	3.52	0	0	0	0 - 00:00 hrs
0203-223	9.044	270.244	Surcharged	-1.114	0 - 12:51 hrs	0	272.947	0	44.098	0.009	4.819	3.044	0	0.012	2.155	2.791	0 - 12:04 hrs
0203-224	7.463	268.543	Surcharged	-1.083	0 - 13:00 hrs	156.893	156.893	4.305	4.306	0	8.015	4.463	0	1.236	3.929	132.962	0 - 12:15 hrs
0203-225	4.212	310.872	Below Maximum Depth	3.858	0 - 12:15 hrs	26.387	26.387	1.261	1.261	0	0.394	1.712	3.858	0	0	0	0 - 00:00 hrs
0203-226	15.018	319.038	Surcharged	-1.008	0 - 12:23 hrs	155.713	155.713	8.712	8.714	0	11.369	11.518	0	0.392	1.43	77.397	0 - 12:15 hrs
0203-227	11.51	315.13	Surcharged	-0.88	0 - 12:45 hrs	0	78.937	0	8.694	0.001	11.354	8.01	0	0.039	1.532	4.484	0 - 12:15 hrs
0203-228	3.971	311.971	Below Link Crown	5.299	0 - 13:59 hrs	0	17.649	0	0.805	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-229	3.745	330.335	Below Maximum Depth	6.475	0 - 14:34 hrs	0	20.784	0	4.467	0	13.399	1.495	6.475	0	0	0	0 - 00:00 hrs
0203-230	2.973	327.473	Below Maximum Depth	2.677	0 - 14:34 hrs	0	20.784	0	4.474	0	13.384	0.473	2.677	0	0	0	0 - 00:00 hrs
0203-231	1.609	322.989	Below Link Crown	4.851	0 - 14:36 hrs	0	20.784	0	4.475	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-232	1.435	318.296	Below Link Crown	6.835	0 - 14:37 hrs	0	20.784	0	4.463	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-233	1.23	315.73	Below Link Crown	7.56	0 - 14:37 hrs	0	20.784	0	4.462	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-234	4.023	319.773	Below Maximum Depth	1.567	0 - 13:41 hrs	0	37.491	0	6.384	0.001	2.993	0.023	1.567	0	0	0	0 - 00:00 hrs
0203-235	3.462	318.712	Below Link Crown	2.348	0 - 13:41 hrs	0	37.491	0	6.376	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-236	1.474	316.474	Below Link Crown	2.886	0 - 13:40 hrs	0	37.491	0	6.375	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-237	2.464	313.464	Below Link Crown	4.546	0 - 13:42 hrs	0	37.491	0	6.374	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-238	8.171	310.171	Below Maximum Depth	6.249	0 - 12:15 hrs	47.743	104.454	1.921	12.695	0.002	4.116	3.171	6.249	0	0	0	0 - 00:00 hrs
0203-239	4.726	298.226	Below Link Crown	6.464	0 - 12:18 hrs	0	150.909	0	22.746	0.011	0	0	0	0	0	0	0 - 00:00 hrs
0203-240	9.581	277.031	Surcharged	-0.171	0 - 12:37 hrs	0	43.996	0	5.258	0.004	3.86	5.581	0	0.001	0.603	7.693	0 - 13:37 hrs

Table B-6a. Existing System Analysis - Nodes
100-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-241	9.862	275.862	Below Maximum Depth	1.428	0 - 12:22 hrs	0	41.933	0	1.639	0	2.503	6.832	1.428	0	0	0	0 - 00:00 hrs
0203-242	8.503	265.853	Surcharged	-0.243	0 - 13:25 hrs	0	112.331	0	12.164	0.004	6.27	4.17	0	0.327	1.892	12.217	0 - 12:26 hrs
0203-243	6.38	263.35	Below Maximum Depth	2.97	0 - 13:25 hrs	0	101.496	0	12.147	0.001	6.252	2.046	2.97	0	0	0	0 - 00:00 hrs
0203-244	6.802	289.923	Surcharged	-1.065	0 - 16:59 hrs	0	176.828	0	36.912	0.003	23.013	1.065	0	9.746	11.505	85.081	0 - 12:49 hrs
0203-245	4.328	297.328	Below Link Crown	6.142	0 - 12:18 hrs	0	150.839	0	22.734	0.014	0	0	0	0	0	0	0 - 00:00 hrs
0203-246	5.343	290.996	Below Link Crown	2.104	0 - 12:26 hrs	0	171.287	0	20.044	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-247	3.455	297.211	Below Link Crown	12.545	0 - 18:24 hrs	0	113.865	0	47.846	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-248	4.801	284.263	Below Maximum Depth	1.327	0 - 15:34 hrs	0	35.429	0	13.732	0.031	23.932	0.631	1.327	0	0	0	0 - 00:00 hrs
0203-249	1.538	304.138	Below Link Crown	2.062	0 - 12:15 hrs	65.185	65.185	1.864	1.865	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-250	5.044	285.794	Surcharged	-0.994	0 - 15:02 hrs	0	80.895	0	16.598	0.048	18.653	1.004	0	0.251	9.252	6.218	0 - 12:00 hrs
0203-251	4.754	284.732	Below Link Crown	1.898	0 - 15:41 hrs	0	35.419	0	13.808	0.021	0	0	0	0	0	0	0 - 00:00 hrs
0203-252	2.691	295.181	Below Link Crown	3.819	0 - 12:17 hrs	0	94.649	0	10.806	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-253	6.448	277.218	Below Maximum Depth	1.912	0 - 12:18 hrs	41.473	49.665	1.134	2.258	0.003	0.9	1.307	1.912	0	0	0	0 - 00:00 hrs
0203-254	4.895	269.282	Below Link Crown	6.538	0 - 12:18 hrs	0	153.314	0	16.029	0.019	0	0	0	0	0	0	0 - 00:00 hrs
0203-255	3.07	279.018	Below Link Crown	6.88	0 - 12:33 hrs	0	40.609	0	14.791	0.014	0	0	0	0	0	0	0 - 00:00 hrs
0203-256	4.493	302.103	Below Maximum Depth	4.657	0 - 12:18 hrs	0	48.126	0	9.508	0.001	10.916	0.493	4.657	0	0	0	0 - 00:00 hrs
0203-257	2.436	280.666	Below Link Crown	2.009	0 - 13:52 hrs	0	30.094	0	6.112	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-258	3.603	281.833	Below Maximum Depth	4.187	0 - 11:56 hrs	0	30.094	0	6.116	0.003	10.39	0.603	4.187	0	0	0	0 - 00:00 hrs
0203-259	4.773	284.253	Below Maximum Depth	1.257	0 - 11:56 hrs	0	30.094	0	6.119	0.002	10.265	1.773	1.257	0	0	0	0 - 00:00 hrs
0203-260	4.54	285.09	Below Maximum Depth	1.74	0 - 11:56 hrs	0	31.809	0	6.127	0.003	10.262	1.54	1.74	0	0	0	0 - 00:00 hrs
0203-261	4.597	286.097	Below Maximum Depth	1.683	0 - 13:49 hrs	0	31.843	0	6.125	0.003	10.316	1.597	1.683	0	0	0	0 - 00:00 hrs
0203-262	6.77	289.99	Surcharged	-0.98	0 - 13:49 hrs	0	32.262	0	6.153	0.003	10.363	3.77	0	0.081	5.127	3.127	0 - 12:26 hrs
0203-263	7.223	291.613	Surcharged	-0.993	0 - 13:29 hrs	130.055	130.055	6.129	6.132	0	10.339	4.223	0	1.389	5.145	98.862	0 - 12:15 hrs
0203-264	3.577	290.577	Surcharged	-0.977	0 - 12:22 hrs	41.859	41.859	1.15	1.151	0	1.936	1.577	0	0.13	0.967	23.857	0 - 12:15 hrs
0203-265	3.478	284.698	Below Maximum Depth	1.702	0 - 12:27 hrs	0	18.311	0	1.149	0.002	1.931	0.478	1.702	0	0	0	0 - 00:00 hrs
0203-266	3.323	284.223	Below Maximum Depth	1.697	0 - 12:30 hrs	0	18.31	0	1.146	0.004	1.907	0.263	1.697	0	0	0	0 - 00:00 hrs
0203-267	3.123	283.903	Below Maximum Depth	2.047	0 - 12:34 hrs	0	18.308	0	1.142	0.007	1.652	0.123	2.047	0	0	0	0 - 00:00 hrs
0203-268	8.22	281.234	Below Link Crown	4.256	0 - 12:34 hrs	0	1,012.30	0	232.003	0.363	0	0	0	0	0	0	0 - 00:00 hrs
0203-269	6.013	286.177	Below Link Crown	1.323	0 - 14:11 hrs	0	36.007	0	6.513	0.011	0	0	0	0	0	0	0 - 00:00 hrs
0203-270	8.333	290.853	Below Link Crown	3.847	0 - 13:10 hrs	0	119.664	0	15.016	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-271	6.513	309.103	Surcharged	-0.953	0 - 12:30 hrs	193.241	193.241	6.765	6.767	0	2.255	3.623	0	0.57	1.117	101.108	0 - 12:15 hrs
0203-272	3.585	294.715	Below Link Crown	5.305	0 - 11:57 hrs	0	70.478	0	12.165	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-273	4.4	291.27	Below Link Crown	6.53	0 - 12:37 hrs	0	70.648	0	12.169	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-274	5.387	291.247	Below Maximum Depth	1.163	0 - 13:37 hrs	0	76.047	0	12.295	0.006	8.472	1.367	1.163	0	0	0	0 - 00:00 hrs
0203-275	3.082	287.262	Below Link Crown	6.118	0 - 13:38 hrs	0	76.047	0	12.295	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-276	3.369	286.639	Below Link Crown	6.741	0 - 13:40 hrs	0	76.046	0	12.293	0.011	0	0	0	0	0	0	0 - 00:00 hrs
0203-277	1.779	284.699	Below Link Crown	2.501	0 - 13:40 hrs	0	76.046	0	12.285	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-278	5.37	291.37	Below Maximum Depth	1.11	0 - 11:56 hrs	0	31.08	0	2.771	0.003	7.998	1.37	1.11	0	0	0	0 - 00:00 hrs
0203-279	4.454	292.014	Below Maximum Depth	0.866	0 - 11:56 hrs	0	31.08	0	2.774	0	3.567	0.954	0.866	0	0	0	0 - 00:00 hrs
0203-280	4.486	292.626	Below Maximum Depth	0.224	0 - 12:37 hrs	0	31.08	0	2.772	0.001	3.54	0.986	0.224	0	0	0	0 - 00:00 hrs
0203-281	4.931	293.971	Below Maximum Depth	0.719	0 - 12:33 hrs	0	31.08	0	2.771	-0.001	3.545	1.681	0.719	0	0	0	0 - 00:00 hrs
0203-282	5.525	295.175	Surcharged	-1.005	0 - 12:32 hrs	93.965	93.965	2.778	2.779	0	3.563	2.525	0	0.427	1.754	63.905	0 - 12:15 hrs
0203-283	5.999	293.579	Surcharged	-1.129	0 - 15:07 hrs	0	68.035	0	9.52	0.001	8.666	2.499	0	1.181	4.325	24.772	0 - 12:23 hrs
0203-284	10.689	336.399	Surcharged	-0.979	0 - 12:34 hrs	214.285	214.285	8.486	8.491	0	9.634	7.189	0	0.761	1.369	116.877	0 - 12:15 hrs
0203-285	3.359	307.859	Below Maximum Depth	2.141	0 - 12:51 hrs	0	20.924	0	8.164	0.003	3.302	0.359	2.141	0	0	0	0 - 00:00 hrs
0203-286	2.305	308.305	Below Link Crown	2.535	0 - 12:52 hrs	0	20.855	0	8.167	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-287	1.688	309.388	Below Link Crown	1.702	0 - 16:43 hrs	0	20.855	0	8.17	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-288	2.271	310.611	Below Link Crown	1.839	0 - 16:43 hrs	0	20.855	0	8.178	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-289	2.454	311.454	Below Link Crown	3.086	0 - 16:42 hrs	0	20.855	0	8.186	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-290	2.743	314.743	Below Maximum Depth	5.787	0 - 16:40 hrs	0	20.855	0	8.192	0.005	24.559	0.243	5.787	0	0	0	0 - 00:00 hrs
0203-291	3.586	316.886	Below Maximum Depth	2.534	0 - 16:40 hrs	0	20.855	0	8.201	0.005	24.849	1.086	2.534	0	0	0	0 - 00:00 hrs
0203-292	3.531	321.341	Below Maximum Depth	4.539	0 - 16:39 hrs	0	20.855	0	8.206	0.005	24.62	1.531	4.539	0	0	0	0 - 00:00 hrs
0203-293	4.778	324.518	Below Maximum Depth	0.012	0 - 16:39 hrs	0	20.855	0	8.209	0.003	24.621	2.048	0.012	0	0	0	0 - 00:00 hrs
0203-294	3.275	326.505	Below Link Crown	0.785	0 - 16:37 hrs	0	46.28	0	8.483	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-295	3.737	327.737	Below Maximum Depth	6.303	0 - 13:30 hrs	0	46.28	0	8.48	0.001	7.283	0.237	6.303	0	0	0	0 - 00:00 hrs
0203-296	4.914	328.964	Below Maximum Depth	4.376	0 - 13:25 hrs	0	46.28	0	8.477	0.001	9.625	1.414	4.376	0	0	0	0 - 00:00 hrs
0203-297	4.49	330.2	Surcharged	-0.99	0 - 13:25 hrs	0	99.792	0	8.458	0	9.54	0.99	0	1.99	4.769	56.553	0 - 12:25 hrs
0203-298	6.69	316.22	Surcharged	0	0 - 11:49 hrs	0	115.3	0	22.433	-0.006	9.955	2.19	0	0	0.001	21.341	0 - 11:49 hrs
0203-299	6.705	320.546	Surcharged	-0.975	0 - 12:42 hrs	239.337	239.337	6.379	6.381	0	6.619	3.705	0	1.582	3.303	191.991	0 - 12:15 hrs
0203-300	6.211	321.191	Surcharged	-0.981	0 - 13:19 hrs	401.078	401.078	12.118	12.123	0	13.328	3.211	0	3.688	6.39	348.21	0 - 12:15 hrs
0203-301	9.676	309.676	Surcharged	-1.216	0 - 17:51 hrs	0	130.963	0	34.512	0.018	19.954	4.676	0	1.136	8.184	63.948	0 - 20:00 hrs
0203-302	11.026	306.216	Surcharged	-1.096	0 - 16:31 hrs	370.135	508.044	11.171	51.591	0.053	22.211	5.946	0	4.776	9.901	350.555	0 - 12:15 hrs
0203-303	6.805	307.555	Surcharged	-0.985	0 - 13:08 hrs	212.176	212.176	5.906	5.908	0	20.011	3.805	0	1.793	6.809	182.793	0 - 12:15 hrs
0203-304	1.477	312.827	Below Link Crown	1.713	0 - 16:42 hrs	0	20.855	0	8.188	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-305	3.429	315.759	Surcharged	-0.199	0 - 16:40 hrs	0	20.855	0	8.196	0.003	25.078	0.929	0	0	11.96	0.008	0 - 11:53 hrs
0203-306	5.106	325.436	Surcharged	-0.996	0 - 16:39 hrs	0	46.251	0	8.483	0.011	24.528	1.606	0	2.955	12.219	25.963	0 - 13:25 hrs
0203-307	4.21	318.41	Below Maximum Depth	1.82	0 - 13:48 hrs	0	53.099	0	12.14	0	12.115	0.71	1.82	0	0	0	0 - 00:00 hrs
0203-308	4.142	316.642	Below Maximum Depth	4.208	0 - 14:21 hrs	0	53.098	0	12.136	0.002	12.019	0.642	4.208	0	0	0	0 - 00:00 hrs
0203-309	4.134	314.804	Below Maximum Depth	3.046	0 - 15:25 hrs	0	53.096	0	12.128	0.001	11.752	0.534	3.046	0	0	0	0 - 00:00 hrs
0203-310	4.037	313.177	Below Maximum Depth	4.483	0 - 16:07 hrs	0	53.093	0	12.121	0.005	11.119	0.467	4.483	0	0	0	0 - 00:00 hrs
0203-311	7.35	312.91	Surcharged	0	0 - 11:49 hrs	0	53.079	0	12.114	0	12.956	3.35	0	0	0.001	9.929	0 - 11:49 hrs
0203-312	8.704	310.704	Surcharged	-1.104	0 - 16:49 hrs	0	101.207	0	22.406	0.008	16.866	3.704	0	2.361	8.126	33.751	0 - 19:55 hrs
0203-313	7.839	312.089	Surcharged	-0.279	0 - 15:10 hrs	0	101.207	0	22.404	0.002	16.232	2.839	0	0.04	2.304	7.713	0 - 11:48 hrs
0203-314	8.045	313.535	Surcharged	-0.435	0 - 15:07 hrs	0	102.177	0	22.426	0.005	14.192	3.045	0	0.092	2.769	2.031	0 - 13:33 hrs
0203-315	6.42	321.05	Below Maximum Depth	0	0 - 11:48 hrs	0	75.266	0	16.06	-0.003	13.645	2.78	0	0	0	7.434	0 - 11:48 hrs
0203-316	7.401	323.451	Surcharged	-0.981	0 - 13:30 hrs	512.869	512.869	16.084	16.09	0	13.743	3.901	0	5.093	6.822	449.189	0 - 12:15 hrs
0203-317	9.258	307.378	Surcharged	-0.848	0 - 18:14 hrs	0	124.241	0	34.543	0.01	20.161	4.178	0	1.948	8.457	61.891	0 - 21:40 hrs
0203-318	4.278	283.417	Below Maximum Depth	2.173	0 - 13:00 hrs	0	40.664	0	14.838	0.012	25.331	1.278	2.173	0	0	0	0 - 00:00 hrs
0203-319	6.233	273.933	Below Maximum Depth	9.547	0 - 12:15 hrs	0	77.724	0	7.543	0.007	0.658	2.233	9.547	0	0	0	0 - 00:00 hrs
0203-320	1.717	279.709	Below Link Crown	4.532	0 - 13:56 hrs	0	30.094	0	6.103	0.005	0	0	0	0	0	0	0 - 00:00 hrs

Table B-6a. Existing System Analysis - Nodes
100-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-321	2.283	280.575	Below Link Crown	6.027	0 - 13:52 hrs	0	30.094	0	6.111	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-322	4.708	274.843	Below Maximum Depth	1.157	0 - 13:34 hrs	0	27.317	0	7.297	0.01	16.647	0.708	1.157	0	0	0	0 - 00:00 hrs
0203-323	5.494	274.603	Below Link Crown	28.017	0 - 13:36 hrs	0	27.317	0	7.288	0.049	0	0	0	0	0	0	0 - 00:00 hrs
0203-324	1.487	274.402	Below Link Crown	28.218	0 - 13:37 hrs	0	27.317	0	7.238	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-325	7.364	293.508	Below Link Crown	7.252	0 - 12:26 hrs	0	242.81	0	34.3	0.233	0	0	0	0	0	0	0 - 00:00 hrs
0203-326	2.757	273.705	Below Link Crown	4.095	0 - 12:15 hrs	206.246	206.246	5.542	5.545	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-327	3.863	270.963	Below Link Crown	6.137	0 - 12:15 hrs	0	204.925	0	5.545	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-328	6.606	269.81	Below Link Crown	3.49	0 - 12:18 hrs	0	213.493	0	15.076	0.012	0	0	0	0	0	0	0 - 00:00 hrs
0203-329	7.389	292.815	Below Link Crown	3.545	0 - 12:26 hrs	0	232.009	0	34.066	0.147	0	0	0	0	0	0	0 - 00:00 hrs
0203-330	3.946	308.808	Surcharged	-0.108	0 - 12:25 hrs	0	80.228	0	7.897	0.003	0.909	0.126	0	0.011	0.451	5.71	0 - 12:15 hrs
0203-331	7.549	301.549	Surcharged	-0.199	0 - 18:42 hrs	0	151.982	0	51.48	0.037	20.899	1.549	0	0.007	8.627	0.368	0 - 21:47 hrs
0203-332	5.546	299.046	Below Link Crown	0.554	0 - 13:06 hrs	0	151.976	0	51.458	0.022	0	0	0	0	0	0	0 - 00:00 hrs
0203-333	7.571	302.571	Surcharged	-1.291	0 - 18:22 hrs	0	159.538	0	51.585	0.03	20.767	1.571	0	0.856	10.374	28.864	0 - 12:02 hrs
0203-334	7.047	306.687	Surcharged	-0.307	0 - 13:42 hrs	0	29.83	0	5.91	0	20.082	3.517	0	0.006	5.779	4.197	0 - 18:35 hrs
0203-335	4.087	268.474	Below Link Crown	10.626	0 - 13:18 hrs	0	153.249	0	16.002	-0.01	0	0	0	0	0	0	0 - 00:00 hrs
0203-336	3.266	289.476	Below Maximum Depth	5.084	0 - 12:18 hrs	0	17.738	0	2.918	0	8.488	1.266	5.084	0	0	0	0 - 00:00 hrs
0203-337	2.238	303.128	Below Link Crown	4.872	0 - 12:30 hrs	0	62.354	0	20.105	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-338	2.62	296.25	Below Link Crown	2.027	0 - 12:18 hrs	0	94.571	0	11.651	0.016	0	0	0	0	0	0	0 - 00:00 hrs
0203-339	1.369	296.419	Below Link Crown	7.681	0 - 12:15 hrs	102.091	177.34	5.623	17.97	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-340	7.161	317.291	Surcharged	-1.141	0 - 15:07 hrs	0	69.806	0	16.053	0	13.697	3.161	0	0.587	4.974	18.464	0 - 11:49 hrs
0203-341	3.311	260.333	Below Link Crown	8.167	0 - 18:36 hrs	0	255.661	0	87.994	0.015	0	0	0	0	0	0	0 - 00:00 hrs
0203-342	7.291	273.019	Surcharged	-2.419	0 - 12:14 hrs	0	105.036	0	11.081	0.004	7.528	2.43	0	0.08	3.723	52.764	0 - 12:12 hrs
0203-343	13.931	315.217	Surcharged	-0.307	0 - 12:11 hrs	251.557	251.557	9.92	9.922	0	21.091	7.931	0	0.032	0.171	48.839	0 - 11:53 hrs
0203-344	10.138	309.249	Surcharged	-1.049	0 - 15:11 hrs	0	249.295	0	10.123	0.005	21.39	3.993	0	3.785	10.65	221.739	0 - 12:15 hrs
0203-345	2.557	256.594	Below Link Crown	8.235	0 - 16:06 hrs	0	299.835	0	99.039	0.041	0	0	0	0	0	0	0 - 00:00 hrs
0203-346	1.282	258.235	Below Link Crown	6.564	0 - 12:38 hrs	0	47.504	0	11.066	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-347	6.206	264.902	Below Link Crown	1.059	0 - 12:37 hrs	0	47.868	0	11.076	0.009	0	0	0	0	0	0	0 - 00:00 hrs
0203-348	4.467	264.981	Below Link Crown	2.819	0 - 12:37 hrs	0	49.697	0	11.079	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-349	7.642	269.037	Below Maximum Depth	0	0 - 12:12 hrs	0	55.655	0	11.112	0.009	1.939	0.451	0	0.019	0.4	5.968	0 - 12:14 hrs
0203-350	6.497	269.112	Below Link Crown	0.694	0 - 12:14 hrs	0	53.664	0	11.111	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-351	5.33	280.81	Below Link Crown	1.95	0 - 12:19 hrs	0	79.29	0	3.011	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-352	6.258	288.391	Below Link Crown	0.687	0 - 12:15 hrs	0	277.544	0	36.357	0.012	0	0	0	0	0	0	0 - 00:00 hrs
0203-353	6.242	282.807	Below Link Crown	0.788	0 - 12:18 hrs	0	288.13	0	39.193	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-354	3.244	278.961	Below Link Crown	3.786	0 - 12:19 hrs	0	288.143	0	39.186	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-355	7.177	275.696	Surcharged	-0.223	0 - 12:18 hrs	0	289.205	0	39.164	0.002	0.335	0.223	0	0.004	0.167	5.179	0 - 12:15 hrs
0203-356	6.836	274.59	Below Link Crown	1.71	0 - 12:17 hrs	139.514	402.108	3.821	42.991	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-357	9.816	271.23	Surcharged	-1.1	0 - 12:49 hrs	0	374.54	0	44.162	0.012	4.307	1.352	0	1.171	2.12	116.219	0 - 12:17 hrs
0203-358	8.23	269.262	Surcharged	-0.862	0 - 12:52 hrs	0	272.86	0	44.086	0.013	4.326	0.909	0	0.044	2.153	7.367	0 - 12:07 hrs
0203-359	6.548	266.298	Below Link Crown	0.802	0 - 13:03 hrs	0	295.518	0	48.447	0.013	0	0	0	0	0	0	0 - 00:00 hrs
0203-360	2.292	253.099	Below Link Crown	14.401	0 - 13:52 hrs	0	342.904	0	60.449	0.015	0	0	0	0	0	0	0 - 00:00 hrs
0203-361	3.948	260.807	Below Link Crown	5.823	0 - 13:26 hrs	0	101.496	0	12.145	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-362	3.831	279.151	Below Link Crown	4.112	0 - 18:06 hrs	0	268.391	0	79.244	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-363	6.784	287.244	Below Link Crown	0.161	0 - 12:17 hrs	0	276.643	0	36.341	0.012	0	0	0	0	0	0	0 - 00:00 hrs
0203-364	3.175	277.141	Below Link Crown	4.895	0 - 18:07 hrs	0	268.391	0	79.178	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-365	9.252	295.652	Surcharged	-0.052	0 - 14:38 hrs	0	180.102	0	36.988	0	10.365	3.752	0	0.026	1.018	1.496	0 - 13:57 hrs
0203-366	12.778	286.062	Surcharged	-0.862	0 - 12:56 hrs	0	352.697	0	38.897	0.006	8.892	0.877	0	3.459	4.442	352.697	0 - 12:15 hrs
0203-367	17.542	289.991	Surcharged	-6.979	0 - 12:15 hrs	572.242	628.604	16.786	73.144	0.022	10.053	8.327	0	0.284	4.728	42.605	0 - 12:00 hrs
0203-368	10.792	277.453	Surcharged	-1.136	0 - 16:37 hrs	0	330.482	0	71.123	0.008	21.446	2.871	0	6.176	10.327	139.74	0 - 12:15 hrs
0203-369	6.926	284.587	Below Maximum Depth	0.732	0 - 17:24 hrs	0	130.376	0	22.095	0.004	18.376	1.578	0.732	0	0	0	0 - 00:00 hrs
0203-370	8.603	275.5	Surcharged	-0.379	0 - 17:28 hrs	0	208.928	0	71.219	0	16.912	0.382	0	1.019	8.445	14.249	0 - 14:45 hrs
0203-371	0	270.605	Below Link Invert	4.595	0 - 00:00 hrs	0	0	0	0	0	48	0	4.595	0	0	0	0 - 00:00 hrs
0203-372	8.716	273.01	Surcharged	0	0 - 14:44 hrs	0	220.635	0	75.394	0.02	15.073	0.153	0	0.668	4.069	15.745	0 - 16:54 hrs
0203-373	15.08	272.643	Surcharged	-2.124	0 - 18:50 hrs	0	218.905	0	74.662	0.005	22.285	2.124	0	0.051	11.142	9.588	0 - 11:49 hrs
0203-374	13.371	270.863	Surcharged	-0.863	0 - 19:30 hrs	0	215.682	0	74.676	0.036	24.285	5.421	0	1.62	10.788	21.193	0 - 13:08 hrs
0203-375	6.279	265.645	Below Link Crown	5.055	0 - 19:38 hrs	0	203.142	0	74.639	0.029	0	0	0	0	0	0	0 - 00:00 hrs
0203-376	5.567	264.95	Below Link Crown	6.465	0 - 19:45 hrs	0	203.139	0	74.601	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-377	14.255	271.751	Surcharged	-1.751	0 - 18:52 hrs	0	218.591	0	74.631	0.017	27.737	7.255	0	0.42	11.16	26.021	0 - 11:55 hrs
0203-378	11.134	272.034	Surcharged	-0.821	0 - 12:55 hrs	262.932	262.932	8.267	8.271	0	6.27	8.134	0	1.91	3.049	204.732	0 - 12:15 hrs
0203-379	8.888	267.359	Below Maximum Depth	3.854	0 - 13:21 hrs	0	69.968	0	8.272	0.001	6.257	4.888	3.853	0	0	0	0 - 00:00 hrs
0203-380	6.319	293.319	Below Link Crown	3.981	0 - 12:18 hrs	0	181.931	0	20.08	0.021	0	0	0	0	0	0	0 - 00:00 hrs
0203-381	3.349	272.837	Below Link Crown	0.763	0 - 12:15 hrs	275.683	275.683	9.512	9.516	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-382	1.744	299.744	Below Link Crown	8.456	0 - 18:38 hrs	0	30.179	0	9.883	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-383	6.206	317.276	Below Maximum Depth	0.424	0 - 18:04 hrs	0	113.866	0	49.753	0	25.851	1.296	0.424	0	0	0	0 - 00:00 hrs
0203-384	6.091	315.091	Below Maximum Depth	1.279	0 - 18:04 hrs	0	113.866	0	49.11	0.754	26.093	1.181	1.279	0	0	0	0 - 00:00 hrs
0203-385	4.952	310.55	Below Maximum Depth	0	0 - 12:00 hrs	0	5.771	0	0.448	0	4.564	3.452	0	0.146	2.046	3.482	0 - 12:45 hrs
0203-386	3.892	310.49	Below Maximum Depth	0	0 - 12:00 hrs	11.731	14.02	0.355	0.479	0	4.428	2.642	0	0.306	2.07	14.016	0 - 12:15 hrs
0203-387	4.619	310.39	Surcharged	0	0 - 12:06 hrs	0	7.822	0	0.389	0	4.379	3.119	0	0.015	0.26	5.544	0 - 12:15 hrs
0203-388	3.839	310.61	Below Maximum Depth	0	0 - 12:00 hrs	20.877	20.877	0.504	0.504	0	4.307	2.589	0	0.113	0.515	16.578	0 - 12:15 hrs
0203-389	9.994	272.76	Surcharged	0	0 - 12:19 hrs	0	14.26	0	1.196	0.002	25.498	8.244	0	0.001	0.17	0.369	0 - 12:23 hrs
0203-390	9.71	272.91	Surcharged	0	0 - 11:49 hrs	63.76	63.76	1.833	1.834	0	25.998	8.46	0	0.638	1.544	58.516	0 - 12:15 hrs
0203-391	6.259	258.744	Below Link Crown	4.564	0 - 12:25 hrs	0	303.219	0	19.148	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-392	4.723	257.006	Below Link Crown	13.094	0 - 12:26 hrs	0	303.015	0	19.118	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-393	2.68	313.558	Below Link Crown	11.442	0 - 14:38 hrs	0	20.784	0	4.462	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-394	5.89	310.127	Surcharged	-0.217	0 - 12:18 hrs	0	170.364	0	14.552	0.004	0.516	0.368	0	0.04	0.235	19.127	0 - 12:15 hrs
0203-395	3.9	308.03	Below Link Crown	3.176	0 - 12:18 hrs	0	153.39	0	14.571	0.009	0	0	0	0	0	0	0 - 00:00 hrs
0203-396	3.443	307.64	Below Maximum Depth	2.46	0 - 12:15 hrs	37.979	37.979	0.908	0.908	0	23.881	1.636	2.46	0	0	0	0 - 00:00 hrs
0203-397	3.878	298.51	Below Link Crown	2.779	0 - 12:18 hrs	0	49.602	0	10.069	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-398	3.726	298.359	Below Link Crown	2.636	0 - 12:18 hrs	0	49.709	0	10.061	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-399	4.204	312.847	Below Maximum Depth	0	0 - 12:11 hrs	44.824	44.824	2.313	2.313	0	0.241	1.204	0	0	0.023	1.288	0 - 12:15 hrs
0203-400	4.045	309.453	Surcharged	-0.223	0 - 12:17 hrs	0	43.656	0	2.311	0.001	0.43	0.223	0	0.01	0.212	5.724	0 - 12:14 hrs

Table B-6a. Existing System Analysis - Nodes
100-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-401	7.186	299.4	Below Maximum Depth	0	0 - 12:12 hrs	0	150.628	0	10.449	0.01	2.105	3.186	0	0.001	0.002	29.266	0 - 12:12 hrs
0203-402	6.96	289.457	Surcharged	-2.457	0 - 14:26 hrs	0	487.905	0	57.572	0.053	16.489	2.463	0	5.118	8.244	221.397	0 - 12:15 hrs
0203-403	6.304	288.405	Below Maximum Depth	0.07	0 - 14:52 hrs	0	248.157	0	57.472	0.013	16.306	1.89	0.07	0	0	0	0 - 00:00 hrs
0203-404	5.859	287.96	Below Link Crown	1.04	0 - 15:02 hrs	0	248.151	0	57.461	0.013	0	0	0	0	0	0	0 - 00:00 hrs
0203-405	5.924	287.556	Below Link Crown	0.944	0 - 15:18 hrs	0	248.107	0	57.447	0.01	0	0	0	0	0	0	0 - 00:00 hrs
0203-406	5.759	287.166	Below Link Crown	0.734	0 - 15:45 hrs	0	248.036	0	57.436	0.015	0	0	0	0	0	0	0 - 00:00 hrs
0203-407	6.739	286.896	Surcharged	-0.376	0 - 16:14 hrs	0	247.94	0	57.418	0.027	11.53	0.376	0	0.117	5.764	3.624	0 - 13:52 hrs
0203-408	6.49	286.555	Surcharged	-0.412	0 - 16:54 hrs	0	246.261	0	57.392	0.014	13.351	0.412	0	0.87	6.675	20.294	0 - 13:52 hrs
0203-409	6.388	286.388	Surcharged	-0.288	0 - 17:09 hrs	0	235.201	0	57.44	0.04	11.924	0.31	0	1.045	5.871	18.763	0 - 14:37 hrs
0203-410	6.981	285.831	Below Link Crown	1.069	0 - 17:21 hrs	0	217.235	0	57.28	0.014	0	0	0	0	0	0	0 - 00:00 hrs
0203-411	5.796	313.404	Surcharged	-1.154	0 - 12:17 hrs	58.768	58.768	2.472	2.473	0	0.657	2.796	0	0.028	0.291	10.682	0 - 12:15 hrs
0203-412	5.037	310.848	Below Maximum Depth	1.852	0 - 12:17 hrs	0	48.786	0	2.463	0	0.674	2.037	1.852	0	0	0	0 - 00:00 hrs
0203-413	3.592	308.375	Below Maximum Depth	4.225	0 - 12:17 hrs	0	48.786	0	2.465	0	0.601	0.592	4.225	0	0	0	0 - 00:00 hrs
0203-414	2.344	304.548	Below Link Crown	1.742	0 - 12:18 hrs	0	48.787	0	2.465	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-415	7.033	310.638	Surcharged	-1.338	0 - 12:45 hrs	58.927	58.927	2.196	2.196	0	4.319	5.033	0	0.231	1.959	33.845	0 - 12:15 hrs
0203-416	1.477	304.232	Below Link Crown	3.468	0 - 12:45 hrs	0	26.546	0	2.182	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-417	6.307	290.877	Below Link Crown	1.132	0 - 12:26 hrs	0	167.063	0	20.041	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-418	5.505	288.869	Below Link Crown	2.962	0 - 12:27 hrs	0	166.26	0	20.041	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-419	7.094	297.018	Surcharged	-0.918	0 - 13:11 hrs	0	47.223	0	2.195	0.002	4.301	1.014	0	0.158	2.133	27.12	0 - 12:19 hrs
0203-420	1.021	288.742	Below Link Crown	5.569	0 - 12:29 hrs	0	22.577	0	2.184	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-421	1.641	301.783	Below Link Crown	4.217	0 - 12:15 hrs	0	28.917	0	0.927	-0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-422	2.979	308.729	Below Link Crown	0.471	0 - 12:15 hrs	0	26.38	0	1.262	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-423	2.455	307.861	Below Link Crown	4.739	0 - 12:15 hrs	0	26.237	0	1.263	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-424	3.963	286.592	Below Link Crown	3.808	0 - 12:34 hrs	0	182.706	0	22.189	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-425	4.01	286.349	Below Link Crown	7.151	0 - 12:34 hrs	0	181.5	0	22.185	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-426	5.555	284.639	Below Maximum Depth	2.361	0 - 17:05 hrs	0	130.242	0	22.074	0.006	17.595	1.029	2.361	0	0	0	0 - 00:00 hrs
0203-427	5.609	284.538	Below Maximum Depth	2.362	0 - 17:39 hrs	0	130.438	0	22.092	0.006	17.2	1.076	2.362	0	0	0	0 - 00:00 hrs
0203-428	6.257	270.903	Below Link Crown	7.586	0 - 12:17 hrs	0	268.404	0	79.09	0.054	0	0	0	0	0	0	0 - 00:00 hrs
0203-429	5.86	270.327	Below Link Crown	6.288	0 - 12:17 hrs	0	318.086	0	85.751	0.057	0	0	0	0	0	0	0 - 00:00 hrs
0203-430	7.323	277.219	Surcharged	-0.769	0 - 12:55 hrs	0	37.689	0	5.255	0.001	7.534	4.323	0	0.176	1.716	20.127	0 - 12:22 hrs
0203-431	5.295	336.075	Surcharged	-1.135	0 - 14:33 hrs	80.065	80.065	4.467	4.468	0	13.436	3.295	0	0.861	6.676	60.065	0 - 12:15 hrs
0203-432	6.029	277.269	Below Maximum Depth	0.411	0 - 12:19 hrs	0	35.441	0	1.175	0	0.773	1.029	0.411	0	0	0	0 - 00:00 hrs
0203-433	6.295	277.225	Below Maximum Depth	1.645	0 - 12:18 hrs	0	35.547	0	1.228	0.003	0.889	1.295	1.645	0	0	0	0 - 00:00 hrs
0203-434	6.443	277.213	Below Maximum Depth	1.847	0 - 12:18 hrs	90.91	114.028	3.586	5.706	0.002	0.895	1.302	1.847	0	0	0	0 - 00:00 hrs
0203-435	3.386	274.416	Below Link Crown	5.104	0 - 12:30 hrs	0	113.392	0	5.704	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-436	0	269.45	Below Link Invert	3.53	0 - 00:00 hrs	0	0	0	0	0	48	0	3.53	0	0	0	0 - 00:00 hrs
0203-437	2.554	272.694	Below Link Crown	3.406	0 - 12:36 hrs	0	94.073	0	5.624	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-438	2.28	267.229	Below Link Crown	6.971	0 - 12:36 hrs	0	93.86	0	5.621	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-439	5.461	330.906	Surcharged	-0.988	0 - 13:03 hrs	329.515	329.515	10.425	10.429	0	8.796	2.323	0	2.679	4.388	267.75	0 - 12:15 hrs
0203-440	5.041	325.177	Surcharged	-1.019	0 - 16:14 hrs	0	63.483	0	10.389	-0.003	20.389	1.744	0	3.488	10.094	33.947	0 - 12:37 hrs
0203-441	5.191	323.991	Surcharged	-0.531	0 - 16:22 hrs	0	32.394	0	10.438	0.004	20.991	2.191	0	0.046	7.364	0.602	0 - 13:42 hrs
0203-442	3.64	322.285	Below Maximum Depth	0.115	0 - 16:22 hrs	0	31.972	0	10.431	0.003	20.334	0.64	0.115	0	0	0	0 - 00:00 hrs
0203-443	3.149	321.102	Below Link Crown	0.698	0 - 16:22 hrs	0	31.972	0	10.424	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-444	1.639	319.03	Below Link Crown	2.67	0 - 12:56 hrs	0	31.972	0	10.423	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-445	1.573	312.903	Below Link Crown	2.963	0 - 16:00 hrs	0	32.08	0	10.417	-0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-446	3.553	311.092	Below Maximum Depth	0.587	0 - 16:00 hrs	0	31.977	0	10.416	0.002	20.363	0.516	0.587	0	0	0	0 - 00:00 hrs
0203-447	2.58	309.902	Below Link Crown	2.339	0 - 14:56 hrs	0	31.977	0	10.414	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-448	5.018	308.829	Below Maximum Depth	2.921	0 - 14:57 hrs	0	73.004	0	17.258	0.002	7.594	1.018	2.921	0	0	0	0 - 00:00 hrs
0203-449	6.059	318.777	Surcharged	-0.977	0 - 12:45 hrs	250.454	250.454	6.851	6.854	0	6.222	3.059	0	1.641	3.057	196.942	0 - 12:15 hrs
0203-450	5.726	316.594	Below Maximum Depth	1.406	0 - 11:52 hrs	0	54.258	0	6.868	0.001	6.121	2.714	1.406	0	0	0	0 - 00:00 hrs
0203-451	5.984	309.915	Surcharged	-1.015	0 - 14:56 hrs	0	54.257	0	6.855	0.001	8.36	2.484	0	0.84	4.119	11.808	0 - 12:57 hrs
0203-452	4.85	307.12	Below Maximum Depth	4.132	0 - 14:56 hrs	0	73.004	0	17.258	0.003	6.44	0.707	4.132	0	0	0	0 - 00:00 hrs
0203-453	5.348	305.058	Below Maximum Depth	0.342	0 - 14:56 hrs	0	76.517	0	17.261	0	8.194	1.278	0.342	0	0	0	0 - 00:00 hrs
0203-454	7.587	302.782	Surcharged	-1.182	0 - 14:56 hrs	0	73.004	0	17.267	0.002	9.713	3.087	0	0.187	4.544	19.406	0 - 11:52 hrs
0203-455	8.06	301.63	Surcharged	-0.92	0 - 14:33 hrs	0	92.633	0	20.019	0.001	9.753	3.461	0	0.72	4.816	23.842	0 - 12:25 hrs
0203-456	4.141	303.274	Surcharged	-1.006	0 - 13:03 hrs	111.592	111.592	2.759	2.76	0	10.254	2.141	0	0.919	5.119	95.696	0 - 12:15 hrs
0203-457	8.478	300.123	Surcharged	-0.992	0 - 12:48 hrs	336.508	403.511	10.575	30.559	0.004	9.717	2.978	0	2.153	4.749	253.804	0 - 12:15 hrs
0203-458	10.675	297.184	Surcharged	-1.206	0 - 14:40 hrs	0	153.53	0	30.574	0.018	10.435	5.175	0	1.249	5.052	33.726	0 - 12:22 hrs
0203-459	7.763	299.493	Surcharged	-0.973	0 - 12:41 hrs	224.653	224.653	6.392	6.394	0	6.074	4.263	0	1.295	2.769	168.139	0 - 12:15 hrs
0203-460	7.963	298.097	Below Maximum Depth	0	0 - 14:40 hrs	0	57.671	0	6.398	0.002	9.016	3.536	0	0.001	0.002	15.279	0 - 14:40 hrs
0203-461	9.533	292.709	Surcharged	-0.759	0 - 14:41 hrs	0	180.067	0	36.991	0.007	23.171	3.796	0	0.229	5.035	5.174	0 - 12:33 hrs
0203-462	6.235	288.807	Below Maximum Depth	0.863	0 - 16:59 hrs	0	105.692	0	36.998	0.011	15.281	0.498	0.863	0	0	0	0 - 00:00 hrs
0203-463	5.065	297.292	Below Maximum Depth	2.208	0 - 13:52 hrs	0	63.974	0	17.45	0.001	16.123	1.565	2.208	0	0	0	0 - 00:00 hrs
0203-464	8.432	303.96	Surcharged	-0.996	0 - 13:52 hrs	466.772	466.772	17.474	17.481	0	16.189	5.432	0	5.801	8.011	405.333	0 - 12:15 hrs
0203-465	2.94	294.565	Below Link Crown	4.46	0 - 12:18 hrs	0	63.974	0	17.448	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-466	6.844	293.452	Below Maximum Depth	0	0 - 12:12 hrs	0	67.42	0	17.461	0.005	0.261	2.786	0	0	0.002	13.578	0 - 12:12 hrs
0203-467	5.526	280.936	Surcharged	-1.436	0 - 12:41 hrs	0	94.251	0	19.23	0.002	19.233	1.446	0	1.199	9.616	94.251	0 - 12:15 hrs
0203-468	5.381	276.289	Surcharged	-1.089	0 - 13:08 hrs	138.806	138.806	4.285	4.287	0	10.152	2.381	0	1.203	5.074	115.51	0 - 12:15 hrs
0203-469	5.397	275.748	Below Maximum Depth	0.352	0 - 13:15 hrs	0	24.695	0	4.298	0.001	10.178	2.397	0.352	0	0	0	0 - 00:00 hrs
0203-470	6.034	274.803	Below Maximum Depth	3.441	0 - 13:30 hrs	0	24.695	0	4.295	0.002	20.921	3.034	3.441	0	0	0	0 - 00:00 hrs
0203-471	5.913	274.059	Below Maximum Depth	1.041	0 - 15:00 hrs	0	24.694	0	4.295	0	21.51	2.913	1.041	0	0	0	0 - 00:00 hrs
0203-472	4.597	295.558	Surcharged	-0.562	0 - 16:22 hrs	0	97.138	0	17.724	0.003	10.414	0.562	0	0.843	5.207	11.017	0 - 12:45 hrs
0203-473	6.098	273.605	Below Maximum Depth	1.295	0 - 15:00 hrs	0	24.693	0	4.294	0.001	22.506	3.098	1.295	0	0	0	0 - 00:00 hrs
0203-474	10.404	269.38	Surcharged	-0.78	0 - 12:27 hrs	145.633	145.633	3.868	3.869	0	6.285	7.404	0	0.589	1.436	94.204	0 - 12:15 hrs
0203-475	7.286	267.59	Surcharged	-0.29	0 - 13:29 hrs	0	33.165	0	4.297	0.001	8.03	4.142	0	0.07	2.12	3.791	0 - 12:38 hrs
0203-476	7.055	267.017	Below Maximum Depth	0.583	0 - 13:18 hrs	0	34.351	0	4.301	0.002	8.062	3.925	0.583	0	0	0	0 - 00:00 hrs
0203-477	7.691	279.732	Surcharged	-1.032	0 - 13:15 hrs	230.892	230.892	6.974	6.977	0	10.397	4.691	0	2.087	5.197	195.923	0 - 12:15 hrs
0203-478	8.171	277.555	Surcharged	-0.807	0 - 13:22 hrs	0	41.466	0	6.961	-0.002	10.418	5.08	0	0.037	4.516	8.366	0 - 11:51 hrs
0203-479	9.084	274.827	Below Maximum Depth	0	0 - 12:15 hrs	0	38.919	0	6.959	0.005	11.437	5.925	0	0.057	1.362	3.084	0 - 12:45 hrs
0203-480	7.705	273.44	Surcharged	0	0 - 12:10 hrs	0	38.911	0	6.898	0.003	11.348	4.705	0	0.075	0.59	14.248	0 - 12:14 hrs

Table B-6a. Existing System Analysis - Nodes
100-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-481	8.467	329.5	Surcharged	-0.992	0 - 13:41 hrs	799.02	799.02	20.11	20.117	0	19.246	5.467	0	8.632	9.468	737.52	0 - 12:15 hrs
0203-482	6.413	322.078	Below Maximum Depth	0.62	0 - 13:41 hrs	0	62.354	0	20.078	0.011	19.544	3.413	0.62	0	0	0	0 - 00:00 hrs
0203-483	2.504	314.277	Below Link Crown	3.875	0 - 13:40 hrs	0	62.354	0	20.104	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-484	2.641	307.76	Below Link Crown	3.68	0 - 13:41 hrs	0	62.354	0	20.109	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-485	5.952	281.132	Surcharged	-1.312	0 - 12:30 hrs	0	111.058	0	20.118	0.002	19.291	2.012	0	0.316	7.077	42.902	0 - 12:15 hrs
0203-486	2.733	299.012	Below Link Crown	6.062	0 - 13:44 hrs	0	62.378	0	20.099	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-487	3.877	297.38	Below Link Crown	5.808	0 - 12:06 hrs	0	62.409	0	20.09	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-488	8.57	296.591	Surcharged	0	0 - 12:03 hrs	404.615	465.605	14.295	35.867	0.014	4.139	2.57	0	1.124	0.42	208.853	0 - 12:15 hrs
0203-489	4.772	295.351	Surcharged	-0.251	0 - 12:45 hrs	0	83.373	0	1.503	0	4.271	1.272	0	1.109	2.052	83.371	0 - 12:15 hrs
0203-490	4.137	295.8	Below Maximum Depth	1.26	0 - 12:15 hrs	31.866	31.866	0.712	0.712	0	3.646	0.637	1.26	0	0	0	0 - 00:00 hrs
0203-491	6.023	293.1	Surcharged	0	0 - 12:07 hrs	0	218.914	0	33.955	0.011	0.478	0.023	0	0.05	0.23	13.651	0 - 12:15 hrs
0203-492	8.434	294.432	Surcharged	-2.49	0 - 12:15 hrs	89.614	89.614	2.443	2.444	0	1.1	4.934	0	0.018	0.244	5.955	0 - 12:10 hrs
0203-493	2.697	303.615	Below Link Crown	12.985	0 - 12:15 hrs	28.99	28.99	0.927	0.927	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-494	10.939	277.012	Surcharged	-1.002	0 - 12:34 hrs	259.342	263.991	9.206	14.425	0.006	5.368	6.939	0	0.998	1.59	153.781	0 - 12:15 hrs
0203-495	10.33	277.268	Surcharged	-1.136	0 - 12:17 hrs	49.291	49.291	1.646	1.646	0	2.021	7.83	0	0.017	0.243	8.183	0 - 12:15 hrs
0203-496	3.665	308.911	Below Maximum Depth	0.539	0 - 12:15 hrs	24.162	24.162	0.795	0.795	0	0.218	0.665	0.538	0	0	0	0 - 00:00 hrs
0203-497	3.759	308.173	Below Maximum Depth	0.127	0 - 12:15 hrs	0	24.163	0	0.796	0	0.329	0.759	0.127	0	0	0	0 - 00:00 hrs
0203-498	3.154	307.526	Below Maximum Depth	4.374	0 - 12:15 hrs	0	24.163	0	0.797	0	0.098	0.154	4.374	0	0	0	0 - 00:00 hrs
0203-499	2.65	306.819	Below Link Crown	3.781	0 - 12:15 hrs	0	24.166	0	0.797	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-500	0.855	304.045	Below Link Crown	6.055	0 - 12:15 hrs	0	23.976	0	0.797	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-501	0.643	303.994	Below Link Crown	3.306	0 - 12:15 hrs	0	26.154	0	1.263	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-502	6.78	319.139	Surcharged	-0.939	0 - 12:17 hrs	89.312	89.312	5.253	5.254	0	0.676	3.28	0	0.046	0.28	16.912	0 - 12:15 hrs
0203-503	4.101	315.386	Below Maximum Depth	4.529	0 - 12:15 hrs	0	73.551	0	5.243	0.001	0.567	0.601	4.529	0	0	0	0 - 00:00 hrs
0203-504	3.339	311.135	Below Link Crown	0.708	0 - 12:22 hrs	0	81.539	0	5.573	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-505	2.558	311.16	Below Link Crown	4.862	0 - 12:22 hrs	9.188	9.188	0.332	0.332	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-506	6.56	277.824	Surcharged	-1.007	0 - 13:45 hrs	160.388	160.388	5.188	5.19	0	10.063	4.06	0	2.068	4.955	146.636	0 - 12:15 hrs
0203-507	6.248	270.748	Below Link Crown	5.867	0 - 12:15 hrs	140.058	319.232	6.739	85.778	0.023	0	0	0	0	0	0	0 - 00:00 hrs
0203-508	7.34	279.58	Below Link Crown	0	0 - 12:11 hrs	152.45	152.45	3.895	3.897	0	0.157	0	0	0.044	0.078	35.965	0 - 12:15 hrs
0203-509	8.205	279.505	Surcharged	-0.265	0 - 12:15 hrs	0	145.011	0	3.851	0.003	3.339	0.545	0	0.012	0.166	12.171	0 - 12:11 hrs
0203-510	5.46	276.253	Surcharged	-0.994	0 - 13:45 hrs	336.327	336.327	13.423	13.429	0	14.001	2.46	0	4.221	6.992	283.664	0 - 12:15 hrs
0203-511	2.994	328.348	Below Maximum Depth	0.952	0 - 14:34 hrs	0	20.784	0	4.473	0	13.361	0.494	0.952	0	0	0	0 - 00:00 hrs
0203-512	1.564	325.723	Below Link Crown	4.528	0 - 14:34 hrs	0	20.784	0	4.473	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-513	4.097	333.177	Surcharged	-0.467	0 - 14:34 hrs	0	20.785	0	4.454	0	13.377	2.097	0	0.002	5.156	0.074	0 - 12:22 hrs
0203-514	2.276	321.893	Below Link Crown	0.807	0 - 14:37 hrs	0	20.784	0	4.471	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-515	1.625	320.276	Below Link Crown	3.316	0 - 14:37 hrs	0	20.784	0	4.464	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-516	1.869	313.937	Below Link Crown	5.043	0 - 14:37 hrs	0	20.784	0	4.461	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-517	8.481	279.091	Below Link Crown	0.439	0 - 12:15 hrs	0	137.589	0	3.835	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-518	4.643	320.954	Surcharged	-1.154	0 - 12:52 hrs	120.927	120.927	4.52	4.521	0	5.754	2.243	0	0.627	2.738	80.312	0 - 12:15 hrs
0203-519	3.298	318.709	Below Link Crown	1.891	0 - 12:53 hrs	0	44.512	0	4.522	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-520	3.97	263.919	Below Link Crown	9.94	0 - 12:18 hrs	0	251.67	0	48.208	0.018	0	0	0	0	0	0	0 - 00:00 hrs
0203-521	4.825	322.625	Below Maximum Depth	1.519	0 - 13:41 hrs	0	37.491	0	6.403	0.001	10.014	1.325	1.519	0	0	0	0 - 00:00 hrs
0203-522	5.558	323.558	Below Maximum Depth	1.115	0 - 13:41 hrs	0	37.491	0	6.404	0.001	10.03	2.058	1.115	0	0	0	0 - 00:00 hrs
0203-523	6.682	325.182	Surcharged	-0.982	0 - 13:32 hrs	178.691	178.691	6.38	6.381	0	10.051	3.182	0	1.492	4.991	141.648	0 - 12:15 hrs
0203-524	6.147	324.397	Surcharged	-0.497	0 - 13:41 hrs	0	39.424	0	6.406	0	10.041	2.647	0	0.048	3.758	3.122	0 - 12:21 hrs
0203-525	3.498	267.808	Below Link Crown	13.492	0 - 12:15 hrs	0	212.862	0	45.295	0.024	0	0	0	0	0	0	0 - 00:00 hrs
0203-526	4.324	321.87	Below Maximum Depth	1.13	0 - 13:41 hrs	0	37.491	0	6.398	0	9.992	0.824	1.13	0	0	0	0 - 00:00 hrs
0203-527	3.586	321.077	Below Maximum Depth	1.694	0 - 13:41 hrs	0	37.491	0	6.395	0	4.491	0.086	1.694	0	0	0	0 - 00:00 hrs
0203-528	3.661	320.247	Below Link Crown	2.05	0 - 13:41 hrs	0	37.491	0	6.39	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-529	3.744	319.244	Below Link Crown	1.444	0 - 13:41 hrs	0	37.491	0	6.379	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-530	9.759	276.619	Below Maximum Depth	0.241	0 - 12:18 hrs	0	134.225	0	42.278	0.168	2.074	0.229	0.241	0	0	0	0 - 00:00 hrs
0203-531	12.88	325.614	Surcharged	-1.003	0 - 12:18 hrs	90.46	90.46	2.949	2.949	0	2.507	10.38	0	0.129	0.554	32.699	0 - 12:15 hrs
0203-532	2.867	295.697	Below Link Crown	7.153	0 - 12:25 hrs	0	113.869	0	47.586	0.037	0	0	0	0	0	0	0 - 00:00 hrs
0203-533	2.164	302.754	Below Link Crown	2.686	0 - 13:56 hrs	0	101.174	0	30.929	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-534	3.94	307.411	Below Maximum Depth	1.796	0 - 12:49 hrs	0	22.396	0	8.161	0.003	5.805	0.94	1.796	0	0	0	0 - 00:00 hrs
0203-535	3.716	307.014	Below Maximum Depth	1.954	0 - 12:49 hrs	0	23.382	0	8.158	0.003	4.8	0.716	1.954	0	0	0	0 - 00:00 hrs
0203-536	9.047	306.218	Surcharged	-0.986	0 - 12:48 hrs	264.572	284.339	8.506	16.664	0.009	6.932	5.547	0	1.768	3.051	203.499	0 - 12:15 hrs
0203-537	5.149	302.32	Below Maximum Depth	3.503	0 - 12:48 hrs	0	82.524	0	16.646	0.007	6.099	1.149	3.503	0	0	0	0 - 00:00 hrs
0203-538	1.535	301.375	Below Link Crown	4.905	0 - 13:48 hrs	0	101.174	0	30.915	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-539	4.856	299.516	Below Maximum Depth	1.084	0 - 11:55 hrs	0	82.524	0	16.641	0.007	6.091	0.856	1.084	0	0	0	0 - 00:00 hrs
0203-540	5.306	296.296	Below Maximum Depth	1.254	0 - 11:55 hrs	0	82.524	0	16.647	0.009	6.285	1.266	1.254	0	0	0	0 - 00:00 hrs
0203-541	3.266	293.406	Below Link Crown	3.034	0 - 13:47 hrs	0	82.525	0	16.633	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-542	5.63	306.512	Below Maximum Depth	0.994	0 - 12:48 hrs	0	31.416	0	8.148	0.003	6.142	2.13	0.994	0	0	0	0 - 00:00 hrs
0203-543	6.106	290.566	Below Maximum Depth	0.574	0 - 14:57 hrs	0	82.483	0	16.633	0.007	6.255	2.106	0.574	0	0	0	0 - 00:00 hrs
0203-544	5.272	288.372	Below Maximum Depth	5.478	0 - 14:57 hrs	0	82.482	0	16.622	0.006	6.445	1.232	5.478	0	0	0	0 - 00:00 hrs
0203-545	4.925	284.903	Surcharged	-1.003	0 - 15:44 hrs	0	77.074	0	16.543	0.033	24.929	1.015	0	4.421	12.463	54.202	0 - 12:25 hrs
0203-546	4.727	284.677	Below Link Crown	2.393	0 - 15:41 hrs	0	35.425	0	13.787	0.012	0	0	0	0	0	0	0 - 00:00 hrs
0203-547	5.177	299.887	Below Link Crown	2.913	0 - 12:15 hrs	0	113.438	0	30.851	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-548	4.636	284.556	Below Maximum Depth	2.724	0 - 15:38 hrs	0	35.428	0	13.774	0.01	23.878	0.746	2.724	0	0	0	0 - 00:00 hrs
0203-549	2.914	281.754	Below Link Crown	3.836	0 - 13:00 hrs	0	40.664	0	14.826	0.005	0	0	0	0	0	0	0 - 00:00 hrs
0203-550	11.18	278.095	Surcharged	-0.895	0 - 12:32 hrs	0	1,129.30	0	251.848	0.192	2.556	0.92	0	0.284	1.249	82.734	0 - 12:15 hrs
0203-551	5.264	280.714	Below Link Crown	1.786	0 - 12:19 hrs	0	72.76	0	3.006	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-552	6.197	279.257	Below Maximum Depth	1.593	0 - 13:34 hrs	0	27.317	0	7.311	0.003	15.954	3.187	1.593	0	0	0	0 - 00:00 hrs
0203-553	4.099	275.119	Below Maximum Depth	5.581	0 - 13:34 hrs	0	27.317	0	7.304	0.007	10.812	0.099	5.581	0	0	0	0 - 00:00 hrs
0203-554	5.882	277.702	Surcharged	-1.662	0 - 12:15 hrs	50.425	50.425	1.459	1.46	0	0.447	2.882	0	0.007	0.191	3.133	0 - 12:10 hrs
0203-555	6.825	274.895	Below Maximum Depth	0.615	0 - 12:15 hrs	0	49.064	0	1.441	0	0.472	2.175	0.615	0	0	0	0 - 00:00 hrs
0203-556	2.87	269.72	Below Link Crown	6.48	0 - 12:18 hrs	0	77.735	0	7.544	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-557	10.145	299.165	Below Link Crown	3.935	0 - 12:15 hrs	0	496.959	0	118.43	0.036	0	0	0	0	0	0	0 - 00:00 hrs
0203-558	7.047	268.449	Below Link Crown	12.681	0 - 12:29 hrs	88.18	1,374.70	2.13	274.419	0.111	0	0	0	0	0	0	0 - 00:00 hrs
0203-559	5.217	299.927	Below Link Crown	2.873	0 - 12:15 hrs	0	109.876	0	30.857	0.004	0	0	0	0	0	0	0 - 00:00 hrs
0203-560	6.394	351.614	Surcharged	-0.964	0 - 12:33 hrs	920.025	920.025	33.01	33.024	0	2.953	1.814	0	3.533	1.471	544.421	0 - 12:15 hrs

Table B-6a. Existing System Analysis - Nodes
100-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-561	6.86	342.52	Below Maximum Depth	0	0 - 12:02 hrs	0	251.951	0	33.068	0.018	5.625	1.86	0	0.015	0.351	7.554	0 - 12:03 hrs
0203-562	6.996	332.996	Surcharged	-1.296	0 - 17:05 hrs	0	81.287	0	18.566	0.004	19.958	1.326	0	3.106	9.965	35.621	0 - 12:32 hrs
0203-563	7.01	335.08	Surcharged	-1	0 - 13:21 hrs	625.587	625.587	18.537	18.544	0	15.476	1.34	0	5.865	7.732	547.547	0 - 12:15 hrs
0203-564	5.686	346.786	Surcharged	-1.086	0 - 13:30 hrs	0	384.339	0	33.148	0.021	5.496	1.106	0	4.789	2.748	144.704	0 - 12:23 hrs
0203-565	1.895	335.275	Below Link Crown	4.235	0 - 13:29 hrs	0	249.036	0	32.987	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-566	4.671	334.031	Below Link Crown	3.109	0 - 13:21 hrs	0	249.036	0	32.989	0.062	0	0	0	0	0	0	0 - 00:00 hrs
0203-567	4.867	329.277	Below Link Crown	2.913	0 - 13:38 hrs	0	249.059	0	32.904	0.018	0	0	0	0	0	0	0 - 00:00 hrs
0203-568	5.558	327.228	Below Link Crown	2.712	0 - 12:07 hrs	0	249.046	0	32.881	0.027	0	0	0	0	0	0	0 - 00:00 hrs
0203-569	4.694	324.974	Below Link Crown	2.026	0 - 14:45 hrs	0	250.624	0	32.856	0.028	0	0	0	0	0	0	0 - 00:00 hrs
0203-570	6.85	324.81	Surcharged	-0.81	0 - 14:48 hrs	0	255.302	0	33.098	0.041	7.183	1.75	0	3.198	3.478	67.399	0 - 12:17 hrs
0203-571	8.97	321.63	Surcharged	-1.43	0 - 12:41 hrs	0	220.49	0	32.773	0.224	7.36	1.44	0	0.765	3.679	171.33	0 - 12:11 hrs
0203-572	10.809	321.419	Surcharged	-0.719	0 - 12:37 hrs	0	228.256	0	32.637	0.178	3.755	0.809	0	0.486	1.751	114.214	0 - 12:15 hrs
0203-573	10.752	321.362	Surcharged	-0.662	0 - 12:34 hrs	1,045.99	1,082.50	62.72	95.21	0.127	3.445	0.752	0	0.84	1.607	209.821	0 - 12:15 hrs
0203-574	9.457	320.067	Surcharged	-1.067	0 - 13:37 hrs	0	926.901	0	94.998	0.178	9.138	1.107	0	9.512	4.568	408.555	0 - 12:22 hrs
0203-575	7.512	318.122	Surcharged	-1.022	0 - 18:04 hrs	0	573.177	0	94.806	0.259	25.683	1.072	0	51.307	12.83	464.625	0 - 13:15 hrs
0203-576	1.676	310.166	Below Link Crown	11.534	0 - 18:06 hrs	0	113.866	0	48.356	0.111	0	0	0	0	0	0	0 - 00:00 hrs
0203-577	3.471	298.53	Below Link Crown	9.673	0 - 18:09 hrs	0	113.866	0	48.245	0.067	0	0	0	0	0	0	0 - 00:00 hrs
0203-578	2.594	297.724	Below Link Crown	10.549	0 - 18:16 hrs	0	113.866	0	48.178	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-579	4.439	297.287	Below Link Crown	12.433	0 - 18:22 hrs	0	113.865	0	48.067	0.228	0	0	0	0	0	0	0 - 00:00 hrs
0203-580	4.567	295.377	Below Link Crown	6.943	0 - 12:23 hrs	0	113.871	0	47.551	0.083	0	0	0	0	0	0	0 - 00:00 hrs
0203-581	7.713	300.363	Surcharged	-1.043	0 - 12:23 hrs	149.811	149.811	4.132	4.134	0	2.505	4.713	0	0.501	1.136	90.529	0 - 12:15 hrs
0203-582	3.879	295.139	Below Link Crown	6.061	0 - 12:22 hrs	0	113.884	0	47.467	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-583	6.987	295.107	Below Link Crown	4.793	0 - 12:22 hrs	0	115.456	0	47.445	0.079	0	0	0	0	0	0	0 - 00:00 hrs
0203-584	8.923	295.103	Below Link Crown	5.097	0 - 12:22 hrs	0	576.585	0	165.761	0.139	0	0	0	0	0	0	0 - 00:00 hrs
0203-585	8.832	294.972	Below Link Crown	4.528	0 - 12:23 hrs	0	570.43	0	165.612	0.068	0	0	0	0	0	0	0 - 00:00 hrs
0203-586	8.81	294.76	Below Link Crown	5.44	0 - 12:23 hrs	0	567.24	0	165.544	0.102	0	0	0	0	0	0	0 - 00:00 hrs
0203-587	9.69	294.31	Below Link Crown	4.49	0 - 12:26 hrs	0	561.054	0	165.441	0.154	0	0	0	0	0	0	0 - 00:00 hrs
0203-588	11.353	294.183	Below Link Crown	3.887	0 - 12:27 hrs	0	553.406	0	165.286	0.213	0	0	0	0	0	0	0 - 00:00 hrs
0203-589	8.78	293.84	Below Link Crown	7.56	0 - 12:33 hrs	0	548.015	0	165.071	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-590	4.47	330.4	Below Maximum Depth	0	0 - 17:32 hrs	0	71.547	0	18.557	0.004	5.08	0.04	0	0.296	2.428	5.661	0 - 18:19 hrs
0203-591	4.437	325.487	Surcharged	-1.817	0 - 20:00 hrs	0	67.286	0	18.251	0.012	15.151	1.817	0	0.321	7.574	9.81	0 - 17:32 hrs
0203-592	5.179	295.709	Below Maximum Depth	1.121	0 - 12:30 hrs	0	65.817	0	4.089	0.002	1.975	1.179	1.121	0	0	0	0 - 00:00 hrs
0203-593	1.33	317.51	Below Link Crown	2.29	0 - 20:00 hrs	0	62.811	0	18.233	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-594	4.317	313.247	Surcharged	-0.647	0 - 21:30 hrs	0	62.811	0	18.22	0.132	24.161	0.717	0	2.587	12.05	16.953	0 - 18:45 hrs
0203-595	2.998	310.988	Below Link Crown	0.112	0 - 21:31 hrs	0	47.538	0	18.022	0.042	0	0	0	0	0	0	0 - 00:00 hrs
0203-596	1.945	308.305	Below Link Crown	1.195	0 - 21:32 hrs	0	47.536	0	17.98	0.037	0	0	0	0	0	0	0 - 00:00 hrs
0203-597	3.075	300.605	Below Link Crown	4.095	0 - 12:18 hrs	0	47.534	0	17.943	0.044	0	0	0	0	0	0	0 - 00:00 hrs
0203-598	3.245	300.155	Below Link Crown	3.845	0 - 12:17 hrs	0	47.532	0	17.901	0.022	0	0	0	0	0	0	0 - 00:00 hrs
0203-599	6.035	300.065	Below Link Crown	3.225	0 - 12:17 hrs	0	47.607	0	17.873	0.064	0	0	0	0	0	0	0 - 00:00 hrs
0203-600	8.14	299.84	Below Maximum Depth	1.02	0 - 12:15 hrs	686.225	745.611	22.475	119.81	0.045	0.412	0.59	1.02	0	0	0	0 - 00:00 hrs
0203-601	8.214	299.234	Below Link Crown	2.116	0 - 12:15 hrs	0	504.616	0	118.439	0.009	0	0	0	0	0	0	0 - 00:00 hrs
0203-602	2.725	295.815	Below Link Crown	9.685	0 - 12:25 hrs	0	113.864	0	47.683	0.095	0	0	0	0	0	0	0 - 00:00 hrs
0203-603	5.55	310.29	Surcharged	-0.99	0 - 13:52 hrs	843.108	843.108	30.938	30.952	0	19.357	1.001	0	10.703	9.675	753.491	0 - 12:15 hrs
0203-604	4.804	308.849	Surcharged	-0.25	0 - 13:55 hrs	0	101.175	0	30.998	0.006	11.464	0.25	0	0.007	5.731	0.579	0 - 12:23 hrs
0203-605	4.151	308.181	Below Link Crown	0.419	0 - 13:55 hrs	0	101.174	0	30.98	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-606	2.769	304.769	Below Link Crown	1.831	0 - 13:55 hrs	0	101.174	0	30.954	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-607	2.116	303.866	Below Link Crown	1.334	0 - 13:56 hrs	0	101.174	0	30.938	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-608	2.252	300.392	Below Link Crown	3.978	0 - 12:17 hrs	0	101.177	0	30.904	0.008	0	0	0	0	0	0	0 - 00:00 hrs
0203-609	4.983	300.013	Below Link Crown	3.217	0 - 12:15 hrs	0	101.165	0	30.897	0.022	0	0	0	0	0	0	0 - 00:00 hrs
0203-610	5.253	299.963	Below Link Crown	3.037	0 - 12:15 hrs	0	103.762	0	30.871	0.012	0	0	0	0	0	0	0 - 00:00 hrs
0203-611	11.02	293.37	Below Link Crown	4.13	0 - 12:33 hrs	0	819.858	0	181.515	0.14	0	0	0	0	0	0	0 - 00:00 hrs
0203-612	8.832	293.502	Below Link Crown	7.498	0 - 12:33 hrs	278.107	776.957	12.667	177.548	0.171	0	0	0	0	0	0	0 - 00:00 hrs
0203-613	10.533	292.273	Below Link Crown	3.327	0 - 12:34 hrs	0	808.483	0	181.327	0.175	0	0	0	0	0	0	0 - 00:00 hrs
0203-614	11.859	291.999	Below Link Crown	2.232	0 - 12:36 hrs	0	792.449	0	181.152	0.268	0	0	0	0	0	0	0 - 00:00 hrs
0203-615	11.53	291.67	Below Link Crown	5.13	0 - 12:36 hrs	0	771.073	0	180.881	0.338	0	0	0	0	0	0	0 - 00:00 hrs
0203-616	11.555	291.515	Below Link Crown	5.185	0 - 12:36 hrs	0	743.133	0	180.543	0.487	0	0	0	0	0	0	0 - 00:00 hrs
0203-617	11.132	291.262	Below Link Crown	0.938	0 - 12:37 hrs	0	809.082	0	192.225	0.582	0	0	0	0	0	0	0 - 00:00 hrs
0203-618	11.531	291.081	Surcharged	-0.581	0 - 12:36 hrs	0	808.724	0	191.624	0.232	3.365	0.601	0	0.166	1.67	64.785	0 - 12:23 hrs
0203-619	11.8	290.8	Below Maximum Depth	0	0 - 12:30 hrs	0	808.667	0	191.332	0.292	1.994	0.04	0	2.105	0.869	156.743	0 - 12:36 hrs
0203-620	11.001	290.431	Below Link Crown	3.399	0 - 12:30 hrs	0	680.347	0	189.016	0.188	0	0	0	0	0	0	0 - 00:00 hrs
0203-621	10.25	292.75	Below Link Crown	4.87	0 - 12:33 hrs	0	812.826	0	181.379	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-622	10.647	290.367	Below Link Crown	3.463	0 - 12:30 hrs	100.842	703.297	3.692	192.518	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-623	5.502	285.052	Below Link Crown	1.848	0 - 12:33 hrs	0	812.883	0	207.361	0.102	0	0	0	0	0	0	0 - 00:00 hrs
0203-624	4.618	285.308	Below Maximum Depth	4.712	0 - 12:33 hrs	0	115.223	0	14.985	0.007	5.213	0.608	4.712	0	0	0	0 - 00:00 hrs
0203-625	7.232	290.892	Below Link Crown	4.008	0 - 13:10 hrs	0	137.595	0	15.042	0.006	0	0	0	0	0	0	0 - 00:00 hrs
0203-626	7.431	295.101	Surcharged	-0.901	0 - 12:17 hrs	144.712	224.987	4.203	15.001	0.002	0.881	0.981	0	0.083	0.436	23.86	0 - 12:15 hrs
0203-627	3.237	296.567	Below Link Crown	3.213	0 - 14:11 hrs	0	56.154	0	6.764	0.007	0	0	0	0	0	0	0 - 00:00 hrs
0203-628	4.541	283.261	Below Link Crown	2.839	0 - 12:33 hrs	0	879.461	0	210.808	0.078	0	0	0	0	0	0	0 - 00:00 hrs
0203-629	5.364	282.379	Below Link Crown	3.051	0 - 12:33 hrs	115.754	981.718	2.975	225.994	0.085	0	0	0	0	0	0	0 - 00:00 hrs
0203-630	8.804	281.88	Below Link Crown	3.62	0 - 12:33 hrs	0	979.08	0	225.916	0.413	0	0	0	0	0	0	0 - 00:00 hrs
0203-631	8.481	280.556	Below Link Crown	3.944	0 - 12:34 hrs	37.435	1,042.75	1.109	234.794	0.417	0	0	0	0	0	0	0 - 00:00 hrs
0203-632	7.549	279.439	Below Link Crown	4.561	0 - 12:34 hrs	0	1,041.83	0	234.393	0.219	0	0	0	0	0	0	0 - 00:00 hrs
0203-633	2.599	281.509	Below Link Crown	1.991	0 - 13:00 hrs	0	40.661	0	14.822	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-634	2.171	280.531	Below Link Crown	2.389	0 - 13:00 hrs	0	40.653	0	14.808	0.017	0	0	0	0	0	0	0 - 00:00 hrs
0203-635	3.126	278.646	Below Link Crown	3.934	0 - 12:33 hrs	0	40.751	0	14.777	0.013	0	0	0	0	0	0	0 - 00:00 hrs
0203-636	6.761	278.591	Below Link Crown	4.529	0 - 12:33 hrs	0	41.521	0	14.763	0.043	0	0	0	0	0	0	0 - 00:00 hrs
0203-637	5.814	278.584	Below Link Crown	5.516	0 - 12:33 hrs	0	1,083.94	0	248.897	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-638	12.057	277.777	Below Link Crown	5.223	0 - 12:30 hrs	0	1,135.09	0	251.686	0.225	0	0	0	0	0	0	0 - 00:00 hrs
0203-639	9.171	277.131	Below Link Crown	8.069	0 - 12:29 hrs	419.468	1,282.71	12.447	263.904	0.197	0	0	0	0	0	0	0 - 00:00 hrs
0203-640	7.81	275.89	Below Link Crown	5.59	0 - 12:30 hrs	0	1,279.82	0	263.658	0	0	0	0	0	0	0	0 - 00:00 hrs

Table B-6a. Existing System Analysis - Nodes
100-year, 24-hour Event

ID	Maximum Depth (ft)	Maximum HGL (ft)	Maximum HGL Head Class	Freeboard (ft)	Max.Depth Day-Time (day-time)	Maximum Lateral Inflow (cfs)	Maximum Total Inflow (cfs)	Lateral Inflow Volume (MG)	Total Inflow Volume (MG)	Flow Volume Difference (MG)	Total Surcharge Time (hrs)	Max.Surcharge Height Above Crown (ft)	Min.Surcharge Depth Below Rim (ft)	Total Flood Volume (MG)	Total Flood Time (hrs)	Maximum Flood Rate (cfs)	Max.Flood Day-Time (day-time)
0203-641	8.821	274.721	Below Link Crown	4.579	0 - 12:30 hrs	0	1,278.23	0	263.458	0.286	0	0	0	0	0	0	0 - 00:00 hrs
0203-642	8.003	272.663	Below Link Crown	9.207	0 - 12:30 hrs	82.141	1,302.26	2.196	265.393	0.392	0	0	0	0	0	0	0 - 00:00 hrs
0203-643	5.63	270.34	Below Link Crown	11.66	0 - 12:30 hrs	0	1,301.89	0	264.993	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-644	7.691	267.411	Below Link Crown	14.339	0 - 12:30 hrs	0	1,374.13	0	274.307	0.187	0	0	0	0	0	0	0 - 00:00 hrs
0203-645	9.916	265.556	Below Link Crown	13.244	0 - 12:30 hrs	0	1,373.55	0	274.121	0.357	0	0	0	0	0	0	0 - 00:00 hrs
0203-646	8.237	264.447	Below Link Crown	14.853	0 - 12:30 hrs	0	1,373.04	0	273.769	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-647	4.848	281.862	Below Link Crown	0.122	0 - 12:18 hrs	0	98.788	0	3.016	0.003	0	0	0	0	0	0	0 - 00:00 hrs
0203-648	4.585	282.155	Below Maximum Depth	0.445	0 - 12:18 hrs	66.509	66.509	1.912	1.912	0	0.5	0.985	0.445	0	0	0	0 - 00:00 hrs
0203-649	3.749	281.899	Below Link Crown	2.251	0 - 12:18 hrs	40.048	40.048	1.1	1.101	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-650	5.122	287.542	Surcharged	-0.652	0 - 14:59 hrs	0	82.481	0	16.615	0.02	6.452	1.082	0	0.142	2.886	2.779	0 - 12:48 hrs
0203-651	4.643	284.443	Below Maximum Depth	1.697	0 - 15:37 hrs	0	35.428	0	13.764	0.032	22.661	0.473	1.697	0	0	0	0 - 00:00 hrs
0203-652	7.526	315.754	Surcharged	-1	0 - 13:02 hrs	360.626	360.626	12.166	12.171	0	8.39	4.526	0	2.906	4.187	291.38	0 - 12:15 hrs
0203-653	6.29	308.94	Surcharged	0	0 - 11:51 hrs	0	71.917	0	12.162	0.003	8.372	2.79	0	0	0.001	4.582	0 - 11:51 hrs
0203-654	2.236	300.956	Below Link Crown	1.844	0 - 11:52 hrs	0	70.484	0	12.148	0.002	0	0	0	0	0	0	0 - 00:00 hrs
0203-655	7.67	302.16	Surcharged	-0.88	0 - 18:36 hrs	0	152.527	0	51.595	0.018	20.841	1.67	0	0.482	10.042	14.276	0 - 12:21 hrs
0203-656	3.344	297.164	Below Link Crown	2.916	0 - 13:49 hrs	0	70.487	0	12.144	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-657	7.158	292.758	Surcharged	-1.058	0 - 13:08 hrs	0	203.172	0	14.976	0.008	5.614	3.298	0	0.984	2.705	88.706	0 - 12:15 hrs
0203-658	7.765	290.825	Below Link Crown	4.725	0 - 13:10 hrs	0	115.207	0	14.997	0	0	0	0	0	0	0	0 - 00:00 hrs
0203-659	4.311	286.541	Below Link Crown	7.549	0 - 12:33 hrs	0	115.217	0	14.985	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-660	6.709	279.989	Surcharged	-0.989	0 - 13:34 hrs	244.27	244.27	7.308	7.311	0	15.997	3.709	0	2.484	7.769	218.068	0 - 12:15 hrs
0203-661	7.509	301.949	Surcharged	-0.599	0 - 18:38 hrs	0	152.124	0	51.489	0.017	20.808	1.509	0	0.302	9.629	8.47	0 - 12:37 hrs
0203-662	5.906	303.096	Surcharged	-1.016	0 - 13:08 hrs	0	93.853	0	6.725	0.006	5.089	2.406	0	1.092	2.527	40.596	0 - 12:22 hrs
0203-663	4.648	300.418	Below Maximum Depth	1.242	0 - 13:08 hrs	0	56.154	0	6.769	0	5.076	1.148	1.242	0	0	0	0 - 00:00 hrs
0203-664	4.339	298.639	Below Maximum Depth	2.331	0 - 13:08 hrs	0	56.154	0	6.765	0.001	5.105	0.839	2.331	0	0	0	0 - 00:00 hrs
0203-665	6.41	298.87	Below Maximum Depth	0	0 - 12:56 hrs	0	152.033	0	51.445	0.024	3.719	0.41	0	0.002	0.142	1.144	0 - 13:04 hrs
0203-666	8.51	305.14	Surcharged	-0.98	0 - 12:34 hrs	107.136	107.136	4.062	4.064	0	3.655	5.51	0	0.397	1.433	60.007	0 - 12:15 hrs
0203-667	7.518	302.758	Below Maximum Depth	0.192	0 - 13:27 hrs	0	48.183	0	4.044	0	4.105	4.248	0.192	0	0	0	0 - 00:00 hrs
0203-668	6.325	299.765	Surcharged	-1.035	0 - 13:27 hrs	0	48.182	0	4.041	0	4.237	3.145	0	0.337	2.034	12.588	0 - 12:18 hrs
0203-669	5.49	298.17	Surcharged	0	0 - 13:15 hrs	0	39.345	0	4.056	0.001	4.332	2.49	0	0.002	0.234	0.698	0 - 13:27 hrs
0203-670	3.789	296.279	Surcharged	-0.279	0 - 13:30 hrs	0	38.666	0	4.056	0.002	3.549	0.289	0	0.003	1.764	0.639	0 - 12:15 hrs
0203-671	6.545	289.145	Below Maximum Depth	6.405	0 - 13:07 hrs	0	115.217	0	14.988	0.001	5.717	2.045	6.405	0	0	0	0 - 00:00 hrs
0203-672	5.51	287.86	Below Maximum Depth	6.23	0 - 13:00 hrs	0	115.217	0	14.986	0.002	5.523	1.01	6.23	0	0	0	0 - 00:00 hrs
0203-673	6.31	298.71	Below Maximum Depth	0	0 - 12:02 hrs	0	288.449	0	52.834	0.025	3.088	0.31	0	3.609	1.044	288.446	0 - 12:21 hrs
0203-674	7.774	290.374	Surcharged	-1.134	0 - 12:18 hrs	114.83	114.83	3.732	3.733	0	1.065	3.774	0	0.122	0.47	35.561	0 - 12:15 hrs
0203-675	5.833	288.313	Below Maximum Depth	0.457	0 - 12:18 hrs	0	82.06	0	3.708	0.011	1.003	1.833	0.457	0	0	0	0 - 00:00 hrs
0203-676	5.214	284.394	Below Link Crown	3.136	0 - 12:33 hrs	0	881.577	0	210.965	0.159	0	0	0	0	0	0	0 - 00:00 hrs
0203-677	7.05	298.98	Surcharged	0	0 - 12:08 hrs	0	273.032	0	50.994	0.052	4.347	1.05	0	0.358	0.209	110.269	0 - 12:15 hrs
0203-678	6.69	301.01	Surcharged	-0.98	0 - 12:52 hrs	270.882	270.882	9.533	9.537	0	6.395	3.19	0	1.885	3.195	203.937	0 - 12:15 hrs
0203-679	7.983	299.783	Below Maximum Depth	0.237	0 - 12:15 hrs	0	272.993	0	68.317	0.044	0.336	0.433	0.237	0	0	0	0 - 00:00 hrs
0203-680	5.698	291.581	Surcharged	-0.847	0 - 13:04 hrs	199.457	199.457	6.526	6.529	0	9.482	2.698	0	1.648	4.697	165.419	0 - 12:15 hrs
0203-681	4.926	289.736	Below Maximum Depth	2.714	0 - 13:25 hrs	0	38.97	0	6.511	-0.003	9.398	1.596	2.714	0	0	0	0 - 00:00 hrs
0203-682	5.066	288.066	Below Maximum Depth	0.254	0 - 14:07 hrs	0	38.983	0	6.517	0.001	9.134	1.066	0.254	0	0	0	0 - 00:00 hrs
0203-683	4.814	287.704	Below Maximum Depth	0.546	0 - 14:07 hrs	0	38.528	0	6.518	0.001	9.027	0.814	0.546	0	0	0	0 - 00:00 hrs
0203-684	5.437	287.277	Below Maximum Depth	0.693	0 - 14:10 hrs	0	37.748	0	6.52	0.001	9.247	1.437	0.693	0	0	0	0 - 00:00 hrs
0203-685	6.289	286.729	Below Maximum Depth	0.782	0 - 14:11 hrs	0	36.02	0	6.517	0.003	9.395	1.789	0.782	0	0	0	0 - 00:00 hrs
0203-686	6.344	286.508	Below Maximum Depth	0.587	0 - 14:11 hrs	0	36.02	0	6.514	0.001	9.435	1.844	0.587	0	0	0	0 - 00:00 hrs
0203-687	6.116	286.28	Below Link Crown	1.205	0 - 14:11 hrs	0	36.019	0	6.513	0.001	0	0	0	0	0	0	0 - 00:00 hrs
0203-688	5.759	286.83	Surcharged	-1.162	0 - 12:17 hrs	67.125	67.125	2.056	2.056	0	0.98	2.759	0	0.056	0.394	15.667	0 - 12:15 hrs
0203-689	2.915	283.948	Below Link Crown	1.715	0 - 12:18 hrs	0	53.263	0	2.047	0.004	0	0	0	0	0	0	0 - 00:00 hrs

Table B-6b. Existing System Analysis - Pipes/Channels
100-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-001-022	3.883	345.652	0.807	150.733	Free Surface	0 - 12:18 hrs	8.048	8.062	0.436	0.841	194.919	43.272	6.648	0	0	17.471	0	0	0
0203-002-001	3	68.703	1.061	55.275	Backwater	0 - 12:15 hrs	7.82	7.82	0.805	1	13.429	1.283	2.994	12.708	12.708	20.776	0	0.252	0
0203-003-051	7.47	1,836.26	1.173	142.363	Backwater	0 - 12:07 hrs	0.931	4.326	0.078	1	1,693.90	42.322	31.255	1.461	1.461	4.692	0	0	0
0203-004-003	3.5	70.599	0.717	144.686	Exceeds Capa	0 - 12:07 hrs	6.89	6.89	2.049	1	-74.087	42.326	6	9.172	11.253	9.172	11.368	9.172	0
0203-005-041	4	336.322	0.564	226.665	Backwater	0 - 12:17 hrs	8.852	8.852	0.674	1	109.658	32.11	7.413	8.303	8.849	8.303	0	8.303	0
0203-006-005	4.17	340.431	0.535	116.142	Backwater	0 - 12:15 hrs	4.37	4.37	0.341	1	224.289	17.659	7.017	8.171	8.171	8.642	0	0	0
0203-007-040	3.06	227.444	0.761	90.792	Free Surface	0 - 16:36 hrs	5.343	5.851	0.399	0.996	136.652	17.676	6.368	0	4.672	0	0	0	0
0203-008-007	3.75	289.554	0.703	90.793	Free Surface	0 - 16:35 hrs	4.525	4.525	0.314	0.945	198.761	17.679	6.19	0	3.617	0	0	0	0
0203-009-467	4.08	204.974	0.478	69.389	Backwater	0 - 21:29 hrs	3.69	3.713	0.339	1	135.584	17.653	5.474	9.616	10.71	9.616	0	7.431	0
0203-010-008	3.5	155.722	0.302	90.793	Backwater	0 - 16:35 hrs	3.991	3.991	0.583	1	64.929	17.681	6.5	5.355	5.413	5.355	0	5.355	0
0203-011-039	3.82	361.971	0.957	90.795	Free Surface	0 - 16:34 hrs	5.485	5.63	0.251	0.742	271.176	17.704	6.19	0	0	0	0	0	0
0203-012-011	3.4	179.651	0.437	90.795	Free Surface	0 - 16:32 hrs	4.401	4.401	0.505	0.934	88.856	17.702	6.5	0	3.773	0	0	0	0
0203-013-012	3	215.243	0.901	90.795	Backwater	0 - 16:32 hrs	4.656	4.656	0.422	1	124.448	17.688	6.5	5.395	5.403	5.397	0	5.393	0
0203-014-017	5.5	200.833	0.358	106.372	Backwater	0 - 13:08 hrs	4.477	4.477	0.53	1	94.461	17.74	5.499	3.759	4.466	3.808	0	3.702	0
0203-015-014	5.5	584.361	3.028	106.373	Backwater	0 - 13:08 hrs	4.477	4.478	0.182	1	477.987	17.729	5.5	2.53	2.53	4.466	0	0	0
0203-016-025	3.5	86.614	0.741	63.691	Backwater	0 - 12:18 hrs	6.62	6.62	0.735	1	22.923	8.905	3.5	3.804	3.804	3.817	0	3.486	0
0203-017-018	4.035	221.445	0.332	104.005	Backwater	0 - 12:33 hrs	4.566	4.566	0.47	1	117.439	17.717	6.73	5.12	5.135	5.29	0	4.54	0
0203-018-472	4.035	202.107	0.276	97.138	Backwater	0 - 15:23 hrs	4.264	4.264	0.481	1	104.969	17.724	6.73	5.094	5.29	5.207	0	4.923	0
0203-019-020	3	95.745	2.061	40.904	Backwater	0 - 15:15 hrs	5.787	5.787	0.427	1	54.841	4.007	2.99	3.77	3.77	3.78	0	0.352	0
0203-020-021	3	3.682	0.003	41.541	Exceeds Capa	0 - 15:10 hrs	5.877	5.877	11.282	1	-37.858	4.031	2.995	3.772	3.78	3.772	8.108	3.771	0
0203-021-023	3	55.487	0.692	41.542	Backwater	0 - 15:10 hrs	5.877	5.877	0.749	1	13.945	4.024	2.978	3.771	3.772	3.787	0	0.455	0
0203-022-525	10.92	4,890.27	0.824	212.862	Free Surface	0 - 12:15 hrs	3.831	3.846	0.044	0.281	4,677.41	45.295	27.214	0	0	0	0	0	0
0203-023-024	3	58.562	0.771	46.297	Backwater	0 - 15:08 hrs	6.55	6.55	0.791	1	12.265	4	2.998	3.418	3.793	3.418	0	2.481	0
0203-024-016	3	80.465	1.455	63.691	Backwater	0 - 12:18 hrs	9.01	9.01	0.792	1	16.774	8.903	2.999	3.432	3.433	3.498	0	3.419	0
0203-025-026	3.5	111.064	1.219	61.686	Backwater	0 - 11:55 hrs	6.595	7.335	0.555	1	49.379	8.91	3.499	3.192	3.817	3.192	0	3.192	0
0203-026-027	3.5	99.78	0.984	60.267	Backwater	0 - 14:18 hrs	6.264	6.817	0.604	1	39.513	8.919	3.499	3.194	3.194	3.489	0	0	0
0203-027-028	4	133.8	0.868	60.268	Backwater	0 - 14:18 hrs	4.796	5.514	0.45	1	73.532	8.917	3.975	3.325	3.364	3.325	0	3.325	0
0203-028-029	4.5	158.864	0.653	60.799	Backwater	0 - 15:14 hrs	3.963	4.293	0.383	1	98.065	8.93	4.498	3.239	3.239	3.778	0	0	0
0203-029-030	4.5	85.729	0.19	80.694	Backwater	0 - 13:49 hrs	5.074	5.074	0.941	1	5.034	8.927	4.497	3.44	3.778	3.44	0	3.004	0
0203-030-037	7.66	386.522	0.309	80.82	Backwater	0 - 13:49 hrs	2.571	2.897	0.209	1	305.701	8.939	5.331	0.219	0.219	0.882	0	0	0
0203-031-022	4.5	22.455	0.013	69.885	Free Surface	0 - 12:15 hrs	5.169	5.169	3.112	0.793	-47.43	2.046	4.5	0	0	0	0.523	0	0
0203-032-033	2.5	83.636	4.158	41.944	Free Surface	0 - 12:22 hrs	10.616	10.616	0.502	0.751	41.692	2.948	2.5	0	1.527	0	0	0	0
0203-033-520	8.14	2,355.24	0.771	251.67	Free Surface	0 - 12:17 hrs	3.703	3.708	0.107	0.453	2,103.57	48.208	31.062	0	0	0	0	0	0
0203-034-009	4.08	269.154	0.824	68.744	Backwater	0 - 21:34 hrs	3.612	3.612	0.255	1	200.41	17.651	5.474	10.676	10.676	10.71	0	0	0
0203-035-010	5.391	1,184.67	3.322	90.794	Free Surface	0 - 16:35 hrs	4.559	5.299	0.077	0.628	1,093.87	17.685	6.466	0	0	0	0	0	0
0203-036-035	5.33	290.679	2.466	90.795	Free Surface	0 - 16:34 hrs	5.624	5.957	0.312	0.535	199.884	17.688	6.148	0	0	0	0	0	0
0203-037-038	3.923	268.973	0.973	173.378	Backwater	0 - 12:17 hrs	9.687	9.687	0.645	1	95.595	17.689	5.364	4.322	4.322	4.42	0	3.391	0
0203-038-015	5	322.127	1.53	106.382	Backwater	0 - 13:07 hrs	5.418	5.817	0.33	1	215.745	17.7	4.999	3.912	4.37	3.912	0	3.912	0
0203-039-036	3.883	682.362	3.144	90.795	Free Surface	0 - 16:34 hrs	5.012	5.012	0.133	0.807	591.567	17.694	6.461	0	0	0	0	0	0
0203-040-034	3.98	279.318	0.963	90.756	Free Surface	0 - 16:37 hrs	5.876	6.192	0.325	0.881	188.562	17.674	6.033	0	0	10.684	0	0	0
0203-041-042	4.06	499.996	0.664	109.243	Backwater	0 - 11:55 hrs	3.435	4.408	0.218	1	390.754	32.107	10.421	8.215	8.237	8.336	0	0.279	0
0203-042-043	4.16	563.61	1.528	107.91	Backwater	0 - 11:55 hrs	4.221	4.234	0.191	1	455.7	32.122	6.861	8.289	8.289	9.799	0	0	0
0203-043-044	8.63	2,960.15	2.046	105.551	Free Surface	0 - 11:55 hrs	1.28	1.476	0.036	0.859	2,854.60	32.117	37.692	0	0	0	0	0	0
0203-044-045	8.63	367.618	0.032	102.792	Free Surface	0 - 16:20 hrs	0.804	1.412	0.28	0.878	264.826	32.106	38.418	0	0	0	0	0	0
0203-045-046	10.92	3,308.14	0.377	103.372	Free Surface	0 - 16:15 hrs	0.52	0.869	0.031	0.725	3,204.76	32.072	51.298	0	0	0	0	0	0
0203-046-047	16.9	4,107.02	0.223	116.955	Free Surface	0 - 12:14 hrs	0.781	1.431	0.028	0.468	3,990.06	32.001	33.026	0	0	0	0	0	0
0203-047-048	8.14	1,396.26	0.271	136.613	Free Surface	0 - 12:14 hrs	0.573	1.203	0.098	0.961	1,259.65	31.991	51.787	0	0	0	0	0	0
0203-048-049	7.17	1,567.97	0.556	111.417	Backwater	0 - 15:07 hrs	0.544	0.761	0.071	1	1,456.55	35.832	40.93	3.85	3.85	5.399	0	0	0
0203-049-050	8.06	304.652	0.023	112.338	Backwater	0 - 15:07 hrs	0.572	0.931	0.369	1	192.314	35.809	38.362	2.968	2.968	2.976	0	0	0
0203-050-004	8.06	279.054	0.019	112.675	Backwater	0 - 15:07 hrs	0.573	0.947	0.404	1	166.379	35.778	38.362	2.976	2.976	2.993	0	0.011	0
0203-051-530	9.53	1,383.85	0.423	134.225	Free Surface	0 - 12:19 hrs	0.758	1.491	0.097	0.945	1,249.63	42.278	27.164	0	0	1.036	0	0	0
0203-052-053	3	63.59	0.909	38.474	Backwater	0 - 12:15 hrs	5.443	5.443	0.605	1	25.116	1.176	2.998	2.01	2.01	2.013	0	0.263	0
0203-053-054	3	48.022	0.518	38.473	Backwater	0 - 12:15 hrs	5.443	5.443	0.801	1	9.549	1.177	2.998	2.014	2.015	2.014	0	0.914	0
0203-054-055	3	84.505	1.605	38.47	Backwater	0 - 12:15 hrs	5.442	5.442	0.455	1	46.035	1.181	2.996	2.014	2.014	2.107	0	0.133	0
0203-055-056	3.5	168.299	2.798	47.709	Backwater	0 - 12:37 hrs	4.959	5.248	0.283	1	120.589	4.153	3.498	2.081	2.081	2.124	0	0	0
0203-056-057	3.5	83.517	0.689	46.463	Backwater	0 - 12:48 hrs	4.829	4.829	0.556	1	37.053	4.149	3.498	2.135	2.138	2.167	0	2.009	0
0203-057-058	3	74.237	1.239	44.072	Backwater	0 - 14:00 hrs	6.235	6.235	0.594	1	30.165	4.022	3	2.21	2.217	2.223	0	1.952	0
0203-058-238	3.5	90.882	0.816	49.021	Backwater	0 - 12:00 hrs	5.095	5.095	0.539	1	41.861	4.397	3.5	2.173	2.173	2.317	0	0.009	0
0203-059-058	3	54.649	0.671	7.809	Backwater	0 - 12:00 hrs	1.105	3.19	0.143	1	46.839	0.375	2.996	2.106	2.106	2.174	0	0	1
0203-060-061	3.5	142.302	2.001	37.481	Backwater	0 - 13:44 hrs	5.87	6.913	0.263	1	104.82	6.371	3.499	0.093	0.093	0.27	0	0	0
0203-061-238	3.5	172.123	2.927	39.56	Backwater	0 - 14:03 hrs	5.209	6.681	0.23	1	132.563	6.376	3.492	0.27	0.27	2.317	0	0	0
0203-062-063	5	162.88	0.391	104.425	Backwater	0 - 12:15 hrs	5.318	5.318	0.641	1	58.455	12.698	4.999	2.041	2.057	2.041	0	2.039	0
0203-063-064	5	130.257	0.25	104.416	Backwater	0 - 12:15 hrs	5.318	5.363	0.802	1	25.842	12.691	5	1.507	2.071	1.507	0	1.507	0
0203-064-065	5	183.236	0.495	104.422	Backwater	0 - 12:15 hrs	5.318	5.318	0.57	1	78.813	12.697	4.999	1.845	1.845	2.177	0	0	0
0203-065-066	5	159.984	0.377	104.421	Backwater	0 - 12:15 hrs	5.318	5.318	0.653	1	55.562	12.694	4.998	1.203	2.177	1.203	0	1.203	0
0203-066-067	5	161.359	0.384	104.417	Free Surface	0 - 12:15 hrs	5.337	5.337	0.647	0.985	56.943	12.694	4.999	0	1.203	0	0	0	0
0203-067-239	5	206.753	0.63	104.232	Free Surface	0 - 12:15 hrs	5.413	5.635	0.504	0.952	102.521	12.693	4.999	0	0	0	0	0	0
0203-068-215	3.066	1,149.61	20.197	30.965	Free Surface	0 - 12:15 hrs	6.55	6.555	0.027	0.306	1,118.65	0.936	10.075	0	0	0	0	0	0
0203-069-068	2	25.455	1.266	30.937	Free Surface	0 - 12:15 hrs	6.467	6.467	0.608	0.712	-5.482	0.936	1.999	0	0.295	0	0	0	0
0203-070-325	12.854	4,967.02	0.992	242.81	Free Surface	0 - 12:19 hrs	2.514	2.609	0.049	0.381	4,724.21	34.3	25.366	0	0	0	0	0	0
0203-071-060	3.5	187.895	3.488	37.499	Free Surface	0 - 14:03 hrs	5.397	5.624	0.2	0.908	150.395	6.372	3.482	0	0	0.065	0	0	0
0203-072-228	4.5	186.529	0.9	17.649	Free Surface	0 - 12:15 hrs	1.58	2.746	0.095	0.824	168.88	0.805	4.494	0	0	0	0	0	0
0203-073-074	4.5	4.183	0	21.135	Exceeds Capa	0 - 17:25 hrs	1.785	2.04	5.053	1	-16.952	0.825	4.442	3.272	3.283	3.272	1.916	3.247	0
0203-074-075	4.5	221.385	1.267	28.526	Backwater	0 - 17:25 hrs	2.181	3.893	0.129	1	192.859	0.834	4.498	3.272	3.272	4.865	0	0	0
0203-075-076	4.5	325.803	2.745	28.074	Backwater	0 - 17:25 hrs	1.769	3.607	0.086	1	297.729	0.833	4.402	5.401	5.401	5.444	0	0.001	0
0203-076-078	3.5	68.953	0.47	48.135	Backwater	0 - 13:33 hrs	5.003	5.003	0.698	1	20.817	9.514	3.499	5.605	5.645	5.605	0	5.605	0
0203-077-073	4.5	160.442	0.666	18.515	Free Surface	0 - 12:03 hrs	1.325	2.31	0.115	0.98	141.927	0.818	4.304	0	0	3.283	0	0	0
0203-078-079	3.5	93.392	0.862	48.125	Backwater	0 - 14:03 hrs	5.002	5.002	0.515	1	45.267	9.512	3.5	5.605	5.605	5.669	0	0	0
0203-079-080	3.5	54.172	0.29	48.125	Backwater	0 - 14:03 hrs	5.002	5.002	0.888	1	6.047	9.512	3.5	5.615	5.669	5.615	0	5.615	0
0203-080-081	3.5	87.521	0.757	48.125	Backwater	0 - 14:03 hrs	5.002	5.002	0.55	1	39.395	9.512	3.499	5.615	5.615	5.702	0	2.769	0

Table B-6b. Existing System Analysis - Pipes/Channels
100-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-081-082	3.5	69.53	0.478	48.125	Backwater	0 - 14:03 hrs	5.002	5.002	0.692	1	21.405	9.51	3.5	5.633	5.703	5.633	0	5.633	1
0203-082-083	3.5	6.926	0.005	48.125	Exceeds Capa	0 - 14:03 hrs	5.002	5.002	6.948	1	-41.199	9.51	3.5	5.418	5.639	5.418	9.938	5.418	1
0203-083-084	4	131.346	0.836	48.125	Backwater	0 - 14:03 hrs	3.83	4.014	0.366	1	83.22	9.509	3.989	3.575	3.575	5.417	0	0	0
0203-084-256	4	101.062	0.495	48.126	Backwater	0 - 14:03 hrs	3.83	3.83	0.476	1	52.937	9.508	4	5.455	5.456	5.458	0	5.448	0
0203-085-086	4	70.749	0.243	48.126	Free Surface	0 - 14:03 hrs	4.45	4.461	0.68	0.894	22.623	9.505	3.999	0	0	0	0	0	0
0203-086-087	4	154.972	1.164	48.131	Free Surface	0 - 14:03 hrs	4.764	4.845	0.311	0.933	106.841	9.504	3.998	0	0	0.143	0	0	0
0203-087-092	4.5	84.096	0.183	61.871	Free Surface	0 - 12:15 hrs	4.238	4.239	0.736	0.864	22.225	8.789	4.499	0	0	0	0	0	0
0203-088-089	3	82.098	1.515	50.508	Backwater	0 - 12:15 hrs	7.145	7.145	0.615	1	31.589	2.149	3	0.203	0.203	0.219	0	0.197	0
0203-089-090	3	60.036	0.81	50.522	Backwater	0 - 12:15 hrs	7.147	7.147	0.842	1	9.514	2.153	2.999	0.2	0.256	0.2	0	0.2	0
0203-090-091	3	65.069	0.952	50.511	Free Surface	0 - 12:15 hrs	7.147	7.148	0.776	1	14.558	2.153	3	0	0.201	0	0	0	0
0203-091-087	3	88.207	1.749	16.737	Backwater	0 - 12:15 hrs	2.368	2.85	0.19	1	71.471	0.715	2.991	0.058	0.058	0.477	0	0	0
0203-091-093	3	49.976	0.561	33.691	Backwater	0 - 12:15 hrs	4.766	5.047	0.674	1	16.285	2.868	2.999	0.043	0.058	0.045	0	0.042	0
0203-092-094	5	130.84	0.252	61.824	Free Surface	0 - 12:17 hrs	5.09	5.098	0.473	0.594	69.016	8.781	5	0	0	0	0	0	0
0203-093-094	3	32.421	0.236	33.683	Free Surface	0 - 12:15 hrs	4.885	4.927	1.039	0.943	-1.262	2.87	2.999	0	0.405	0	0.167	0	0
0203-094-338	2.97	136.306	0.132	94.571	Free Surface	0 - 12:18 hrs	1.73	1.815	0.694	0.888	41.735	11.651	30.497	0	0	0	0	0	0
0203-095-096	3.5	90.975	0.818	54.085	Backwater	0 - 13:45 hrs	5.622	5.647	0.595	1	36.889	13.418	3.5	6.995	6.999	6.997	0	6.994	2
0203-096-097	3.5	101.427	1.016	54.085	Backwater	0 - 13:45 hrs	5.622	5.622	0.533	1	47.342	13.446	3.499	6.998	6.998	7.013	0	6.994	1
0203-097-098	4	103.324	0.517	54.085	Backwater	0 - 13:45 hrs	4.304	4.304	0.523	1	49.239	13.441	4	6.956	6.986	6.956	0	6.956	0
0203-098-099	4	97.211	0.458	54.085	Backwater	0 - 13:45 hrs	4.304	4.402	0.556	1	43.125	13.432	4	2.513	6.968	2.513	0	2.513	0
0203-099-100	4	100.312	0.488	54.085	Backwater	0 - 13:45 hrs	4.304	4.304	0.539	1	46.227	13.425	4	2.791	2.791	3.742	0	0	0
0203-100-101	4	83.923	0.341	54.085	Free Surface	0 - 13:45 hrs	4.411	4.411	0.644	0.94	29.837	13.42	3.999	0	3.742	0	0	0	0
0203-101-102	5	90.752	1.15	54.085	Free Surface	0 - 13:45 hrs	4.056	4.09	0.596	0.643	36.667	13.416	4.997	0	0	0	0	0	0
0203-102-103	5	185.211	0.506	54.085	Free Surface	0 - 13:47 hrs	4.348	4.502	0.292	0.606	131.125	13.412	4.983	0	0	0	0	0	0
0203-103-104	5	159.475	0.375	54.085	Free Surface	0 - 13:47 hrs	4.422	4.51	0.339	0.597	105.39	13.409	4.965	0	0	0	0	0	0
0203-104-341	5.5	207.433	0.382	54.08	Free Surface	0 - 13:48 hrs	4.219	4.315	0.261	0.538	153.352	13.403	5.498	0	0	0	0	0	0
0203-105-106	2	30.06	1.766	17.737	Backwater	0 - 14:22 hrs	5.646	5.646	0.59	1	12.323	2.919	1.999	3.995	4.439	3.995	0	3.995	0
0203-106-336	2	28.691	1.609	17.738	Backwater	0 - 14:22 hrs	5.646	5.761	0.618	1	10.954	2.918	1.999	3.995	3.995	4.244	0	1.408	0
0203-107-108	2	28.341	1.57	17.744	Backwater	0 - 14:22 hrs	5.716	6.115	0.626	1	10.598	2.917	1.999	2.338	4.298	2.338	0	1.44	0
0203-108-353	2.5	51.358	1.568	17.818	Backwater	0 - 14:18 hrs	3.884	4.227	0.347	1	33.54	2.92	2.5	2.158	2.158	9.468	0	0	0
0203-109-001	13.779	15,450.54	0.802	342.898	Free Surface	0 - 13:52 hrs	3.539	3.539	0.022	0.144	15,107.64	60.409	59.79	0	0	0	0	0	0
0203-110-109	16.67	43,091.18	5.225	342.899	Free Surface	0 - 13:52 hrs	5.981	5.981	0.008	0.154	42,748.28	60.421	38.118	0	0	0	0	0	0
0203-111-110	16.67	32,295.05	2.935	342.901	Free Surface	0 - 13:52 hrs	5.326	5.326	0.011	0.165	31,952.15	60.429	39.093	0	0	0	0	0	0
0203-112-218	7.321	243.809	0.423	247.282	Free Surface	0 - 14:15 hrs	5.263	5.489	1.014	0.906	-3.473	48.387	8.112	0	3.553	0	0.816	0	0
0203-113-357	8.464	406.283	0.082	374.54	Backwater	0 - 12:18 hrs	6.031	6.031	0.922	1	31.744	44.162	8.717	2.154	2.197	2.154	0	2.153	0
0203-114-355	6.954	1,349.50	0.794	289.205	Free Surface	0 - 12:21 hrs	4.701	5.673	0.214	0.954	1,060.29	39.164	10.049	0	0	0.167	0	0	0
0203-115-353	7.03	1,566.16	1.225	272.295	Free Surface	0 - 12:18 hrs	4.714	4.714	0.174	0.944	1,293.86	36.271	9.594	0	0	0.802	0	0	0
0203-116-115	9.15	3,747.00	0.711	273.288	Free Surface	0 - 12:17 hrs	3.101	3.48	0.073	0.727	3,473.71	36.298	19.741	0	0	0	0	0	0
0203-117-116	6.945	921.659	0.399	275.554	Free Surface	0 - 12:15 hrs	5.561	5.932	0.299	0.798	646.105	36.311	9.608	0	0	0	0	0	0
0203-118-372	8.563	803.823	0.95	203.459	Free Surface	0 - 16:57 hrs	2.604	4.37	0.253	0.898	600.365	71.102	17.873	0	0	7.536	0	0	0
0203-119-366	7.336	447.07	0.386	121.437	Free Surface	0 - 16:29 hrs	1.952	3.711	0.272	0.91	325.633	36.943	21.976	0	0	4.446	0	0	0
0203-120-003	22.5	12,809.94	0.912	302.829	Free Surface	0 - 12:26 hrs	5.756	5.756	0.024	0.259	12,507.11	19.105	18.035	0	0	0	0	0	0
0203-121-120	17.772	22,770.23	2.632	302.866	Free Surface	0 - 12:26 hrs	2.697	2.727	0.013	0.306	22,467.37	19.106	34.612	0	0	0	0	0	0
0203-122-392	17.772	3,239.21	0.053	303.015	Free Surface	0 - 12:25 hrs	3.104	3.113	0.094	0.281	2,936.20	19.118	32.809	0	0	0	0	0	0
0203-123-122	20	2,602.91	0.05	303.082	Free Surface	0 - 12:25 hrs	3.078	3.078	0.116	0.274	2,299.83	19.135	18	0	0	0	0	0	0
0203-124-391	6.887	1,318.52	1.785	303.219	Free Surface	0 - 12:23 hrs	3.212	3.281	0.23	0.9	1,015.30	19.148	28.154	0	0	0	0	0	0
0203-125-124	6.724	2,774.56	11.136	117.899	Free Surface	0 - 12:25 hrs	3.009	3.135	0.042	0.609	2,656.66	4.148	19.127	0	0	0	0	0	0
0203-126-125	6.174	1,373.44	3.659	117.899	Free Surface	0 - 12:25 hrs	5.91	5.91	0.086	0.457	1,255.54	4.148	14.134	0	0	0	0	0	0
0203-127-126	4.532	720.569	2.378	117.899	Free Surface	0 - 12:25 hrs	3.699	3.735	0.164	0.648	602.669	4.146	21.6	0	0	0	0	0	0
0203-128-127	2.699	140.425	0.406	117.9	Free Surface	0 - 12:25 hrs	3.024	3.032	0.84	0.924	22.525	4.146	27.314	0	0.329	0	0	0	0
0203-128-129	4.861	7.073	0	66.91	Exceeds Capa	0 - 12:15 hrs	0.858	1.182	9.459	1	-59.837	1.903	24.715	0.273	0.279	0.296	3.063	0.109	0
0203-129-342	4.861	498.481	0.673	81.176	Backwater	0 - 12:12 hrs	1.041	1.885	0.163	1	417.305	4.268	24.715	0.296	0.296	3.764	0	0	0
0203-130-124	7.936	627.086	0.675	185.506	Free Surface	0 - 12:22 hrs	3.291	3.976	0.296	0.745	441.58	15	16.526	0	0	0	0	0	0
0203-131-130	7.259	399.334	0.298	185.682	Free Surface	0 - 12:22 hrs	3.109	3.381	0.465	0.808	213.653	15.004	20.366	0	0	0	0	0	0
0203-132-131	8.018	540.547	0.563	186.197	Free Surface	0 - 12:21 hrs	3.848	3.929	0.344	0.714	354.351	15.016	15.306	0	0	0	0	0	0
0203-133-132	6.815	448.438	0.712	186.523	Free Surface	0 - 12:19 hrs	4.226	4.244	0.416	0.793	261.915	15.029	16.338	0	0	0	0	0	0
0203-134-328	4.533	193.541	0.93	133.24	Backwater	0 - 13:21 hrs	3.928	3.928	0.688	1	60.301	9.514	13.642	1.564	1.564	1.606	0	0	0
0203-135-005	9.15	3,341.27	2.172	93.81	Free Surface	0 - 12:37 hrs	7.908	12.175	0.028	0.21	3,247.46	5.689	11.732	0	0	0	0	0	1
0203-136-437	5.947	17.321	0	94.073	Free Surface	0 - 12:33 hrs	2.412	2.448	5.431	0.525	-76.752	5.624	22.223	0	0	0	2.534	0	0
0203-137-136	6.797	23.695	0	95.023	Free Surface	0 - 12:30 hrs	1.378	1.394	4.01	0.569	-71.328	5.647	31.276	0	0	0	1.907	0	0
0203-138-137	6.268	600.479	0.087	102.624	Free Surface	0 - 12:22 hrs	1.099	1.211	0.171	0.614	497.855	5.692	44.156	0	0	0	0	0	0
0203-139-432	4.941	1,402.11	2.904	35.441	Backwater	0 - 12:30 hrs	0.36	1.02	0.025	1	1,366.67	0.989	30.712	0.18	0.18	0.405	0	0	0
0203-140-139	9.026	1,769.19	0.482	32.588	Free Surface	0 - 12:30 hrs	0.414	1.744	0.018	0.573	1,736.60	0.99	32.956	0	0	0	0	0	0
0203-141-140	8.612	1,878.86	0.563	28.44	Free Surface	0 - 12:29 hrs	0.381	1.078	0.015	0.548	1,850.42	0.989	33.441	0	0	0	0	0	0
0203-142-141	6.92	832.122	0.288	27.2	Free Surface	0 - 12:07 hrs	1.288	1.495	0.033	0.535	804.922	0.994	26.634	0	0	0	0	0	0
0203-143-004	17.323	21,642.13	0.992	296.549	Free Surface	0 - 13:11 hrs	3.491	3.491	0.014	0.087	21,345.58	84.901	63.85	0	0	0	0	0	0
0203-144-143	19	992.533	0	296.558	Free Surface	0 - 13:11 hrs	2.438	2.438	0.299	0.099	695.975	84.966	65	0	0	0	0	0	0
0203-145-144	18.74	4,051.12	0.094	296.581	Free Surface	0 - 13:11 hrs	4.931	4.931	0.073	0.236	3,754.54	85.038	27.242	0	0	0	0	0	0
0203-146-145	10.21	90.41	0.001	296.575	Free Surface	0 - 13:10 hrs	2.088	2.088	3.28	0.677	-206.165	85.122	37.855	0	0	0	10.92	0	0
0203-147-146	9.691	2,334.74	0.658	296.579	Free Surface	0 - 13:08 hrs	2.044	2.044	0.127	0.727	2,038.16	85.167	33.506	0	0	0	0	0	0
0203-148-147	15.381	252.174	0.002	296.584	Free Surface	0 - 13:08 hrs	2.936	2.936	1.176	0.473	-44.41	85.188	25.509	0	0	0	8.903	0	0
0203-149-148	14.554	2,720.41	0.165	296.591	Free Surface	0 - 13:08 hrs	2.022	2.022	0.109	0.519	2,423.82	85.213	34.424	0	0	0	0	0	0
0203-150-149	7.733	78.841	0.002	296.602	Free Surface	0 - 13:07 hrs	1.64	1.64	3.762	0.992	-217.761	85.239	45.328	0	0.423	0	11.41	0	0
0203-151-150	8.225	2,435.01	1.458	296.619	Free Surface	0 - 13:07 hrs	1.707	1.709	0.122	0.903	2,138.39	85.264	44.738	0	0	0	0	0	0
0203-152-151	16.837	2,557.95	0.144	296.681	Free Surface	0 - 13:06 hrs	2.784	2.818	0.116	0.431	2,261.27	85.313	28.455	0	0	0	0	0	0
0203-153-152	8.005	344.331	0.082	296.746	Free Surface	0 - 13:04 hrs	2.464	2.531	0.862	0.942	47.585	85.357	31.254	0	0	0	0	0	0
0203-154-153	7.008	33.026	0.001	296.789	Exceeds Capa	0 - 13:04 hrs	2.312	2.312	8.987	1	-263.764	85.386	35.833	9.081	9.218	9.081	14.517	9.081	0
0203-155-154	10.079	70.597	0.001	296.872	Free Surface	0 - 13:03 hrs	1.815	1.974	4.205	0.807	-226.275	85.424	40.246	0	0	0	11.852	0	0
0203-156-155	9.089	2,711.45	2.503	296.961	Free Surface	0 - 13:03 hrs	2.358	2.52	0.11	0.877	2,414.49	85.459	24.495	0	0	0	0	0	0
0203-157-156	11.338	119.826	0.002	297.674	Free Surface	0 - 12:22 hrs	2.675	2.805	2.484	0.695	-177.848	85.474	24.017	0	0	0	10.48	0	0
0203-158-157	19.416	423.315	0.002	298.492	Free Surface	0 - 12:22 hrs	2.259	2.333	0.705	0.422	124.823	85.486	27.164	0	0	0	0	0	0

Table B-6b. Existing System Analysis - Pipes/Channels
100-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-159-158	9.951	100.399	0.001	302.444	Free Surface	0 - 12:19 hrs	1.308	1.365	3.012	0.84	-202.045	85.52	54.819	0	0	0	10.68	0	0
0203-160-159	7.221	2,619.35	2.339	309.012	Backwater	0 - 12:18 hrs	1.648	1.667	0.118	1	2,310.34	85.563	48.174	4.493	4.493	9.259	0	0	0
0203-161-160	7.818	3,015.45	4.818	313.152	Free Surface	0 - 12:18 hrs	3.658	3.861	0.104	0.694	2,702.30	85.591	19.241	0	0	0	0	0	0
0203-162-161	7.818	1,242.62	0.818	321.036	Free Surface	0 - 12:18 hrs	5.627	5.718	0.258	0.466	921.583	85.623	18.316	0	0	0	0	0	0
0203-163-428	7.946	723.967	0.687	268.404	Free Surface	0 - 18:08 hrs	4.257	4.275	0.371	0.683	455.563	79.086	13.534	0	0	0	0	0	0
0203-164-163	8.07	714.158	0.628	268.391	Free Surface	0 - 18:07 hrs	4.772	4.774	0.376	0.607	445.767	79.139	13.455	0	0	0	0	0	0
0203-165-364	8.07	2,155.64	5.723	268.391	Free Surface	0 - 18:07 hrs	4.359	4.359	0.125	0.656	1,887.25	79.178	13.601	0	0	0	0	0	0
0203-166-362	7.943	1,142.03	1.468	268.391	Free Surface	0 - 18:06 hrs	3.669	3.669	0.235	0.721	873.634	79.244	14.219	0	0	0	0	0	0
0203-167-166	8.144	114.204	0.071	268.391	Free Surface	0 - 18:05 hrs	4.636	4.636	2.35	0.968	-154.187	79.281	7.867	0	8.859	0	10.346	0	0
0203-168-167	8.144	444.795	1.081	268.393	Backwater	0 - 18:01 hrs	4.477	4.477	0.603	1	176.401	79.318	7.867	8.409	8.409	8.859	0	0	0
0203-169-168	4.473	1,222.99	4.319	268.405	Backwater	0 - 17:55 hrs	3.485	3.485	0.219	1	954.586	79.353	18.555	8.755	8.755	10.467	0	0	0
0203-170-169	4.473	203.446	0.12	217.159	Exceeds Capa	0 - 15:59 hrs	2.819	3.233	1.067	1	-13.713	57.248	18.555	8.739	8.816	8.755	6.469	8.04	0
0203-171-410	6.907	1,099.60	0.666	217.235	Free Surface	0 - 15:56 hrs	1.578	1.76	0.198	0.993	882.37	57.28	21.214	0	0	2.966	0	0	0
0203-172-171	6.907	848.777	0.397	217.291	Free Surface	0 - 15:55 hrs	1.657	1.931	0.256	0.952	631.486	57.305	21.175	0	0	0	0	0	0
0203-173-403	4.414	349.406	0.283	248.157	Backwater	0 - 14:32 hrs	2.967	2.967	0.71	1	101.249	57.472	21.335	8.15	8.176	8.153	0	6.546	0
0203-174-169	4.533	21.186	0.003	142.892	Exceeds Capa	0 - 21:00 hrs	2.623	3.41	6.745	1	-121.707	22.087	14.018	8.706	8.812	8.706	11.626	8.706	0
0203-175-426	4.526	264.171	0.399	130.242	Backwater	0 - 21:14 hrs	2.235	2.283	0.493	1	133.93	22.074	13.596	8.328	8.328	8.797	0	0	0
0203-176-175	4.505	162.954	0.141	129.514	Backwater	0 - 21:14 hrs	2.186	2.208	0.795	1	33.439	22.109	14.298	8.429	8.599	8.431	0	2.793	0
0203-177-176	4.26	265.263	0.478	115.556	Backwater	0 - 21:24 hrs	2.139	2.148	0.436	1	149.707	22.167	14.066	8.733	8.733	9.961	0	0	0
0203-178-177	4.484	537.161	2.016	175.89	Backwater	0 - 12:33 hrs	3.456	3.473	0.327	1	361.271	22.132	13.3	3.099	3.099	9.937	0	0	0
0203-179-178	4.423	225.92	0.285	177.8	Free Surface	0 - 12:33 hrs	3.172	3.213	0.787	0.973	48.12	22.154	13.894	0	0	3.907	0	0	0
0203-180-179	11.458	179.059	0.002	178.626	Free Surface	0 - 12:33 hrs	2.255	2.292	0.998	0.387	0.433	22.168	23.577	0	0	0	0	0	0
0203-181-424	7.728	54.713	0.001	182.706	Free Surface	0 - 12:30 hrs	2.427	2.627	3.339	0.539	-127.994	22.189	24.208	0	0	0	4.834	0	0
0203-182-181	8.53	826.671	0.097	184.284	Free Surface	0 - 12:29 hrs	2.115	2.336	0.223	0.523	642.387	22.197	32.636	0	0	0	0	0	0
0203-183-182	8.571	1,197.10	0.206	185.808	Free Surface	0 - 12:27 hrs	1.869	1.942	0.155	0.557	1,011.29	22.207	30.7	0	0	0	0	0	0
0203-184-183	7.568	1,253.86	3.236	186.644	Free Surface	0 - 12:26 hrs	4.556	4.685	0.149	0.667	1,067.22	22.216	13.168	0	0	0	0	0	0
0203-185-184	7.408	864.065	1.475	23.531	Free Surface	0 - 12:33 hrs	0.541	1.321	0.027	0.677	840.534	2.185	14.631	0	0	0	0	0	0
0203-186-185	6.59	1,544.80	3.044	23.026	Free Surface	0 - 12:33 hrs	0.493	1.07	0.015	0.588	1,521.78	2.186	16.838	0	0	0	0	0	0
0203-187-246	7.439	443.039	0.112	171.287	Free Surface	0 - 12:21 hrs	2.226	2.984	0.387	0.729	271.751	20.044	30.001	0	0	0	0	0	0
0203-188-380	9.535	234.929	0.033	181.931	Free Surface	0 - 12:18 hrs	2.575	2.592	0.774	0.706	52.998	20.08	21.077	0	0	0	0	0	0
0203-189-188	10.121	1,440.98	1.382	185.132	Free Surface	0 - 12:15 hrs	2.856	2.886	0.128	0.706	1,255.84	20.096	18.254	0	0	0	0	0	0
0203-190-189	9.496	1,159.96	1.946	27.435	Free Surface	0 - 12:26 hrs	0.723	2.837	0.024	0.662	1,132.53	2.192	13.571	0	0	0	0	0	0
0203-191-190	11.035	1,486.19	4.607	26.546	Free Surface	0 - 12:47 hrs	2.586	3.225	0.018	0.338	1,459.64	2.193	6.726	0	0	0	0	0	0
0203-192-419	6.08	388.922	0.56	47.223	Free Surface	0 - 12:19 hrs	0.94	1.876	0.121	0.907	341.699	2.195	15.436	0	0	2.151	0	0	0
0203-193-192	4.437	919.169	2.701	25.375	Free Surface	0 - 12:15 hrs	1.242	3.056	0.028	0.555	893.794	1.26	21.918	0	0	0	0	0	0
0203-194-193	3.615	209.313	0.967	25.631	Free Surface	0 - 12:15 hrs	3.229	3.229	0.122	0.295	183.682	1.26	8.496	0	0	0	0	0	0
0203-195-402	4.497	425.77	0.454	487.905	Exceeds Capa	0 - 12:18 hrs	5.995	5.995	1.146	1	-62.135	57.572	18.833	5.21	5.21	8.245	0.525	1.506	0
0203-196-401	3.568	232.948	0.404	150.628	Backwater	0 - 12:11 hrs	3.204	3.393	0.647	1	82.32	10.449	20.359	0.526	0.526	1.214	0	0	0
0203-197-196	3.568	505.968	1.907	113.466	Free Surface	0 - 12:18 hrs	2.325	3.524	0.224	0.918	392.502	8.682	20.359	0	0	0.526	0	0	0
0203-198-330	2.169	48.278	0.68	49.95	Exceeds Capa	0 - 12:06 hrs	3.537	3.537	1.035	1	-1.672	5.584	10.228	1.473	1.51	1.487	0.034	1.361	0
0203-199-197	5.362	628.759	0.855	120.661	Free Surface	0 - 12:17 hrs	3.998	4.439	0.192	0.492	508.099	8.666	16.483	0	0	0	0	0	0
0203-200-199	6.864	525.155	0.561	24.421	Free Surface	0 - 12:15 hrs	1.177	1.284	0.047	0.395	500.734	0.791	10.575	0	0	0	0	0	0
0203-201-202	14.057	1,337.49	0.537	20.735	Free Surface	0 - 14:41 hrs	2.612	2.862	0.016	0.319	1,316.75	4.463	6.52	0	0	0	0	0	0
0203-202-204	4.551	38.21	0.033	31.383	Backwater	0 - 12:25 hrs	0.93	1.481	0.821	1	6.827	4.455	10.685	0.306	0.309	0.306	0	0.303	0
0203-203-204	4.685	59.632	0.106	51.024	Free Surface	0 - 12:25 hrs	2.076	2.854	0.856	0.97	8.607	4.503	10.651	0	0	0	0	0	0
0203-204-205	4.769	902.174	3.745	170.438	Backwater	0 - 12:15 hrs	2.515	2.515	0.189	1	731.736	14.559	24.737	0.254	0.254	0.295	0	0	0
0203-205-394	4.769	274.159	0.346	170.364	Backwater	0 - 12:15 hrs	2.514	2.677	0.621	1	103.795	14.552	24.737	0.258	0.295	0.258	0	0.258	0
0203-206-207	5.829	866.55	1.228	150.764	Free Surface	0 - 12:18 hrs	2.296	2.568	0.174	0.84	715.786	14.487	35.108	0	0	11.965	0	0	0
0203-207-209	8.65	1,034.29	0.319	144.476	Free Surface	0 - 12:19 hrs	0.942	1.031	0.14	0.987	889.809	14.149	40.053	0	0	11.184	0	0	0
0203-208-212	1.777	31.788	0.523	24.893	Backwater	0 - 18:42 hrs	2.037	2.037	0.783	1	6.895	9.191	14.184	2.124	2.124	11.937	0	0	0
0203-209-208	1.163	9.217	1.556	24.894	Exceeds Capa	0 - 18:40 hrs	8.57	8.57	2.701	1	-15.676	9.202	4.297	12.483	14.307	12.483	13.004	12.483	0
0203-210-209	5.187	692.46	5.419	119.395	Backwater	0 - 12:21 hrs	2.769	2.834	0.172	1	573.065	2.955	14.214	11.966	11.966	12.055	0	0	0
0203-211-210	3.936	59.684	0.584	30.859	Backwater	0 - 12:08 hrs	2.066	2.066	0.517	1	28.825	0.209	6.01	12.03	12.03	12.038	0	0.124	0
0203-212-213	1.777	27.411	0.389	24.893	Backwater	0 - 18:42 hrs	1.95	1.951	0.908	1	2.517	9.175	14.184	3.661	11.937	3.72	0	2.565	0
0203-213-217	5.579	277.504	0.202	49.519	Free Surface	0 - 12:18 hrs	1.467	2.098	0.178	0.569	227.985	10.082	15.5	0	0	0	0	0	0
0203-214-213	6.004	529.609	0.526	30.538	Free Surface	0 - 12:17 hrs	1.024	1.047	0.058	0.507	499.07	0.931	15.459	0	0	0	0	0	0
0203-215-214	6.004	1,441.56	3.896	30.931	Free Surface	0 - 12:15 hrs	1.956	1.964	0.021	0.337	1,410.63	0.937	12.025	0	0	0	0	0	0
0203-216-069	3.066	755.983	8.734	37.537	Free Surface	0 - 12:15 hrs	1.114	3.13	0.05	0.819	718.446	0.937	27.119	0	0	0.047	0	0	0
0203-217-397	4	240.254	2.091	49.602	Free Surface	0 - 12:19 hrs	1.539	1.869	0.206	0.896	190.652	10.069	9	0	0	0	0	0	0
0203-218-360	8	616.736	0.931	342.904	Free Surface	0 - 13:52 hrs	6.934	6.934	0.556	0.515	273.832	60.449	12	0	0	0	0	0	0
0203-219-218	15.742	3,098.77	0.197	101.019	Free Surface	0 - 13:26 hrs	1.43	1.592	0.033	0.378	2,997.76	12.072	24.072	0	0	0	0	0	0
0203-220-219	7.957	1,410.25	0.559	101.231	Free Surface	0 - 13:26 hrs	1.312	1.804	0.072	0.59	1,309.02	12.099	27.112	0	0	0	0	0	0
0203-221-352	6	472.126	0.361	277.544	Backwater	0 - 12:15 hrs	5.782	5.782	0.588	1	194.582	36.357	8	0.226	0.539	0.226	0	0.226	0
0203-222-107	2	27.207	1.446	17.741	Backwater	0 - 14:22 hrs	5.647	5.742	0.652	1	9.466	2.915	1.999	3.789	3.789	4.298	0	0.476	0
0203-223-358	6	781.339	0.561	272.86	Backwater	0 - 12:47 hrs	4.548	4.548	0.349	1	508.479	44.086	10	2.363	2.41	2.363	0	2.363	0
0203-224-475	3	31.878	0.228	33.165	Exceeds Capa	0 - 15:41 hrs	4.692	4.692	1.04	1	-1.287	4.297	3	4.008	4.008	4.015	0.17	4.007	0
0203-225-422	2.5	28.674	0.489	26.38	Backwater	0 - 12:15 hrs	5.374	5.374	0.92	1	2.293	1.262	2.499	0.149	0.197	0.149	0	0.149	0
0203-226-227	3.5	48.818	0.235	78.937	Exceeds Capa	0 - 12:18 hrs	8.205	8.205	1.617	1	-30.119	8.694	3.5	5.671	5.685	5.677	1.6	4.54	0
0203-227-076	3.5	40.108	0.159	75.639	Exceeds Capa	0 - 12:26 hrs	7.862	7.862	1.886	1	-35.531	8.69	3.5	5.645	5.677	5.645	2.509	5.096	0
0203-228-077	4.5	123.55	0.395	17.509	Free Surface	0 - 12:15 hrs	1.393	2.921	0.142	0.921	106.041	0.812	4.363	0	0	0	0	0	0
0203-229-511	2.25	27.334	0.779	20.784	Backwater	0 - 14:34 hrs	5.227	5.227	0.76	1	6.55	4.473	2.201	6.691	6.7	6.694	0	6.687	0
0203-230-512	2.5	22.565	0.303	20.784	Free Surface	0 - 14:34 hrs	4.865	4.865	0.921	0.813	1.781	4.473	2.46	0	6.692	0	0	0	0
0203-231-514	3	56.333	0.713	20.784	Free Surface	0 - 14:36 hrs	4.294	4.522	0.369	0.647	35.549	4.471	2.968	0	0	0	0	0	0
0203-232-233	3.5	113.931	1.282	20.784	Free Surface	0 - 14:37 hrs	6.179	6.179	0.182	0.381	93.147	4.462	3.399	0	0	0	0	0	0
0203-233-516	3.5	100.268	0.993	20.784	Free Surface	0 - 14:37 hrs	5.058	5.3	0.207	0.443	79.483	4.461	3.477	0	0	0	0	0	0
0203-234-529	4	56.772	0.156	37.491	Free Surface	0 - 13:41 hrs	3.013	3.013	0.66	0.968	19.281	6.379	3.986	0	1.496	0	0	0	0
0203-235-236	3.5	54.672	0.295	37.491	Free Surface	0 - 13:41 hrs	5.171	5.171	0.686	0.705	17.181	6.375	3.474	0	0	0	0	0	0
0203-236-237	3.5	140.904	1.961	37.491	Free Surface	0 - 13:41 hrs	6.723	6.802	0.266	0.563	103.413	6.374	3.495	0	0	0	0	0	0
0203-237-071	3.5	113.012	1.262	37.491	Free Surface	0 - 13:41 hrs	5.334	5.451	0.332	0.753	75.521	6.373	3.436	0	0	0	0	0	0
0203-238-062	5	380.356	2.133	104.438	Backwater	0 - 12:14 hrs	5.319	5.319	0.275	1	275.918	12.696	5	2.035	2.058	2.035	0	2.035	1

Table B-6b. Existing System Analysis - Pipes/Channels
100-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-239-245	5	163.665	0.393	150.839	Free Surface	0 - 12:18 hrs	3.344	3.344	0.922	0.902	12.826	22.734	10	0	0	0	0	0	0
0203-240-494	4	124.539	0.752	44.89	Backwater	0 - 13:36 hrs	3.572	3.744	0.36	1	79.649	5.181	4	1.929	1.93	2.684	0	0.003	0
0203-241-254	3	38.818	0.339	41.933	Exceeds Capa	0 - 12:17 hrs	5.932	5.932	1.08	1	-3.115	1.642	3	1.361	1.361	3.319	0.242	0.38	0
0203-242-243	4.333	114.727	0.416	101.496	Backwater	0 - 13:25 hrs	6.882	6.882	0.885	1	13.232	12.147	4.333	3.125	3.135	3.125	0	3.124	0
0203-243-361	4.333	74.203	0.174	101.496	Free Surface	0 - 13:25 hrs	6.993	7.016	1.368	0.956	-27.292	12.145	4.333	0	3.125	0	2.961	0	0
0203-244-462	5.737	112.706	0.521	105.692	Backwater	0 - 16:28 hrs	3.84	3.84	0.938	1	7.014	36.998	6.184	7.64	11.507	7.64	0	7.64	0
0203-245-070	5	39.928	0.023	150.806	Free Surface	0 - 12:18 hrs	4.442	4.446	3.777	0.679	-110.877	22.72	10	0	0	0	5.669	0	0
0203-246-417	7.439	3,676.70	7.719	167.063	Free Surface	0 - 12:23 hrs	1.799	4.376	0.045	0.783	3,509.63	20.041	32.194	0	0	0	0	0	0
0203-247-602	12.356	1,517.96	0.118	113.864	Free Surface	0 - 18:12 hrs	2.735	2.736	0.075	0.245	1,404.10	47.683	19.269	0	0	0	0	0	0
0203-248-318	3	67.56	1.026	35.429	Backwater	0 - 17:09 hrs	5.012	5.012	0.524	1	32.131	13.702	3	12.666	12.854	12.666	0	12.666	0
0203-249-196	2.151	129.724	3.804	64.47	Free Surface	0 - 12:15 hrs	5.323	5.331	0.497	0.858	65.254	1.865	9.321	0	0	1.274	0	0	0
0203-250-545	3.91	89.055	0.375	77.074	Backwater	0 - 13:41 hrs	2.995	2.995	0.865	1	11.981	16.543	7.382	11.277	11.277	12.464	0	3.282	0
0203-251-546	5.09	136.033	0.361	35.425	Free Surface	0 - 17:10 hrs	1.069	1.249	0.26	0.931	100.608	13.787	7.809	0	0	0	0	0	0
0203-252-626	6.45	1,853.34	4.54	94.648	Free Surface	0 - 13:12 hrs	2.18	4.101	0.051	0.709	1,758.70	10.796	22.581	0	0	0.44	0	0	0
0203-253-434	5.141	97.055	0.011	49.79	Backwater	0 - 12:26 hrs	0.384	0.384	0.513	1	47.265	2.118	45.615	0.447	0.45	0.447	0	0.368	1
0203-254-335	10.591	74.207	0	153.249	Free Surface	0 - 12:18 hrs	2.991	3.26	2.065	0.411	-79.042	16.002	25.384	0	0	0	1.972	0	2
0203-255-635	4.56	164.413	1.087	40.751	Free Surface	0 - 13:00 hrs	2.952	3.971	0.248	0.679	123.662	14.777	6.785	0	0	0	0	0	0
0203-256-085	4	33.719	0.055	48.126	Free Surface	0 - 14:03 hrs	3.889	3.889	1.427	0.975	-14.407	9.506	4	0	0	5.458	5.651	0	0
0203-257-321	4.392	206.69	0.099	30.094	Free Surface	0 - 13:49 hrs	1.016	1.156	0.146	0.537	176.596	6.111	25.097	0	0	0	0	0	0
0203-258-257	3	2.934	0.002	30.094	Free Surface	0 - 13:49 hrs	4.47	4.47	10.259	0.906	-27.161	6.112	3	0	5.195	0	17.518	0	0
0203-259-258	3	44.007	0.435	30.094	Backwater	0 - 13:49 hrs	4.258	4.258	0.684	1	13.913	6.116	3	5.132	5.132	5.195	0	5.12	0
0203-260-259	3	40.111	0.214	30.094	Backwater	0 - 13:49 hrs	4.258	4.267	0.75	1	10.017	6.119	2.998	5.126	5.131	5.132	0	5.121	0
0203-261-260	3	38.498	0.333	31.809	Backwater	0 - 11:55 hrs	4.617	4.617	0.826	1	6.689	6.127	2.999	5.129	5.158	5.131	0	5.126	1
0203-262-261	2.5	26.97	0.432	31.843	Exceeds Capa	0 - 11:53 hrs	6.487	6.487	1.181	1	-4.874	6.125	2.5	5.194	5.225	5.199	5.178	5.182	0
0203-263-262	3	37.42	0.315	32.262	Backwater	0 - 12:30 hrs	4.564	4.564	0.862	1	5.157	6.153	2.999	5.167	5.169	5.181	0	5.159	0
0203-264-265	2	19.5	0.743	18.311	Backwater	0 - 12:22 hrs	5.828	5.828	0.939	1	1.19	1.149	2	0.963	0.968	0.979	0	0.963	0
0203-265-266	3	22.859	0.117	18.31	Backwater	0 - 12:22 hrs	2.59	2.59	0.801	1	4.549	1.146	2.999	0.953	0.965	0.954	0	0.952	0
0203-266-267	3	53.494	0.643	18.308	Backwater	0 - 12:22 hrs	2.59	2.59	0.342	1	35.185	1.142	2.998	0.826	0.965	0.826	0	0.826	0
0203-267-318	3	49.041	0.541	18.306	Backwater	0 - 12:22 hrs	2.59	2.59	0.373	1	30.736	1.136	3	0.826	0.826	12.666	0	0	0
0203-268-631	12.401	4,258.40	0.223	1,010.63	Free Surface	0 - 12:34 hrs	2.906	2.988	0.237	0.673	3,247.77	231.641	65.745	0	0	0	0	0	0
0203-269-268	3.496	26.348	0.192	36.063	Free Surface	0 - 12:33 hrs	3.412	3.656	1.369	0.799	-9.715	6.506	4.257	0	4.823	0	4.733	0	0
0203-270-658	12.11	5,684.14	1.865	115.207	Free Surface	0 - 13:14 hrs	0.72	1.466	0.02	0.665	5,568.93	14.997	33.199	0	0	0	0	0	0
0203-271-662	2.89	97.449	1.376	93.853	Backwater	0 - 12:23 hrs	5.853	5.853	0.963	1	3.596	6.725	6.37	1.127	1.127	2.61	0	0.99	0
0203-272-273	4	127.985	0.794	70.648	Free Surface	0 - 12:08 hrs	8.457	8.679	0.552	0.854	57.337	12.169	3.969	0	0	1.358	0	0	0
0203-273-617	10.9	5,582.39	1.231	74.526	Free Surface	0 - 14:04 hrs	0.368	1.376	0.013	0.702	5,507.86	12.157	39.675	0	0	1.105	0	0	0
0203-274-275	3.92	107.358	0.572	76.047	Free Surface	0 - 13:37 hrs	7.46	7.46	0.708	0.893	31.311	12.295	3.177	0	4.326	0	0	0	0
0203-275-276	4	208.467	0.182	76.046	Free Surface	0 - 13:38 hrs	3.368	3.368	0.365	0.806	132.42	12.293	7	0	0	0	0	0	0
0203-276-277	4.1	200.517	0.198	76.046	Free Surface	0 - 13:40 hrs	4.988	4.988	0.379	0.628	124.471	12.285	6.757	0	0	0	0	0	0
0203-277-629	4.23	291.179	3.455	76.046	Free Surface	0 - 13:40 hrs	4.103	4.631	0.261	0.71	215.133	12.283	7.019	0	0	2.817	0	0	0
0203-278-274	4	56.829	0.054	31.08	Backwater	0 - 12:27 hrs	1.554	1.554	0.547	1	25.749	2.76	5	3.999	3.999	4.236	0	1.376	1
0203-279-278	3.5	88.814	0.779	31.08	Backwater	0 - 12:27 hrs	3.23	3.23	0.35	1	57.734	2.771	3.494	1.783	1.783	4.355	0	0	1
0203-280-279	3.5	56.3	0.313	31.08	Backwater	0 - 12:27 hrs	3.23	3.494	0.552	1	25.22	2.774	3.49	1.77	1.77	1.783	0	0.973	0
0203-281-280	3	43.759	0.43	31.08	Backwater	0 - 12:27 hrs	4.397	4.397	0.71	1	12.679	2.772	2.999	1.781	1.781	1.799	0	1.768	0
0203-282-281	3	33.701	0.255	31.08	Backwater	0 - 12:27 hrs	4.397	4.397	0.922	1	2.621	2.771	3	1.772	1.781	1.773	0	1.771	0
0203-283-274	3.5	66.952	0.443	60.033	Backwater	0 - 15:07 hrs	6.24	6.24	0.897	1	6.919	9.535	3.5	4.333	4.333	4.369	0	3.651	1
0203-284-297	3.5	2.371	0.001	99.792	Exceeds Capa	0 - 12:29 hrs	10.372	10.372	42.083	1	-97.421	8.458	3.499	4.77	4.817	4.77	20.036	4.768	0
0203-285-534	3	77.681	1.356	22.396	Backwater	0 - 14:57 hrs	3.513	3.585	0.288	1	55.286	8.161	3	1.65	1.65	2.902	0	0	0
0203-286-285	3	90.715	1.85	20.924	Free Surface	0 - 14:59 hrs	4.439	4.925	0.231	0.884	69.791	8.164	3	0	0	1.65	0	0	0
0203-287-286	3	68.923	1.068	20.855	Free Surface	0 - 16:43 hrs	5.311	5.331	0.303	0.634	48.068	8.167	2.999	0	0	0	0	0	0
0203-288-287	3	52.782	0.626	20.855	Free Surface	0 - 16:43 hrs	4.264	4.424	0.395	0.653	31.927	8.17	2.999	0	0	0	0	0	0
0203-289-288	3	35.822	0.288	20.855	Free Surface	0 - 16:42 hrs	3.493	3.493	0.582	0.787	14.967	8.178	3	0	0	0	0	0	0
0203-290-304	2.5	33.019	0.648	20.855	Free Surface	0 - 16:40 hrs	5.024	5.024	0.632	0.788	12.164	8.188	2.499	0	12.279	0	0	0	0
0203-291-305	2.5	38.403	0.877	20.855	Backwater	0 - 16:39 hrs	4.249	4.249	0.543	1	17.548	8.196	2.5	12.424	12.424	12.539	0	12.272	1
0203-292-291	2	28.481	1.585	20.855	Backwater	0 - 16:39 hrs	6.638	6.638	0.732	1	7.625	8.201	2	12.31	12.31	12.619	0	0	0
0203-293-292	2	27.328	1.459	20.855	Backwater	0 - 16:39 hrs	6.638	6.638	0.763	1	6.472	8.206	2	12.31	12.621	12.31	0	12.31	1
0203-294-306	3.5	111.399	1.226	46.251	Free Surface	0 - 13:25 hrs	4.937	4.937	0.415	0.968	65.148	8.483	3.499	0	0	12.264	0	0	0
0203-295-294	3.5	77.262	0.59	46.28	Free Surface	0 - 13:25 hrs	4.941	4.985	0.599	0.967	30.982	8.483	3.5	0	3.641	0	0	0	0
0203-296-295	3.5	26.661	0.07	46.28	Exceeds Capa	0 - 13:25 hrs	4.81	4.81	1.736	1	-19.619	8.48	3.5	3.641	4.812	3.641	4.857	3.641	0
0203-297-296	3.5	149.798	2.217	46.28	Backwater	0 - 13:25 hrs	4.81	4.81	0.309	1	103.518	8.477	3.498	4.77	4.77	4.812	0	0	0
0203-298-314	4.5	229.799	0.808	102.177	Backwater	0 - 13:22 hrs	6.424	7.103	0.445	1	127.622	22.426	4.499	4.977	4.977	7.696	0	0	2
0203-299-298	3	50.348	0.57	48.883	Backwater	0 - 11:49 hrs	6.916	6.916	0.971	1	1.464	6.352	3	3.305	3.309	5.002	0	3.305	0
0203-300-307	3	70.727	1.124	53.099	Backwater	0 - 12:37 hrs	7.512	7.512	0.751	1	17.629	12.14	3	6.12	6.664	6.12	0	6.119	0
0203-301-317	5	253.25	0.946	124.241	Backwater	0 - 16:55 hrs	6.328	6.328	0.491	1	129.01	34.543	5	9.977	9.977	10.105	0	7.02	0
0203-302-333	5.08	39.693	0.032	159.538	Exceeds Capa	0 - 12:30 hrs	4.43	4.43	4.019	1	-119.844	51.585	7.536	10.6	11.106	10.6	12.936	10.249	0
0203-303-334	3	67.685	1.03	29.83	Backwater	0 - 12:22 hrs	4.22	4.374	0.441	1	37.854	5.91	2.999	10.004	10.004	10.041	0	3.772	0
0203-304-289	2.5	50.953	1.543	20.855	Free Surface	0 - 16:42 hrs	5.038	5.069	0.409	0.786	30.098	8.186	2.499	0	0	0	0	0	0
0203-305-290	2.5	28.637	0.487	20.855	Backwater	0 - 16:40 hrs	4.249	4.249	0.728	1	7.782	8.192	2.5	12.279	12.539	12.279	0	12.279	0
0203-306-293	2.5	45.114	1.21	20.855	Backwater	0 - 16:39 hrs	4.249	4.249	0.462	1	24.259	8.209	2.5	12.31	12.453	12.31	0	12.31	1
0203-307-308	3.5	108.726	1.168	53.098	Backwater	0 - 12:37 hrs	5.519	5.651	0.488	1	55.628	12.136	3.499	6.007	6.057	6.01	0	3.028	0
0203-308-309	3.5	95.984	0.91	53.096	Backwater	0 - 12:37 hrs	5.519	5.535	0.553	1	42.888	12.128	3.498	5.874	6.01	5.876	0	4.356	0
0203-309-310	3.5	106.384	1.118	53.093	Backwater	0 - 12:37 hrs	5.518	6.292	0.499	1	53.291	12.121	3.499	5.557	5.978	5.559	0	5.552	0
0203-310-311	3.5	121.546	1.459	53.079	Backwater	0 - 12:40 hrs	5.517	7.8	0.437	1	68.467	12.114	3.499	5.726	5.726	6.777	0	0	0
0203-311-301	4	119.146	0.688	53.079	Backwater	0 - 12:40 hrs	4.224	4.224	0.445	1	66.067	12.068	3.998	6.478	6.478	10.095	0	0	0
0203-312-301	5	184.133	0.5	85.244	Backwater	0 - 18:40 hrs	4.341	4.631	0.463	1	98.889	22.444	5	8.43	8.433	9.977	0	0.002	0
0203-313-312	5	227.511	0.763	101.207	Backwater	0 - 12:52 hrs	5.154	5.821	0.445	1	126.304	22.406	4.999	8.115	8.115	8.433	0	0.001	3
0203-314-313	5	209.24	0.645	101.207	Backwater	0 - 12:52 hrs	5.154	5.455	0.484	1	108.033	22.404	5	7.096	7.096	8.115	0	3.579	4
0203-315-340	3.5	106.06	1.111	69.806	Backwater	0 - 11:48 hrs	7.255	7.255	0.658	1	36.254	16.053	3.5	6.825	6.825	6.853	0	0.023	0
0203-316-315	3.5	69.433	0.476	75.266	Exceeds Capa	0 - 11:48 hrs	7.833	7.864	1.084	1	-5.833	16.06	3.499	6.822	6.872	6.823	0.021	6.822	0
0203-317-302	5.08	262.51	1.382	122.903	Backwater	0 - 18:20 hrs	3.413	3.413	0.468	1	139.607	34.509	7.536	10.079	10.079	11.106	0	0.001	0
0203-318-549	3	67.552	1.026	40.664	Free Surface	0 - 13:00 hrs	5.773	5.773	0.602	0.986	26.888	14.826	3	0	12.666	0	0	0	0

Table B-6b. Existing System Analysis - Pipes/Channels
100-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-319-556	4	56.408	0.154	77.735	Free Surface	0 - 12:15 hrs	6.933	7.182	1.378	0.859	-21.326	7.544	4	0	0.329	0	0.29	0	0
0203-320-319	3	48.238	4.952	30.093	Free Surface	0 - 13:56 hrs	5.049	5.049	0.624	0.786	18.144	6.097	3	0	0	3.751	0	0	0
0203-321-320	4.392	162.289	0.061	30.094	Free Surface	0 - 13:52 hrs	1.415	1.486	0.185	0.455	132.195	6.103	21.27	0	0	0	0	0	0
0203-322-323	4	194.09	1.826	27.317	Backwater	0 - 13:34 hrs	2.174	3.063	0.141	1	166.773	7.288	3.999	8.323	8.323	20.776	0	0	0
0203-323-324	6	498.726	0.855	27.317	Free Surface	0 - 13:34 hrs	1.304	1.304	0.055	0.582	471.409	7.238	6	0	0	0	0	0	0
0203-324-008	11.346	4,998.01	0.94	27.317	Free Surface	0 - 13:37 hrs	3.572	3.572	0.005	0.092	4,970.70	7.221	12.367	0	0	0	0	0	2
0203-325-329	9.647	578.421	0.106	232.009	Free Surface	0 - 12:23 hrs	2.169	2.514	0.401	0.765	346.412	34.066	31.369	0	0	0	0	0	0
0203-326-327	6.218	1,235.41	1.437	204.925	Free Surface	0 - 12:15 hrs	4.66	4.661	0.166	0.532	1,030.49	5.545	21.287	0	0	0	0	0	0
0203-327-328	10	2,249.26	1.211	202.025	Free Surface	0 - 12:15 hrs	3.532	3.536	0.09	0.518	2,047.24	5.544	20.764	0	0	0	0	0	0
0203-328-133	4.533	193.213	0.927	186.757	Backwater	0 - 12:18 hrs	5.506	5.506	0.967	1	6.456	15.043	13.642	1.606	1.606	1.692	0	1.194	0
0203-329-195	9.647	621.526	0.122	230.949	Free Surface	0 - 12:27 hrs	2.088	2.682	0.372	0.776	390.577	33.918	32.111	0	0	0	0	0	0
0203-330-199	2.169	73.922	1.595	76.985	Exceeds Capa	0 - 12:18 hrs	5.451	5.552	1.041	1	-3.063	7.9	10.228	1.072	1.487	1.128	0.422	1.039	0
0203-331-332	5.08	73.265	0.108	151.976	Exceeds Capa	0 - 18:10 hrs	4.425	4.551	2.074	1	-78.711	51.458	7.536	2.237	10.765	2.237	11.201	2.237	0
0203-332-665	6	917.899	0.494	152.033	Free Surface	0 - 18:15 hrs	2.531	2.784	0.166	0.962	765.866	51.445	12	0	0	1.859	0	0	0
0203-333-655	6	240.786	0.322	152.527	Backwater	0 - 15:44 hrs	2.118	2.118	0.633	1	88.259	51.595	12	10.383	10.383	10.42	0	0.002	0
0203-334-302	3.5	153.045	2.314	29.575	Backwater	0 - 12:19 hrs	3.074	3.074	0.193	1	123.47	5.907	3.5	10.045	10.045	13.125	0	0	0
0203-335-009	10.591	5,438.11	2.093	255.425	Free Surface	0 - 13:27 hrs	13.038	13.845	0.047	0.323	5,182.69	16.182	17.711	0	0	0	0	0	4
0203-336-222	2	26.059	1.327	17.738	Backwater	0 - 14:22 hrs	5.646	5.9	0.681	1	8.321	2.916	1.999	3.787	4.245	3.789	0	2.704	0
0203-337-486	4.5	213.147	1.175	62.378	Free Surface	0 - 13:25 hrs	7.375	8.072	0.293	0.525	150.769	20.099	4.5	0	0	0	0	0	0
0203-338-070	4.647	318.699	0.132	93.081	Free Surface	0 - 12:18 hrs	1.937	1.937	0.292	0.548	225.618	11.634	25.763	0	0	0	0	0	0
0203-339-189	4.819	2,243.90	2.013	175.77	Free Surface	0 - 12:15 hrs	1.713	1.713	0.078	0.642	2,068.13	17.971	61.665	0	0	3.013	0	0	0
0203-340-298	4	132.209	0.847	77.664	Backwater	0 - 15:38 hrs	6.18	6.214	0.587	1	54.544	16.081	3.999	6.68	6.849	6.68	0	6.678	2
0203-341-345	8	1,383.33	0.495	255.66	Free Surface	0 - 16:50 hrs	7.317	7.487	0.185	0.364	1,127.67	87.979	12	0	0	0	0	0	0
0203-342-350	3	84.516	1.606	53.664	Backwater	0 - 12:14 hrs	7.592	7.592	0.635	1	30.852	11.111	3	5.59	5.59	5.909	0	0.571	0
0203-343-344	6	212.05	0.251	249.295	Exceeds Capa	0 - 12:15 hrs	8.817	8.817	1.176	1	-37.245	10.123	5.996	10.544	10.545	10.695	0.128	0.265	0
0203-344-382	2	14.788	0.427	30.179	Free Surface	0 - 15:19 hrs	9.908	9.909	2.041	0.936	-15.39	9.883	1.999	0	11.731	0	11.037	0	0
0203-345-002	10.792	35,212.01	40.439	299.835	Free Surface	0 - 16:06 hrs	9.012	9.012	0.009	0.179	34,912.17	98.999	27.475	0	0	0	0	0	0
0203-346-345	7.846	738.424	0.86	47.504	Free Surface	0 - 12:38 hrs	2.239	2.242	0.064	0.242	690.92	11.06	11.858	0	0	0	0	0	0
0203-347-346	3	53.584	0.645	47.504	Free Surface	0 - 12:37 hrs	8.802	8.802	0.887	0.714	6.08	11.066	3	0	6.092	0	0	0	0
0203-348-347	7.265	454.602	0.802	47.868	Free Surface	0 - 12:14 hrs	1.052	1.698	0.105	0.735	406.734	11.076	9.501	0	0	0	0	0	0
0203-349-348	3	31.929	0.229	49.697	Exceeds Capa	0 - 12:14 hrs	7.031	7.031	1.557	1	-17.769	11.079	3	5.549	6.409	5.549	6.034	5.549	0
0203-350-349	7.191	473.764	1.015	55.655	Free Surface	0 - 12:14 hrs	0.905	1.252	0.117	0.952	418.108	11.112	9.643	0	0	0.97	0	0	0
0203-351-551	7.04	318.643	0.203	72.76	Free Surface	0 - 12:17 hrs	1.464	4.199	0.228	0.752	245.883	3.006	16.693	0	0	0	0	0	0
0203-352-363	6.945	878.302	0.362	276.643	Free Surface	0 - 12:15 hrs	4.684	4.836	0.315	0.939	601.659	36.341	9.615	0	0	0	0	0	0
0203-353-354	7.03	983.531	0.483	288.143	Free Surface	0 - 12:18 hrs	7.264	7.275	0.293	0.674	695.388	39.186	9.504	0	0	0	0	0	0
0203-354-114	7.03	1,353.80	0.915	287.753	Free Surface	0 - 12:21 hrs	7.199	8.002	0.213	0.68	1,066.04	39.183	9.505	0	0	0	0	0	0
0203-355-356	6	934.066	0.802	290.38	Backwater	0 - 12:22 hrs	4.84	5.426	0.311	1	643.686	39.168	10	0.449	0.512	0.449	0	0.449	0
0203-356-113	8.464	2,294.28	2.604	398.673	Free Surface	0 - 12:15 hrs	7.292	7.296	0.174	0.904	1,895.61	43.008	8.717	0	0	2.197	0	0	0
0203-357-223	6	829.961	0.633	272.947	Backwater	0 - 12:45 hrs	4.549	4.549	0.329	1	557.013	44.098	10	2.41	2.445	2.41	0	2.41	0
0203-358-359	7.321	274.216	0.535	272.642	Free Surface	0 - 12:51 hrs	5.421	5.424	0.994	0.947	1.574	44.146	8.142	0	2.163	0	0	0	0
0203-359-112	7.321	466.386	1.548	295.419	Free Surface	0 - 12:52 hrs	5.872	5.874	0.633	0.947	170.966	48.415	8.128	0	0	3.553	0	0	0
0203-360-111	16.67	50,175.86	7.084	342.903	Free Surface	0 - 13:52 hrs	6.574	6.574	0.007	0.146	49,832.96	60.436	37.387	0	0	0	0	0	0
0203-361-220	7.957	146.481	0.006	101.447	Free Surface	0 - 13:26 hrs	1.99	2.615	0.693	0.457	45.034	12.109	22.34	0	0	0	0	0	0
0203-362-165	7.943	1,483.04	2.475	268.391	Free Surface	0 - 18:06 hrs	3.746	3.746	0.181	0.707	1,214.65	79.231	14.207	0	0	0	0	0	0
0203-363-117	6.945	873.512	0.358	275.916	Free Surface	0 - 12:15 hrs	4.791	4.845	0.316	0.917	597.597	36.321	9.614	0	0	0	0	0	0
0203-364-164	8.07	2,005.71	4.955	268.391	Free Surface	0 - 18:07 hrs	5.944	5.944	0.134	0.504	1,737.32	79.172	13.144	0	0	0	0	0	0
0203-365-461	5.5	515.198	2.354	180.067	Backwater	0 - 13:12 hrs	7.579	7.579	0.35	1	335.13	36.991	5.498	5.182	5.182	11.847	0	0	0
0203-366-367	6	500.191	1.395	267.194	Backwater	0 - 12:15 hrs	9.45	9.45	0.534	1	232.998	36.928	5.999	12.316	12.316	17.111	0	3.353	0
0203-367-368	3.377	255.263	2.077	330.482	Exceeds Capa	0 - 12:15 hrs	9.669	9.669	1.295	1	-75.22	71.123	19.528	8.091	8.091	10.723	1.584	4.764	0
0203-368-370	6	157.161	0.804	208.928	Backwater	0 - 16:30 hrs	5.804	5.804	1.329	1	-51.767	71.219	6	13.175	13.175	14.639	10.556	0	0
0203-369-427	4	474.879	0.305	130.438	Backwater	0 - 21:14 hrs	2.329	2.329	0.275	1	344.44	22.092	14	9.124	9.188	9.132	0	2.64	0
0203-370-118	4.513	345.587	0.998	202.645	Backwater	0 - 16:58 hrs	3.764	4.107	0.586	1	142.943	71.159	21.428	8.456	8.456	11.39	0	0	0
0203-372-373	8.563	802.787	0.948	218.905	Backwater	0 - 13:15 hrs	2.346	4.319	0.273	1	583.882	74.662	19.12	7.536	7.536	11.142	0	0	0
0203-373-377	7	177.398	0.45	218.591	Exceeds Capa	0 - 13:15 hrs	4.461	4.461	1.232	1	-41.194	74.631	7	13.868	13.918	13.869	10.36	13.86	0
0203-374-375	3.862	144.305	0.401	203.142	Exceeds Capa	0 - 18:51 hrs	5.271	5.271	1.408	1	-58.837	74.639	17.32	12.142	12.142	13.05	11.552	11.81	0
0203-375-376	7.377	166.742	0.058	203.139	Free Surface	0 - 18:50 hrs	3.504	3.504	1.218	0.803	-36.397	74.601	14.79	0	0	0	11.271	0	0
0203-376-341	11.182	2,080.21	1.59	203.138	Free Surface	0 - 18:50 hrs	6.971	7.713	0.098	0.395	1,877.07	74.591	11.78	0	0	0	0	0	0
0203-377-374	7	43.345	0.027	215.682	Exceeds Capa	0 - 13:18 hrs	4.402	4.402	4.976	1	-172.337	74.676	7	13.601	13.869	13.601	16.147	13.601	0
0203-378-379	3	78.635	1.39	69.968	Backwater	0 - 13:52 hrs	9.898	9.898	0.89	1	8.667	8.272	3	3.135	3.135	3.164	0	3.123	0
0203-379-242	4	89.876	0.391	69.875	Backwater	0 - 13:52 hrs	5.561	5.561	0.777	1	20.001	8.275	4	3.128	3.128	3.154	0	3.09	0
0203-380-187	9.535	663.228	0.26	179.75	Free Surface	0 - 12:19 hrs	3.51	3.604	0.271	0.605	483.478	20.057	18.31	0	0	0	0	0	0
0203-381-134	4.101	493.715	1.219	268.262	Free Surface	0 - 12:15 hrs	4.327	4.328	0.543	0.908	225.454	9.509	35.575	0	0	1.594	0	0	0
0203-382-339	9	320.398	0.393	30.176	Free Surface	0 - 15:22 hrs	6.182	6.329	0.094	0.155	290.222	9.877	4	0	0	0	0	0	0
0203-383-384	4.91	116.495	0.091	113.866	Backwater	0 - 18:04 hrs	2.113	2.113	0.977	1	2.629	49.11	12.036	12.925	12.925	13.046	0	9.47	0
0203-384-576	4.91	75.684	0.038	113.866	Free Surface	0 - 18:05 hrs	3.273	3.273	1.504	0.671	-38.181	48.356	11.75	0	13.046	0	14.011	0	0
0203-385-057	1.5	12.834	1.493	5.771	Backwater	0 - 12:45 hrs	3.266	3.266	0.45	1	7.063	0.089	1.5	2.282	2.282	2.616	0	0.001	0
0203-386-385	1.25	8.204	1.613	3.925	Backwater	0 - 12:00 hrs	1.599	3.158	0.239	1	4.279	0.056	1.249	2.213	2.213	2.314	0	0	0
0203-387-059	1.5	11.672	1.235	7.816	Backwater	0 - 12:00 hrs	4.423	4.423	0.67	1	3.856	0.37	1.489	2.19	2.19	2.261	0	0.086	0
0203-388-387	1.25	7.721	1.429	7.822	Backwater	0 - 12:00 hrs	3.187	3.187	0.507	1	-0.1	0.387	1.227	2.153	2.153	2.217	0	0	0
0203-389-113	1.75	11.978	0.571	14.26	Exceeds Capa	0 - 11:49 hrs	5.929	5.929	1.191	1	-2.282	1.194	1.748	12.749	12.749	21.585	0.178	0.36	0
0203-390-389	1.25	5.902	0.835	14.26	Exceeds Capa	0 - 11:49 hrs	5.81	5.81	1.208	1	-8.359	1.196	1.249	12.999	12.999	17.129	0.188	0.632	0
0203-391-123	6.887	598.08	0.367	303.165	Free Surface	0 - 12:23 hrs	3.448	3.547	0.507	0.866	294.915	19.146	27.237	0	0	0	0	0	0
0203-392-121	17.772	12,618.16	0.808	302.968	Free Surface	0 - 12:26 hrs	3.966	4.307	0.024	0.243	12,315.19	19.116	29.967	0	0	0	0	0	0
0203-393-201	14.057	3,408.70	3.486	20.784	Free Surface	0 - 14:38 hrs	3.171	3.415	0.006	0.252	3,387.91	4.462	4.069	0	0	0	0	0	0
0203-394-395	4	77.157	0.289	81.57	Free Surface	0 - 12:18 hrs	6.511	6.511	1.057	0.988	-4.413	7.623	3.966	0	2.7	0	0.246	0	0
0203-395-206	5.829	807.214	1.066	153.368	Free Surface	0 - 12:18 hrs	3.756	4.037	0.19	0.642	653.846	14.561	23.218	0	0	0	0	0	0
0203-396-211	1.807	81.029	6.177	37.962	Backwater	0 - 12:15 hrs	4.006	4.006	0.468	1	43.067	0.907	9.996	11.941	11.941	12.205	0	0	0
0203-397-398	4	5.609	0.001	49.709	Free Surface	0 - 12:19 hrs	1.455	1.761	8.862	0.95	-44.1	10.061	9	0	0	0	14.825	0	0
0203-398-239	4	56.247	0.115	49.817	Free Surface	0 - 12:19 hrs	1.506	2.69	0.886	0.921	6.43	10.052	9	0	0	0	0	0	0
0203-399-400	3	59.881	0.806	43.656	Backwater	0 - 12:14 hrs	6.176	6.176	0.729	1	16.224	2.311	3	0.121	0.121	1.325	0	0.047	0

Table B-6b. Existing System Analysis - Pipes/Channels
100-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-400-330	3.82	39.41	0.21	38.436	Backwater	0 - 12:15 hrs	2.154	2.677	0.975	1	0.974	2.313	9.214	0.151	0.215	0.455	0	0.092	0
0203-401-195	4	182.264	1.61	116.387	Backwater	0 - 12:17 hrs	9.262	9.262	0.639	1	65.876	10.457	3.999	1.052	1.052	5.91	0	0.002	0
0203-402-173	4.497	396.477	0.394	320.954	Backwater	0 - 12:37 hrs	3.943	3.943	0.81	1	75.523	57.479	18.833	8.139	8.245	8.141	0	6.84	0
0203-403-404	4	36.617	0.007	248.151	Exceeds Capa	0 - 14:32 hrs	2.954	2.954	6.777	1	-211.534	57.461	21	8.228	8.286	8.228	13.256	8.228	1
0203-404-405	6.83	653.514	0.416	248.107	Free Surface	0 - 14:33 hrs	2.618	3.369	0.38	0.862	405.407	57.447	17.407	0	0	0	0	0	0
0203-405-406	4	1,076.74	0.63	248.036	Backwater	0 - 14:33 hrs	2.953	2.953	0.23	1	828.701	57.436	21	8.186	8.192	8.202	0	6.307	0
0203-406-407	6.363	925.76	0.729	247.94	Free Surface	0 - 14:33 hrs	2.188	2.539	0.268	0.953	677.82	57.418	19.344	0	0	5.764	0	0	0
0203-407-408	4	686.455	0.256	246.261	Backwater	0 - 14:36 hrs	2.932	2.932	0.359	1	440.194	57.392	21	8.781	8.789	8.883	0	8.309	0
0203-408-409	6.078	408.194	0.133	235.201	Backwater	0 - 14:41 hrs	1.93	2.149	0.576	1	172.993	57.44	20.919	5.961	6.675	5.961	0	5.961	0
0203-409-172	6.078	295.612	0.07	217.41	Backwater	0 - 15:49 hrs	1.784	2.144	0.735	1	78.203	57.347	20.919	5.631	5.961	5.637	0	5.631	0
0203-410-170	8	246.927	0.244	217.21	Free Surface	0 - 15:57 hrs	4.138	4.908	0.44	0.83	29.717	57.266	4	0	0	0	0	0	0
0203-411-412	3	112.659	2.853	48.786	Backwater	0 - 12:17 hrs	6.902	6.902	0.433	1	63.873	2.463	3	0.328	0.328	0.337	0	0.322	0
0203-412-413	3	98.132	2.165	48.786	Backwater	0 - 12:17 hrs	6.902	6.902	0.497	1	49.346	2.465	3	0.3	0.337	0.3	0	0.3	0
0203-413-414	3	75.537	1.283	48.787	Free Surface	0 - 12:17 hrs	7.343	7.345	0.646	0.891	26.75	2.465	2.999	0	0.3	0	0	0	0
0203-414-339	3	94.644	2.014	48.691	Free Surface	0 - 12:18 hrs	10.103	10.103	0.514	0.645	45.953	2.469	2.999	0	0	0	0	0	0
0203-415-416	2	17.553	0.602	26.546	Free Surface	0 - 12:45 hrs	9.156	9.156	1.512	0.869	-8.994	2.182	2	0	2.16	0	1.979	0	0
0203-416-191	4.928	659.285	2.587	26.546	Free Surface	0 - 12:45 hrs	3.226	3.272	0.04	0.36	632.739	2.183	9.282	0	0	0	0	0	0
0203-417-418	6	304.449	4.893	166.26	Free Surface	0 - 12:25 hrs	5.974	5.976	0.546	0.959	138.19	20.04	6	0	0.216	0	0	0	0
0203-418-184	6.773	478.547	0.151	165.684	Free Surface	0 - 12:26 hrs	1.752	1.787	0.346	0.785	312.862	20.035	25.246	0	0	0	0	0	0
0203-419-420	2	21.115	8.248	22.577	Free Surface	0 - 12:30 hrs	8.878	9.167	1.069	0.755	-1.461	2.184	1.999	0	3.06	0	1.122	0	0
0203-420-186	6.59	1,773.95	4.014	22.659	Free Surface	0 - 12:30 hrs	1.236	3.349	0.013	0.293	1,751.29	2.185	12.929	0	0	0	0	0	0
0203-421-192	5.831	443.929	2.958	28.633	Free Surface	0 - 12:15 hrs	3.024	4.561	0.065	0.51	415.295	0.929	6.943	0	0	0	0	0	0
0203-422-423	3	49.047	0.541	26.237	Free Surface	0 - 12:15 hrs	3.901	3.901	0.535	0.905	22.81	1.263	2.999	0	0	0	0	0	0
0203-423-501	3	108.54	2.648	26.154	Free Surface	0 - 12:15 hrs	7.103	7.103	0.241	0.516	82.386	1.263	2.998	0	0	0	0	0	0
0203-424-425	5	849.536	0.219	181.5	Free Surface	0 - 12:30 hrs	2.306	2.377	0.214	0.797	668.036	22.185	20	0	0	0	0	0	0
0203-425-180	11.155	5,446.72	0.483	179.741	Free Surface	0 - 12:32 hrs	1.24	1.386	0.033	0.385	5,266.98	22.177	49.083	0	0	0	0	0	0
0203-426-369	4	471.649	0.301	130.376	Backwater	0 - 21:14 hrs	2.328	2.328	0.276	1	341.273	22.095	14	9.18	9.263	9.188	0	3.604	0
0203-427-174	4.533	224.617	0.327	130.958	Backwater	0 - 21:14 hrs	2.514	2.721	0.583	1	93.659	22.096	14.018	8.599	8.599	8.812	0	0.001	0
0203-428-507	8	1,551.51	0.228	268.45	Free Surface	0 - 18:09 hrs	2.533	2.546	0.173	0.781	1,283.06	79.034	18	0	0	0	0	0	0
0203-429-162	12.147	1,032.00	0.184	317.098	Free Surface	0 - 12:17 hrs	4.307	4.35	0.307	0.413	714.901	85.694	17.535	0	0	0	0	0	0
0203-430-240	3	42.608	0.408	43.996	Exceeds Capa	0 - 13:37 hrs	6.224	6.224	1.033	1	-1.388	5.191	2.989	2.783	3.767	2.824	0.004	1.059	0
0203-431-513	2	29.241	1.671	20.785	Backwater	0 - 14:30 hrs	6.616	6.616	0.711	1	8.456	4.454	1.989	6.688	6.718	6.688	0	6.688	0
0203-432-433	5	128.573	0.244	35.547	Backwater	0 - 12:30 hrs	1.81	1.81	0.276	1	93.026	0.99	4.999	0.386	0.386	0.445	0	0	0
0203-433-253	4.946	221.964	0.118	35.805	Backwater	0 - 12:30 hrs	0.411	0.411	0.161	1	186.158	0.987	27.325	0.468	0.468	0.517	0	0	0
0203-434-435	5	107.609	0.171	113.392	Free Surface	0 - 12:19 hrs	6.583	6.608	1.054	0.839	-5.783	5.704	4.999	0	0	0.498	0.163	0	0
0203-435-138	6.268	2,359.30	1.346	112.26	Free Surface	0 - 12:19 hrs	1.471	1.686	0.048	0.563	2,247.04	5.704	43.108	0	0	0	0	0	0
0203-437-438	5.5	449.896	1.795	93.86	Free Surface	0 - 12:36 hrs	9.34	9.34	0.209	0.439	356.036	5.621	5.459	0	0	0	0	0	0
0203-438-135	9.15	6,022.25	7.055	93.866	Free Surface	0 - 12:36 hrs	4.911	4.942	0.016	0.27	5,928.39	5.629	14.648	0	0	0	0	0	1
0203-439-440	3	87.529	1.722	63.483	Backwater	0 - 12:45 hrs	8.981	8.981	0.725	1	24.045	10.389	2.999	4.398	4.398	10.194	0	3.702	0
0203-440-441	3	80.476	1.456	32.394	Backwater	0 - 16:14 hrs	4.583	4.583	0.403	1	48.082	10.438	3	10.247	10.247	10.495	0	0	0
0203-441-442	3	14.501	0.047	31.972	Exceeds Capa	0 - 16:22 hrs	4.523	4.523	2.205	1	-17.471	10.431	3	10.167	10.495	10.167	10.979	10.167	0
0203-442-443	3	43.012	0.416	31.972	Free Surface	0 - 16:22 hrs	4.545	4.545	0.743	0.98	11.04	10.424	3	0	10.167	0	0	0	0
0203-443-444	3	81.077	1.478	31.972	Free Surface	0 - 16:22 hrs	5.5	5.5	0.394	0.771	49.105	10.423	3	0	4.771	0	0	0	0
0203-444-445	3	93.201	1.953	32.08	Free Surface	0 - 15:59 hrs	8.837	9.094	0.344	0.512	61.121	10.417	3	0	0	0	0	0	0
0203-445-446	3	81.206	1.482	31.977	Free Surface	0 - 16:23 hrs	5.547	5.598	0.394	0.762	49.229	10.416	2.999	0	0	10.181	0	0	0
0203-446-447	3	51.337	0.592	31.977	Free Surface	0 - 16:23 hrs	5.544	5.696	0.623	0.93	19.36	10.414	2.999	0	10.197	0	0	0	0
0203-447-448	3	125.519	3.541	35.831	Free Surface	0 - 15:59 hrs	6.123	7.413	0.285	0.93	89.688	10.412	3	0	0	4.179	0	0	0
0203-448-452	4	240.383	2.801	73.004	Backwater	0 - 14:56 hrs	5.809	6.249	0.304	1	167.379	17.258	4	3.219	3.797	3.22	0	3.219	0
0203-449-450	3	160.418	5.785	54.258	Backwater	0 - 12:33 hrs	7.676	7.676	0.338	1	106.16	6.868	2.989	3.06	3.111	3.06	0	3.058	0
0203-450-451	3	71.197	1.139	54.257	Backwater	0 - 12:33 hrs	7.676	7.676	0.762	1	16.94	6.855	3	3.06	3.06	4.205	0	0.001	0
0203-451-448	3.5	31.481	0.098	43.989	Exceeds Capa	0 - 11:52 hrs	4.572	4.572	1.397	1	-12.508	6.846	3.499	4.156	4.18	4.16	4.177	4.156	0
0203-452-453	4	164.465	1.311	76.517	Backwater	0 - 11:52 hrs	7.376	7.607	0.465	1	87.949	17.261	4	3.46	3.46	4.097	0	0	0
0203-453-454	4	184.959	1.658	73.004	Backwater	0 - 14:56 hrs	5.809	7.455	0.395	1	111.955	17.267	3.998	4.11	4.11	4.867	0	0	0
0203-454-455	4.5	211.484	1.157	73.049	Backwater	0 - 15:02 hrs	4.593	5.241	0.345	1	138.435	17.262	4.499	4.856	4.856	4.876	0	0.001	0
0203-455-457	4.5	164.682	0.701	115.113	Backwater	0 - 16:36 hrs	7.238	7.238	0.699	1	49.568	19.98	4.499	4.884	4.884	5.073	0	1.99	0
0203-456-455	2	39.779	3.092	25.882	Backwater	0 - 16:57 hrs	8.239	8.239	0.651	1	13.896	2.756	2	5.127	5.127	8.884	0	0.003	0
0203-457-458	5.5	268.326	0.638	153.53	Backwater	0 - 12:26 hrs	6.462	6.462	0.572	1	114.796	30.574	5.5	4.858	4.858	5.217	0	0	0
0203-458-365	5.5	112.891	0.113	150.44	Exceeds Capa	0 - 15:04 hrs	6.332	6.332	1.333	1	-37.549	30.558	5.499	5.18	5.217	5.182	5.056	5.178	0
0203-459-460	3.5	120.316	1.43	57.671	Backwater	0 - 12:26 hrs	5.994	5.994	0.479	1	62.645	6.398	3.454	3.032	3.037	4.507	0	2.816	0
0203-460-365	3.5	92.077	0.838	57.67	Backwater	0 - 12:26 hrs	5.994	5.994	0.626	1	34.406	6.43	3.5	5.086	5.086	5.214	0	1.564	0
0203-461-244	5.737	36.296	0.054	176.828	Exceeds Capa	0 - 13:41 hrs	6.425	6.425	4.872	1	-140.532	36.912	6.184	11.344	11.584	11.507	11.901	10.346	0
0203-462-119	5.737	112.77	0.521	105.679	Backwater	0 - 16:28 hrs	4.036	4.505	0.937	1	7.092	36.966	6.184	1.544	7.64	2.335	0	0.554	0
0203-463-465	3.5	87.513	0.757	63.974	Free Surface	0 - 13:52 hrs	6.975	7.279	0.731	0.913	23.539	17.448	3.5	0	8.062	0	0	0	1
0203-464-463	3	66.062	0.981	63.974	Backwater	0 - 13:52 hrs	9.05	9.05	0.968	1	2.088	17.45	3	8.095	8.095	8.188	0	8.086	0
0203-465-466	4	108.88	0.575	67.42	Free Surface	0 - 12:19 hrs	6.1	7.56	0.619	0.868	41.46	17.461	3.988	0	0	0.131	0	0	0
0203-466-367	4	154.166	1.152	73.605	Backwater	0 - 12:22 hrs	5.972	7.734	0.477	1	80.56	17.469	3.974	0.14	0.14	5.026	0	0	0
0203-467-485	3.94	223.265	0.212	77.862	Backwater	0 - 12:23 hrs	2.876	2.876	0.349	1	145.404	17.639	8.105	9.636	9.669	9.645	0	5.15	0
0203-468-469	3	124.699	3.495	24.695	Backwater	0 - 11:51 hrs	3.494	4.259	0.198	1	100.004	4.298	2.974	5.076	5.076	5.088	0	0.455	1
0203-469-470	3	45.052	0.456	24.695	Backwater	0 - 11:51 hrs	3.494	3.68	0.548	1	20.357	4.295	2.999	5.088	5.088	10.46	0	0	1
0203-470-471	3	35.858	0.289	24.694	Backwater	0 - 11:51 hrs	3.494	3.494	0.689	1	11.164	4.295	2.999	10.46	10.46	10.755	0	3.362	2
0203-471-473	3	98.839	2.196	24.693	Backwater	0 - 11:51 hrs	3.493	3.547	0.25	1	74.146	4.294	2.999	10.755	10.755	11.253	0	0	3
0203-472-013	4.033	172.862	0.159	93.533	Backwater	0 - 16:05 hrs	3.736	3.764	0.541	1	79.329	17.677	7.053	2.237	5.21	2.237	0	2.237	0
0203-473-372	3	49.747	0.556	24.689	Backwater	0 - 11:51 hrs	3.493	3.493	0.496	1	25.058	4.292	3	11.253	11.253	11.396	0	0.001	1
0203-474-242	3	65.121	0.953	52.957	Backwater	0 - 12:25 hrs	7.492	7.492	0.813	1	12.164	3.889	2.999	3.142	3.142	3.336	0	1.543	0
0203-475-476	3	58.078	0.758	34.351	Backwater	0 - 14:26 hrs	4.86	4.86	0.591	1	23.728	4.301	3	4.028	4.028	4.03	0	4.022	0
0203-476-359	3	24.18	0.131	34.354	Exceeds Capa	0 - 14:26 hrs	4.86	4.86	1.421	1	-10.173	4.3	3	4.065	4.065	4.1	2.61	4.032	0
0203-477-478	3	55.864	0.702	41.466	Backwater	0 - 11:51 hrs	5.866	6.266	0.742	1	14.398	6.961	2.997	5.198	5.199	5.209	0	0.003	0
0203-478-479	3	52.374	0.617	38.919	Backwater	0 - 11:51 hrs	5.506	5.506	0.743	1	13.455	6.959	2.999	5.215	5.215	5.718	0	0.008	0
0203-479-480	3	4.209	0.004	38.911	Exceeds Capa	0 - 11:51 hrs	5.505	5.505	9.245	1	-34.702	6.898	3	5.674	5.826	5.674	11.274	5.674	0
0203-480-342	3	3.562	0.003	38.987	Exceeds Capa	0 - 11:51 hrs	5.516	5.516	10.947	1	-35.426	6.813	3	5.59	5.674	5.59	13.692	5.59	0

Table B-6b. Existing System Analysis - Pipes/Channels
100-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-481-482	3	74.134	1.235	62.354	Backwater	0 - 13:41 hrs	8.821	8.821	0.841	1	11.78	20.078	3	9.623	9.623	9.772	0	9.603	0
0203-482-483	3	65.191	0.955	62.354	Free Surface	0 - 13:41 hrs	9.292	9.292	0.956	0.902	2.837	20.104	2.999	0	9.772	0	0	0	0
0203-483-484	3.5	127.295	1.601	62.354	Free Surface	0 - 13:41 hrs	9.377	9.394	0.49	0.653	64.941	20.109	3.5	0	0	0	0	0	0
0203-484-337	4.5	186.418	0.899	62.354	Free Surface	0 - 13:41 hrs	7.991	7.991	0.334	0.493	124.064	20.105	4.5	0	0	0	0	0	0
0203-485-006	3.9	296.101	0.613	111.058	Backwater	0 - 12:18 hrs	4.887	4.887	0.375	1	185.044	17.653	6.636	8.682	9.658	8.688	0	5.346	0
0203-486-487	5	258.438	0.985	62.409	Free Surface	0 - 12:03 hrs	6.079	7.485	0.241	0.586	196.029	20.09	4.999	0	0	0	0	0	0
0203-487-488	5	256.983	0.974	66.446	Free Surface	0 - 12:33 hrs	3.756	6.019	0.259	0.888	190.537	20.071	5	0	0	2.255	0	0	0
0203-488-491	6	195.36	0.213	218.914	Exceeds Capa	0 - 12:03 hrs	7.825	7.834	1.121	1	-23.555	33.955	6	0.239	2.069	0.239	0.609	0.239	0
0203-489-488	3.5	167.486	2.771	53.007	Backwater	0 - 12:04 hrs	5.509	5.509	0.316	1	114.479	0.702	3.498	2.135	2.135	2.192	0	0.884	0
0203-490-489	3.5	116.974	1.352	31.861	Backwater	0 - 12:15 hrs	3.312	3.484	0.272	1	85.113	0.709	3.493	1.822	1.822	2.135	0	0	0
0203-491-221	6	442.205	1.09	213.606	Backwater	0 - 12:30 hrs	7.589	7.777	0.483	1	228.599	33.897	6	0.239	0.239	0.482	0	0	0
0203-492-221	3.5	68.221	0.46	85.973	Exceeds Capa	0 - 12:15 hrs	8.936	8.936	1.26	1	-17.752	2.443	3.5	0.482	0.55	0.482	0.177	0.481	0
0203-493-421	3	95.492	2.05	28.917	Free Surface	0 - 12:15 hrs	5.29	5.29	0.303	0.722	66.575	0.927	2.999	0	0	0	0	0	0
0203-494-254	4	74.23	0.267	115.316	Exceeds Capa	0 - 12:40 hrs	9.177	9.177	1.553	1	-41.086	14.387	3.999	1.925	2.684	1.927	1.922	1.923	0
0203-495-241	2.5	20.372	0.247	41.933	Exceeds Capa	0 - 12:17 hrs	8.543	8.543	2.058	1	-21.561	1.639	2.499	0.991	1.01	1.251	0.508	0.873	0
0203-496-497	3	50.948	0.583	24.163	Backwater	0 - 12:15 hrs	3.418	3.418	0.474	1	26.786	0.796	3	0.109	0.109	0.164	0	0	0
0203-497-498	3	15.612	0.055	24.163	Exceeds Capa	0 - 12:15 hrs	3.418	3.418	1.548	1	-8.55	0.797	2.999	0.049	0.164	0.049	0.244	0.049	0
0203-498-499	3	24.975	0.14	24.166	Free Surface	0 - 12:15 hrs	3.546	3.546	0.968	0.922	0.809	0.797	3	0	0.049	0	0	0	0
0203-499-500	3	51.689	0.601	23.976	Free Surface	0 - 12:15 hrs	5.593	5.593	0.464	0.584	27.713	0.797	2.998	0	0	0	0	0	0
0203-500-200	6.864	1,240.30	3.132	23.93	Free Surface	0 - 12:15 hrs	1.872	1.872	0.019	0.266	1,216.37	0.797	8.949	0	0	0	0	0	0
0203-501-194	3.615	519.532	5.96	26.138	Free Surface	0 - 12:15 hrs	3.757	3.76	0.05	0.264	493.394	1.262	8.343	0	0	0	0	0	0
0203-502-503	3.5	74.926	0.555	73.551	Backwater	0 - 12:17 hrs	7.645	7.645	0.982	1	1.375	5.243	3.499	0.283	0.338	0.283	0	0.283	0
0203-503-504	3.5	106.95	1.13	73.558	Free Surface	0 - 12:17 hrs	7.901	7.988	0.688	0.977	33.392	5.24	3.499	0	0.283	0	0	0	0
0203-504-198	3.075	230.775	0.995	79.346	Backwater	0 - 12:15 hrs	1.973	2.39	0.344	1	151.429	5.578	23.313	0.421	0.421	1.377	0	0	0
0203-505-504	3	58.702	0.775	9.023	Free Surface	0 - 12:15 hrs	1.454	1.945	0.154	0.926	49.679	0.333	2.999	0	0	0.511	0	0	0
0203-506-430	2.5	30.24	0.544	37.689	Exceeds Capa	0 - 13:48 hrs	7.678	7.678	1.246	1	-7.449	5.222	2.499	4.964	5.032	4.969	3.05	3.149	0
0203-507-429	8	765.468	0.056	318.086	Free Surface	0 - 12:15 hrs	2.926	2.941	0.416	0.757	447.383	85.751	18	0	0	0	0	0	0
0203-508-509	7.34	1,006.51	1.616	145.011	Backwater	0 - 12:11 hrs	1.486	2.965	0.144	1	861.502	3.851	26.622	0.078	0.078	2.584	0	0	0
0203-509-517	7.66	974.388	1.962	137.589	Backwater	0 - 12:08 hrs	3.543	3.543	0.141	1	836.799	3.835	5.331	1.669	1.669	3.425	0	0	0
0203-510-095	3	255.354	14.657	54.085	Backwater	0 - 13:45 hrs	7.652	7.652	0.212	1	201.269	13.394	3	7.001	7.001	7.028	0	0	1
0203-511-230	2.5	96.373	5.521	20.784	Backwater	0 - 14:34 hrs	4.234	4.234	0.216	1	75.589	4.474	2.471	6.681	6.681	6.692	0	2.977	0
0203-512-231	2.5	51.032	1.548	20.784	Free Surface	0 - 14:34 hrs	6.329	6.391	0.407	0.634	30.248	4.475	2.458	0	0	0	0	0	0
0203-513-229	2	34.719	2.355	20.784	Backwater	0 - 14:34 hrs	6.616	6.616	0.599	1	13.935	4.467	1.987	6.688	6.688	6.7	0	6.687	0
0203-514-515	3	39.502	0.351	20.784	Free Surface	0 - 14:37 hrs	4.413	4.413	0.526	0.632	18.718	4.464	2.987	0	0	0	0	0	0
0203-515-232	3	84.046	1.588	20.784	Free Surface	0 - 14:37 hrs	5.734	5.743	0.247	0.51	63.262	4.463	3	0	0	0	0	0	0
0203-516-393	3.5	136.994	1.854	20.784	Free Surface	0 - 14:37 hrs	3.141	3.141	0.152	0.65	116.209	4.462	3.5	0	0	0	0	0	0
0203-517-048	8.92	861.063	0.529	136.663	Free Surface	0 - 12:10 hrs	1.375	1.377	0.159	0.929	724.401	3.84	25.666	0	0	0	0	0	0
0203-518-519	2.4	58.661	0.743	44.512	Backwater	0 - 12:52 hrs	6.089	6.089	0.759	1	14.148	4.522	3.797	2.877	2.877	2.938	0	2.819	0
0203-519-203	5.134	201.594	1.52	44.512	Free Surface	0 - 12:53 hrs	4.265	4.411	0.221	0.757	157.082	4.516	10.508	0	0	0	0	0	0
0203-520-006	7.17	2,505.53	1.421	251.107	Free Surface	0 - 12:18 hrs	4.154	4.154	0.1	0.42	2,254.43	48.181	27.743	0	0	0	0	0	0
0203-521-526	3.5	87.303	0.753	37.491	Backwater	0 - 13:40 hrs	3.897	3.897	0.429	1	49.812	6.398	3.498	4.996	5.006	4.996	0	4.996	1
0203-522-521	3.5	35.258	0.123	37.491	Exceeds Capa	0 - 13:40 hrs	3.897	3.897	1.063	1	-2.233	6.403	3.499	5.006	5.015	5.006	4.328	5.005	1
0203-523-524	3.5	68.693	0.466	39.424	Backwater	0 - 12:22 hrs	4.098	4.098	0.574	1	29.269	6.406	3.498	5.019	5.025	5.021	0	5.019	1
0203-524-522	3.5	51.644	0.263	37.491	Backwater	0 - 13:40 hrs	3.897	3.897	0.726	1	14.153	6.404	3.5	5.014	5.021	5.015	0	5.013	2
0203-525-033	16.9	11,949.49	1.886	210.471	Free Surface	0 - 12:17 hrs	5.392	5.395	0.018	0.204	11,739.02	45.273	17.356	0	0	0	0	0	0
0203-526-527	3.5	30.056	0.089	37.491	Exceeds Capa	0 - 13:40 hrs	3.897	3.947	1.247	1	-7.435	6.395	3.477	2.244	4.996	2.244	5.008	2.244	0
0203-527-528	3.5	101.622	1.02	37.491	Backwater	0 - 13:41 hrs	3.897	4.352	0.369	1	64.131	6.39	3.398	2.244	2.244	3.667	0	0	0
0203-528-234	4	131.535	0.839	37.491	Free Surface	0 - 13:41 hrs	3.028	3.385	0.285	0.958	94.044	6.384	3.988	0	0	1.496	0	0	0
0203-529-235	4	77.78	0.293	37.491	Free Surface	0 - 13:41 hrs	3.145	3.145	0.482	0.901	40.289	6.376	3.988	0	0	0	0	0	0
0203-530-001	9.53	528.594	0.062	133.572	Backwater	0 - 13:33 hrs	0.697	0.732	0.253	1	395.022	42.124	27.563	1.036	1.036	3.154	0	0	0
0203-531-055	2.5	55.941	1.86	58.009	Exceeds Capa	0 - 12:18 hrs	11.817	11.817	1.037	1	-2.067	2.946	2.493	1.253	1.253	2.134	0.455	0.599	0
0203-532-580	9.45	2,462.51	1.34	113.871	Free Surface	0 - 18:16 hrs	3.055	3.072	0.046	0.393	2,348.64	47.551	21.634	0	0	0	0	0	0
0203-533-538	3	287.313	0.382	101.174	Free Surface	0 - 13:56 hrs	4.559	4.657	0.352	0.616	186.14	30.915	12	0	0	0	0	0	0
0203-534-535	3	63.109	0.895	23.382	Backwater	0 - 14:57 hrs	3.856	4.609	0.371	1	39.727	8.158	3	2.4	2.902	2.4	0	2.4	0
0203-535-542	3	89.294	1.792	31.416	Backwater	0 - 14:57 hrs	4.98	6.951	0.352	1	57.878	8.148	2.996	2.4	2.4	3.098	0	0	0
0203-536-537	3.5	3.806	0.001	82.524	Exceeds Capa	0 - 12:48 hrs	8.577	8.577	21.684	1	-78.718	16.646	3.5	3.096	3.465	3.096	20.858	3.096	0
0203-537-539	4	126.979	0.781	82.524	Backwater	0 - 12:48 hrs	6.567	7	0.65	1	44.455	16.641	3.999	3.044	3.049	3.045	0	3.042	0
0203-538-608	4.87	3,433.72	7.246	101.177	Free Surface	0 - 13:56 hrs	5.762	5.919	0.029	0.357	3,332.55	30.904	12.292	0	0	0	0	0	0
0203-539-540	4	145.306	1.023	82.524	Backwater	0 - 12:48 hrs	6.567	6.567	0.568	1	62.782	16.647	4	3.045	3.045	3.143	0	0	0
0203-540-541	4	152.206	1.123	82.525	Free Surface	0 - 12:48 hrs	6.961	7.745	0.542	0.908	69.681	16.633	4	0	3.149	0	0	0	0
0203-541-543	4	189.82	1.746	82.483	Free Surface	0 - 12:49 hrs	6.953	7.279	0.435	0.908	107.337	16.633	3.998	0	0	3.128	0	0	0
0203-542-536	3.5	129.193	1.649	47.777	Backwater	0 - 14:57 hrs	5.162	5.168	0.37	1	81.417	8.154	3.499	3.071	3.071	3.465	0	0	0
0203-543-544	4	159.361	1.231	82.482	Backwater	0 - 12:49 hrs	6.564	6.564	0.518	1	76.879	16.622	4	3.097	3.128	3.24	0	3.081	0
0203-544-650	4.04	121.062	0.856	82.481	Backwater	0 - 12:51 hrs	3.534	3.534	0.681	1	38.582	16.615	7.247	3.205	3.222	3.226	0	3.041	0
0203-545-251	3.91	3.866	0.001	35.419	Exceeds Capa	0 - 17:07 hrs	1.376	1.376	9.163	1	-31.554	13.808	7.382	11.951	12.464	11.951	20.658	11.951	0
0203-546-548	3.5	28.097	0.056	35.428	Exceeds Capa	0 - 17:10 hrs	1.265	1.265	1.261	1	-7.331	13.774	8	12.526	12.547	12.526	11.399	12.526	0
0203-547-600	6.67	1,344.78	0.969	126.404	Free Surface	0 - 12:19 hrs	1.071	1.747	0.094	0.888	1,218.37	30.839	38.02	0	0	0.434	0	0	0
0203-548-651	3.89	111.91	0.698	35.428	Backwater	0 - 17:10 hrs	1.477	1.477	0.317	1	76.482	13.764	7.177	11.939	11.939	12.015	0	0	0
0203-549-633	4.49	145.474	0.523	40.661	Free Surface	0 - 13:00 hrs	2.084	2.085	0.28	0.614	104.813	14.822	7.816	0	0	0	0	0	0
0203-550-638	10.26	9,226.24	2.917	1,135.09	Backwater	0 - 12:37 hrs	2.564	2.564	0.123	1	8,091.16	251.624	69.83	1.278	1.278	3.015	0	0	0
0203-551-550	3.5	380.538	14.306	72.032	Backwater	0 - 12:18 hrs	7.487	7.487	0.189	1	308.506	3.006	3.5	0.485	0.485	19.171	0	0	0
0203-552-553	3	16.916	0.609	27.317	Exceeds Capa	0 - 13:34 hrs	3.865	3.865	1.615	1	-10.401	7.304	3	7.78	7.979	7.781	8.03	7.78	0
0203-553-322	4	109.183	0.578	27.317	Backwater	0 - 13:34 hrs	2.174	3.037	0.25	1	81.866	7.297	3.995	5.402	5.402	8.323	0	0	0
0203-554-555	3	91.986	1.902	49.064	Backwater	0 - 12:15 hrs	6.941	6.941	0.533	1	42.922	1.441	3	0.223	0.223	0.236	0	0.138	0
0203-555-319	4	59.203	0.17	49.062	Backwater	0 - 12:15 hrs	3.904	3.904	0.829	1	10.14	1.446	3.999	0.314	0.314	0.329	0	0.261	0
0203-556-558	4.5	250.472	1.622	74.596	Free Surface	0 - 12:17 hrs	5.377	5.746	0.298	0.819	175.876	7.54	4.5	0	0	4.633	0	0	0
0203-557-584	14	1,993.65	1.603	491.724	Free Surface	0 - 12:15 hrs	8.698	8.699	0.247	0.675	1,501.93	118.395	6	0	0	0	0	0	0
0203-558-644	17.29	23,504.65	1.58	1,374.13	Free Surface	0 - 12:27 hrs	4.488	4.618	0.058	0.426	22,130.52	274.307	58.149	0	0	0	0	0	0
0203-559-547	8.04	86.352	0.001	113.438	Free Surface	0 - 12:19 hrs	1.276	2.929	1.314	0.646	-27.086	30.851	34.158	0	0	0	7.753	0	0
0203-560-564	4.58	457.706	1.81	384.339	Backwater	0 - 12:26 hrs	7.464	7.464	0.84	1	73.367	33.148	19.156	1.476	1.476	2.748	0	1.336	0

Table B-6b. Existing System Analysis - Pipes/Channels
100-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-561-565	5	246.32	1.547	249.036	Free Surface	0 - 13:30 hrs	7.676	7.676	1.011	0.811	-2.717	32.987	8	0	2.813	0	0.882	0	3
0203-562-590	4.43	15.809	0.103	71.547	Exceeds Capa	0 - 17:31 hrs	5.034	7.579	4.526	1	-55.738	18.557	11.06	2.539	10.653	2.539	12.168	2.539	0
0203-563-562	5.67	87.661	1.863	81.287	Backwater	0 - 12:37 hrs	4.997	4.997	0.927	1	6.374	18.566	3.577	7.738	7.738	9.979	0	3.459	0
0203-564-561	4.58	331.093	0.947	251.951	Backwater	0 - 13:30 hrs	4.893	4.893	0.761	1	79.142	33.068	19.156	2.748	2.748	2.858	0	0	2
0203-565-566	6.13	3,871.66	1.408	249.036	Free Surface	0 - 13:29 hrs	1.864	1.864	0.064	0.536	3,622.63	32.989	69.507	0	0	0	0	0	1
0203-566-567	4.89	320.067	1.093	249.059	Free Surface	0 - 13:22 hrs	5.383	5.4	0.778	0.975	71.007	32.904	18.22	0	0	0	0	0	0
0203-567-568	7.77	909.854	0.572	249.046	Free Surface	0 - 13:26 hrs	4.122	4.126	0.274	0.661	660.808	32.881	21.715	0	0	0	0	0	0
0203-568-569	6.66	552.088	0.267	250.624	Free Surface	0 - 12:14 hrs	4.046	4.303	0.454	0.729	301.465	32.856	24.947	0	0	0	0	0	0
0203-569-570	5.1	1,171.14	0.51	255.302	Free Surface	0 - 15:44 hrs	1.536	2.178	0.218	0.96	915.839	33.098	83.572	0	0	3.592	0	0	0
0203-570-571	4.54	290.106	1.015	220.49	Backwater	0 - 14:52 hrs	4.891	4.891	0.76	1	69.616	32.773	17.729	3.706	3.706	12.869	0	0	0
0203-571-572	7.53	767.629	0.506	228.256	Backwater	0 - 14:56 hrs	2.05	2.05	0.297	1	539.373	32.621	20.731	3.68	3.68	9.085	0	0	0
0203-572-573	10	155.838	0.002	247.096	Exceeds Capa	0 - 13:47 hrs	1.647	1.647	1.586	1	-91.258	32.435	15	1.722	1.877	1.722	3.283	1.674	0
0203-573-574	8.35	39.275	0	926.901	Exceeds Capa	0 - 12:25 hrs	5.349	5.349	23.601	1	-887.626	94.998	35.504	4.569	4.609	4.569	17.9	4.569	0
0203-574-575	6.44	19.662	0.001	573.177	Exceeds Capa	0 - 13:17 hrs	6.111	6.111	29.152	1	-553.516	94.806	18.158	12.842	12.879	12.842	19.906	12.842	0
0203-575-383	4.91	96.731	0.063	113.866	Backwater	0 - 18:04 hrs	2.113	2.113	1.177	1	-17.135	49.753	12.036	12.925	12.925	14.176	13.37	0	0
0203-576-577	13.143	8,486.87	3.432	113.866	Free Surface	0 - 18:06 hrs	4.134	4.134	0.013	0.196	8,373.01	48.245	15.102	0	0	0	0	0	0
0203-577-578	13.143	1,842.63	0.162	113.866	Free Surface	0 - 18:07 hrs	3.274	3.276	0.062	0.231	1,728.77	48.178	16.464	0	0	0	0	0	0
0203-578-579	12.6	3,409.35	0.426	113.865	Free Surface	0 - 18:08 hrs	1.768	1.768	0.033	0.279	3,295.49	48.067	23.409	0	0	0	0	0	0
0203-579-247	16	13,470.77	1.049	113.865	Free Surface	0 - 18:09 hrs	1.154	1.154	0.008	0.247	13,356.91	47.846	25	0	0	0	0	0	0
0203-580-582	9.94	1,281.46	0.17	113.884	Free Surface	0 - 18:19 hrs	2.581	3.073	0.089	0.425	1,167.57	47.467	24.94	0	0	0	0	0	0
0203-581-592	3	67.993	1.039	65.817	Backwater	0 - 12:02 hrs	9.356	9.493	0.968	1	2.176	4.089	3	1.104	1.252	1.117	0	1.103	0
0203-582-583	8.81	4,032.92	2.092	115.456	Free Surface	0 - 21:36 hrs	1.84	3.249	0.029	0.617	3,917.46	47.435	33.315	0	0	0	0	0	0
0203-583-584	11.75	15,533.00	2.768	118.744	Free Surface	0 - 21:37 hrs	0.492	0.812	0.008	0.677	15,414.26	47.355	60.675	0	0	0	0	0	0
0203-584-585	13.35	2,358.24	0.069	570.43	Free Surface	0 - 12:15 hrs	1.704	1.79	0.242	0.665	1,787.81	165.612	54.844	0	0	0	0	0	0
0203-585-586	13.32	3,869.75	0.284	567.24	Free Surface	0 - 12:17 hrs	2.148	2.286	0.147	0.662	3,302.51	165.544	44.8	0	0	0	0	0	0
0203-586-587	14.17	4,356.39	0.461	561.054	Free Surface	0 - 12:18 hrs	2.7	3.168	0.129	0.653	3,795.34	165.441	44.841	0	0	0	0	0	0
0203-587-588	13.84	7,989.37	1.179	553.406	Free Surface	0 - 12:18 hrs	1.71	1.858	0.069	0.76	7,435.96	165.286	48.97	0	0	0	0	0	0
0203-588-589	15.24	7,355.74	0.878	548.015	Free Surface	0 - 12:19 hrs	2.146	2.546	0.075	0.66	6,807.72	165.071	45.591	0	0	0	0	0	0
0203-589-612	16.27	3,369.78	0.088	540.544	Free Surface	0 - 12:22 hrs	2.096	2.976	0.16	0.541	2,829.23	164.874	48.643	0	0	0	0	0	0
0203-590-591	2.03	69.27	1.283	67.286	Backwater	0 - 17:32 hrs	4.686	4.686	0.971	1	1.984	18.251	10.387	4.259	4.259	10.41	0	2.654	0
0203-591-593	2.62	73.4	1.343	62.811	Free Surface	0 - 20:00 hrs	6.673	6.673	0.856	0.754	10.589	18.233	6.743	0	7.574	0	0	0	0
0203-592-611	4	95.093	0.438	61.139	Backwater	0 - 12:03 hrs	5.067	5.099	0.643	1	33.954	4.132	4	0.988	0.988	4.263	0	0	0
0203-593-594	3.6	453.849	1.331	62.811	Free Surface	0 - 20:00 hrs	1.82	1.82	0.138	0.685	391.038	18.22	20.408	0	0	12.081	0	0	0
0203-594-595	2.19	35.906	0.524	47.538	Exceeds Capa	0 - 21:30 hrs	3.621	3.621	1.324	1	-11.632	18.022	11.638	12.894	12.894	13.036	12.542	12.79	0
0203-595-596	3.06	64.797	0.373	47.536	Free Surface	0 - 21:31 hrs	3.118	3.118	0.734	0.808	17.261	17.98	8.225	0	0	0	0	0	0
0203-596-597	2.33	73.112	1.685	47.534	Free Surface	0 - 21:32 hrs	4.026	4.026	0.65	0.917	25.578	17.943	10.101	0	0	12.838	0	0	0
0203-597-598	7.08	393.884	0.474	47.532	Free Surface	0 - 21:34 hrs	3.376	3.376	0.121	0.446	346.352	17.901	9.449	0	0	0	0	0	0
0203-598-599	6.15	520.803	0.782	47.607	Free Surface	0 - 12:21 hrs	1.134	2.43	0.091	0.754	473.195	17.873	16.234	0	0	0	0	0	0
0203-599-679	4.583	13.78	0.012	53.432	Exceeds Capa	0 - 12:25 hrs	1.865	3.209	3.878	1	-39.652	17.806	6.25	0.638	1.133	0.638	14.977	0.638	0
0203-600-601	6.67	1,189.60	0.758	504.616	Backwater	0 - 12:15 hrs	3.291	5	0.424	1	684.984	118.439	38.079	0.912	0.912	1.326	0	0	0
0203-601-557	9.29	10,571.93	4.543	496.959	Free Surface	0 - 12:15 hrs	1.289	4.261	0.047	0.942	10,074.97	118.43	71.662	0	0	0.366	0	0	0
0203-602-532	9	3,094.64	0.323	113.869	Free Surface	0 - 18:15 hrs	1.924	1.927	0.037	0.311	2,980.78	47.586	24	0	0	0	0	0	0
0203-603-604	4.549	95.959	0.384	101.175	Exceeds Capa	0 - 13:52 hrs	3.803	3.803	1.054	1	-5.216	30.998	7.32	5.731	9.679	5.731	4.564	5.731	0
0203-604-605	4.539	43.632	0.049	101.174	Free Surface	0 - 13:53 hrs	3.297	3.297	2.319	0.957	-57.542	30.98	7.876	0	5.815	0	10.516	0	0
0203-605-606	4.52	148.955	0.689	101.174	Free Surface	0 - 13:55 hrs	4.548	4.548	0.679	0.766	47.782	30.954	7.25	0	0	0	0	0	0
0203-606-607	3.356	295.43	1.499	101.174	Free Surface	0 - 13:55 hrs	3.749	3.749	0.342	0.728	194.257	30.938	12.934	0	0	0	0	0	0
0203-607-533	3.063	600.121	1.062	101.174	Free Surface	0 - 13:56 hrs	4.679	4.679	0.169	0.699	498.947	30.929	11.446	0	0	0	0	0	0
0203-608-609	6.23	920.531	0.657	101.165	Free Surface	0 - 13:57 hrs	5.239	5.386	0.11	0.578	819.367	30.897	8.645	0	0	0	0	0	0
0203-609-610	8.2	2,600.98	0.173	103.762	Free Surface	0 - 12:19 hrs	1.216	1.919	0.04	0.624	2,497.22	30.871	27.965	0	0	0	0	0	0
0203-610-559	8.04	117.505	0.003	109.876	Free Surface	0 - 12:19 hrs	1.201	2.109	0.935	0.651	7.629	30.857	34.301	0	0	0	0	0	0
0203-611-621	15.12	3,023.71	0.281	812.826	Free Surface	0 - 12:18 hrs	3.908	4.038	0.269	0.703	2,210.88	181.379	35.07	0	0	0	0	0	0
0203-612-611	11.76	7,994.65	1.202	760.984	Free Surface	0 - 12:18 hrs	1.915	1.965	0.095	0.844	7,233.67	177.382	61.391	0	0	0	0	0	0
0203-613-614	13.8	4,726.46	0.449	792.449	Free Surface	0 - 12:19 hrs	2.502	2.634	0.168	0.811	3,934.01	181.152	51.484	0	0	0	0	0	0
0203-614-615	14.09	134.302	0	771.073	Free Surface	0 - 12:21 hrs	2.708	2.881	5.741	0.83	-636.771	180.881	44.465	0	0	0	15.887	0	0
0203-615-616	16.66	3,218.90	0.047	743.133	Free Surface	0 - 12:25 hrs	1.609	1.822	0.231	0.693	2,475.77	180.54	68.803	0	0	0	0	0	0
0203-616-617	12.01	1,156.69	0.039	738.771	Free Surface	0 - 12:37 hrs	1.82	2.122	0.639	0.944	417.92	180.066	59.973	0	0	0	0	0	0
0203-617-618	10.93	4,117.66	0.453	808.724	Backwater	0 - 12:37 hrs	1.845	1.845	0.196	1	3,308.94	191.624	53.824	1.048	1.048	1.681	0	0	0
0203-618-619	10.66	2,216.36	0.228	808.667	Backwater	0 - 12:37 hrs	2.112	2.112	0.365	1	1,407.69	191.332	60.711	1.959	1.959	2.366	0	0	0
0203-619-620	11.76	1,212.85	0.102	680.347	Free Surface	0 - 13:22 hrs	2.334	3.446	0.561	0.968	532.502	189.008	40.718	0	0	0.997	0	0	0
0203-620-622	13.9	5,243.80	0.147	680.475	Free Surface	0 - 13:22 hrs	1.136	1.44	0.13	0.779	4,563.32	188.814	64.674	0	0	0	0	0	0
0203-621-613	13.58	3,962.39	0.558	808.483	Free Surface	0 - 12:18 hrs	3.537	3.716	0.204	0.765	3,153.91	181.327	39.709	0	0	0	0	0	0
0203-622-623	1.76	230.845	0.512	697.676	Exceeds Capa	0 - 13:22 hrs	9.049	9.049	3.022	1	-466.831	192.38	64.23	18.43	18.43	18.625	12.541	16.689	0
0203-623-676	7.33	4,490.61	0.149	812.989	Free Surface	0 - 13:22 hrs	3.731	3.736	0.181	0.731	3,677.62	207.263	57.281	0	0	0	0	0	0
0203-624-623	4.01	549.756	2.467	115.225	Backwater	0 - 13:15 hrs	2.154	2.154	0.21	1	434.531	14.979	20.41	2.607	2.607	6.49	0	0	0
0203-625-270	11.2	3,720.17	1.794	119.664	Free Surface	0 - 12:03 hrs	1.497	1.787	0.032	0.695	3,600.50	15.016	26.637	0	0	0	0	0	0
0203-626-657	3.86	270.391	1.937	203.172	Backwater	0 - 12:15 hrs	6.165	6.165	0.751	1	67.219	14.976	13.226	2.737	2.738	2.807	0	0.359	0
0203-627-252	6.45	380.355	0.191	56.131	Free Surface	0 - 13:11 hrs	2.749	2.807	0.148	0.435	324.224	6.751	14.677	0	0	0	0	0	0
0203-628-629	6.99	10,583.69	1.162	877.972	Free Surface	0 - 12:33 hrs	4.628	6.02	0.083	0.708	9,705.72	210.735	50.649	0	0	0	0	0	0
0203-629-630	8.41	10,075.58	0.756	979.08	Free Surface	0 - 12:33 hrs	3.91	4.167	0.097	0.819	9,096.50	225.916	50.381	0	0	1.287	0	0	0
0203-630-268	12.401	1,060.03	0.014	976.241	Free Surface	0 - 12:33 hrs	2.724	2.756	0.921	0.686	83.789	225.497	66.681	0	0	0	0	0	0
0203-631-632	12.016	1,549.05	0.035	1,041.83	Free Surface	0 - 12:36 hrs	3.305	3.466	0.673	0.667	507.216	234.388	64.517	0	0	0	0	0	0
0203-632-637	9.93	7,174.33	1.141	1,042.79	Free Surface	0 - 12:36 hrs	3.562	4.129	0.145	0.673	6,131.54	234.172	62.78	0	0	0	0	0	0
0203-633-634	4.51	102.646	0.306	40.653	Free Surface	0 - 13:00 hrs	2.679	2.695	0.396	0.529	61.994	14.808	7.088	0	0	0	0	0	0
0203-634-255	4.56	151.447	0.923	40.609	Free Surface	0 - 13:00 hrs	3.288	3.389	0.268	0.57	110.838	14.791	6.416	0	0	0	0	0	0
0203-635-636	6.75	673.062	1.181	41.521	Free Surface	0 - 12:48 hrs	0.929	2.082	0.062	0.732	631.541	14.763	13.716	0	0	0.102	0	0	0
0203-636-637	11.29	4,138.85	0.961	43.103	Free Surface	0 - 12:48 hrs	0.354	1.026	0.01	0.557	4,095.75	14.721	33.066	0	0	0	0	0	0
0203-637-550	10.26	9,217.28	2.911	1,085.41	Free Surface	0 - 12:37 hrs	3.657	3.945	0.118	0.783	8,131.87	248.834	62.228	0	0	1.278	0	0	0
0203-638-639	17.23	13,754.19	1.014	1,136.75	Free Surface	0 - 12:37 hrs	3.051	3.104	0.083	0.616	12,617.44	251.398	49.057	0	0	0	0	0	0
0203-639-640	11.92	1,425.16	0.041	1,279.82	Free Surface	0 - 12:22 hrs	4.088	4.308	0.898	0.712	145.347	263.658	49.603	0	0	0	0	0	0
0203-640-641	13.4	6,157.15	0.482	1,278.23	Free Surface	0 - 12:29 hrs	3.833	4.263	0.208	0.621	4,878.92	263.458	64.552	0	0	0	0	0	0

Table B-6b. Existing System Analysis - Pipes/Channels
100-year, 24-hour Event

ID	Full Depth (ft)	Full Flow (cfs)	Percent Slope (%)	Maximum Flow (cfs)	Maximum Flow Class	Max.Flow Day-Time (day-time)	Velocity at Maximum Flow (ft/s)	Maximum Velocity (ft/s)	Max.Flow/Full Flow	Max.Depth/Full Depth	Reserve Capacity (cfs)	Total Flow Volume (MG)	Maximum Top Width (ft)	Both End Surcharge Time (hrs)	Upstream Surcharge Time (hrs)	Downstream Surcharge Time (hrs)	Above Full-Flow Time (hrs)	Capacity Limited Time (hrs)	Instability Index
0203-641-642	7.11	1,605.32	0.414	1,277.80	Backwater	0 - 12:30 hrs	5.227	5.227	0.796	1	327.519	263.196	49.661	1.975	2.073	1.975	0	1.975	0
0203-642-643	17.21	1,925.72	0.009	1,301.89	Free Surface	0 - 12:30 hrs	4.433	4.44	0.676	0.396	623.826	264.993	60.384	0	0	0	0	0	0
0203-643-558	17.29	19,135.11	1.047	1,301.88	Free Surface	0 - 12:30 hrs	5.244	5.262	0.068	0.367	17,833.23	264.748	54.222	0	0	0	0	0	0
0203-644-645	22.03	20,938.12	0.668	1,373.55	Free Surface	0 - 12:29 hrs	4.727	4.8	0.066	0.4	19,564.56	274.121	52.169	0	0	0	0	0	0
0203-645-646	23.07	16,084.02	0.29	1,373.04	Free Surface	0 - 12:30 hrs	3.978	3.978	0.085	0.393	14,710.98	273.769	55.216	0	0	0	0	0	0
0203-646-007	23.07	17,808.79	0.355	1,372.97	Free Surface	0 - 12:30 hrs	7.316	7.316	0.077	0.256	16,435.82	273.596	44.29	0	0	0	0	0	0
0203-647-351	3.6	105.916	0.448	79.29	Backwater	0 - 12:15 hrs	2.842	2.967	0.749	1	26.626	3.011	12.757	0.326	0.326	0.495	0	0	0
0203-648-647	3.6	105.904	0.448	66.486	Backwater	0 - 12:15 hrs	2.383	2.383	0.628	1	39.417	1.914	12.757	0.25	0.25	0.326	0	0	0
0203-649-647	4.97	241.168	0.392	32.866	Free Surface	0 - 12:10 hrs	1.297	1.437	0.136	0.865	208.302	1.102	18.307	0	0	0	0	0	0
0203-650-250	4.04	90.812	0.482	80.895	Backwater	0 - 12:18 hrs	3.466	3.466	0.891	1	9.917	16.598	7.247	3.226	3.226	9.325	0	3.076	0
0203-651-248	4.17	61.813	0.13	35.429	Backwater	0 - 17:10 hrs	1.224	1.224	0.573	1	26.384	13.732	8.005	11.33	11.33	11.966	0	0	0
0203-652-653	3	89.924	1.818	71.917	Backwater	0 - 11:51 hrs	10.174	10.174	0.8	1	18.006	12.162	3	4.195	4.195	4.21	0	4.191	0
0203-653-654	3.5	89.147	0.785	70.484	Free Surface	0 - 13:00 hrs	8.463	8.464	0.791	0.819	18.664	12.148	3.494	0	4.186	0	0	0	0
0203-654-656	4	192.782	1.801	70.487	Free Surface	0 - 13:00 hrs	7.764	8.189	0.366	0.68	122.295	12.144	3.999	0	0	0	0	0	0
0203-655-661	6	544.482	0.174	152.124	Backwater	0 - 17:16 hrs	2.113	2.113	0.279	1	392.358	51.489	12	10.404	10.42	10.404	0	10.403	0
0203-656-272	4	136.969	0.538	70.478	Free Surface	0 - 13:02 hrs	6.85	7.037	0.515	0.837	66.491	12.165	3.984	0	0	0	0	0	0
0203-657-625	3.86	140.903	0.526	137.595	Backwater	0 - 12:03 hrs	4.175	4.175	0.977	1	3.308	15.042	13.226	2.807	2.807	2.939	0	0.116	0
0203-658-671	4.5	115.357	1.52	115.217	Backwater	0 - 13:15 hrs	5.121	5.121	0.999	1	0.14	14.988	5	2.859	2.906	2.859	0	2.859	0
0203-659-624	3.98	491.176	1.802	115.223	Backwater	0 - 13:15 hrs	5.06	5.111	0.235	1	375.953	14.985	5.812	1.97	1.97	2.633	0	0	0
0203-660-552	3	65.969	0.978	27.317	Backwater	0 - 13:34 hrs	3.865	3.865	0.414	1	38.652	7.311	3	7.975	7.997	7.977	0	7.975	0
0203-661-331	6	229.475	0.292	151.982	Backwater	0 - 18:08 hrs	2.111	2.111	0.662	1	77.493	51.48	12	10.404	10.404	10.449	0	0.002	0
0203-662-663	3.5	64.069	0.406	56.154	Backwater	0 - 13:08 hrs	5.837	5.837	0.876	1	7.915	6.769	3.489	2.536	2.545	2.537	0	2.535	0
0203-663-664	3.5	155.483	2.388	56.154	Backwater	0 - 13:08 hrs	5.837	5.837	0.361	1	99.329	6.765	3.495	2.537	2.537	2.552	0	2.529	0
0203-664-627	3.5	130.884	1.692	56.154	Free Surface	0 - 13:08 hrs	6.185	6.185	0.429	0.9	74.73	6.764	3.5	0	2.552	0	0	0	0
0203-665-673	6	506.09	0.15	152.069	Backwater	0 - 18:15 hrs	2.406	2.671	0.3	1	354.021	51.412	12	1.544	1.859	1.544	0	1.544	0
0203-666-667	3	55.113	0.683	48.183	Backwater	0 - 12:27 hrs	6.816	6.816	0.874	1	6.93	4.044	2.999	1.826	1.827	2.052	0	1.484	0
0203-667-668	3	70.995	1.133	48.182	Backwater	0 - 12:26 hrs	6.816	6.816	0.679	1	22.813	4.041	2.999	2.063	2.065	2.118	0	1.464	0
0203-668-669	3	88.178	1.748	39.345	Backwater	0 - 13:27 hrs	5.566	5.566	0.446	1	48.833	4.056	3	2.139	2.139	2.166	0	2.073	0
0203-669-670	3	23.852	0.128	38.666	Exceeds Capa	0 - 13:15 hrs	5.47	5.47	1.621	1	-14.813	4.056	3	2.071	2.166	2.071	2.125	2.07	0
0203-670-252	3.5	2.598	0.001	38.65	Free Surface	0 - 13:18 hrs	4.908	4.911	14.876	0.884	-36.052	4.054	3.5	0	1.775	0	12.407	0	0
0203-671-672	4.5	224.625	0.609	115.217	Backwater	0 - 13:15 hrs	5.121	5.121	0.513	1	109.408	14.986	5	2.762	2.859	2.762	0	2.762	0
0203-672-659	4.5	193.383	0.451	115.217	Free Surface	0 - 13:15 hrs	5.272	5.353	0.596	0.979	78.165	14.985	5	0	2.762	0	0	0	0
0203-673-677	6	624.338	0.228	162.763	Backwater	0 - 12:21 hrs	2.261	2.736	0.261	1	461.575	47.792	12	1.544	1.544	2.173	0	0	0
0203-674-675	4	103.697	0.521	82.06	Backwater	0 - 12:18 hrs	6.53	6.53	0.791	1	21.637	3.708	4	0.501	0.533	0.502	0	0.501	0
0203-675-676	4	75.888	0.279	82.06	Free Surface	0 - 12:18 hrs	7.26	7.26	1.081	0.843	-6.172	3.702	4	0	0.502	0	0.319	0	0
0203-676-628	7.33	4,266.06	0.134	879.461	Free Surface	0 - 12:32 hrs	4.398	4.616	0.206	0.665	3,386.60	210.808	57.109	0	0	0	0	0	0
0203-677-679	6	286.566	0.048	273.032	Backwater	0 - 12:15 hrs	3.792	3.792	0.953	1	13.534	47.386	12	1.915	2.173	1.915	0	1.074	0
0203-678-283	3.5	73.608	0.535	68.035	Backwater	0 - 12:33 hrs	7.071	7.071	0.924	1	5.574	9.52	3.494	3.197	3.197	4.333	0	2.732	0
0203-679-600	7.55	1,792.78	0.744	240.964	Backwater	0 - 12:15 hrs	1.106	2.58	0.134	1	1,551.82	65.142	49.189	0.168	0.168	0.206	0	0	0
0203-680-681	3	36.722	0.303	38.97	Exceeds Capa	0 - 11:52 hrs	5.513	5.513	1.061	1	-2.248	6.511	2.999	4.698	4.741	4.699	0.124	4.698	0
0203-681-682	3	60.903	0.834	38.983	Backwater	0 - 11:52 hrs	5.515	5.515	0.64	1	21.919	6.517	2.999	4.709	4.709	4.749	0	0.57	0
0203-682-683	4	80.161	0.311	38.528	Backwater	0 - 11:52 hrs	3.751	3.849	0.481	1	41.633	6.518	3.982	4.513	4.567	4.513	0	4.513	0
0203-683-684	4	120.044	0.698	37.748	Backwater	0 - 11:52 hrs	3.951	4.121	0.314	1	82.296	6.52	3.988	4.513	4.513	4.624	0	0	1
0203-684-685	4	88.644	0.381	36.02	Backwater	0 - 12:38 hrs	2.866	2.957	0.406	1	52.624	6.517	3.998	4.624	4.624	4.779	0	0	1
0203-685-686	4.5	201.454	1.049	36.02	Backwater	0 - 12:38 hrs	2.265	2.265	0.179	1	165.434	6.514	4.5	4.698	4.698	4.717	0	0	3
0203-686-687	4.5	8.888	0.002	36.019	Exceeds Capa	0 - 12:38 hrs	2.265	2.265	4.053	1	-27.131	6.513	4.499	4.691	4.717	4.691	6.084	4.691	2
0203-687-269	7.321	16.942	0.011	36.007	Free Surface	0 - 12:37 hrs	1.689	2.45	2.125	0.828	-19.065	6.513	4.83	0	0	0	4.927	0	0
0203-688-689	3	20.487	0.094	53.263	Free Surface	0 - 12:17 hrs	7.602	7.613	2.6	0.986	-32.776	2.047	3	0	0.49	0	0.597	0	0
0203-689-631	3.333	69.94	0.627	52.495	Free Surface	0 - 12:17 hrs	6.233	6.631	0.751	0.937	17.445	2.044	3.333	0	0	1.15	0	0	0
CDT-395	3.75	65.819	0.296	71.82	Exceeds Capa	0 - 12:18 hrs	6.503	6.503	1.091	1	-6.002	6.948	3.731	0.302	2.782	0.302	0.286	0.302	0

APPENDIX C: Inundation Figures

Figure C-1. Existing System Flood Extents

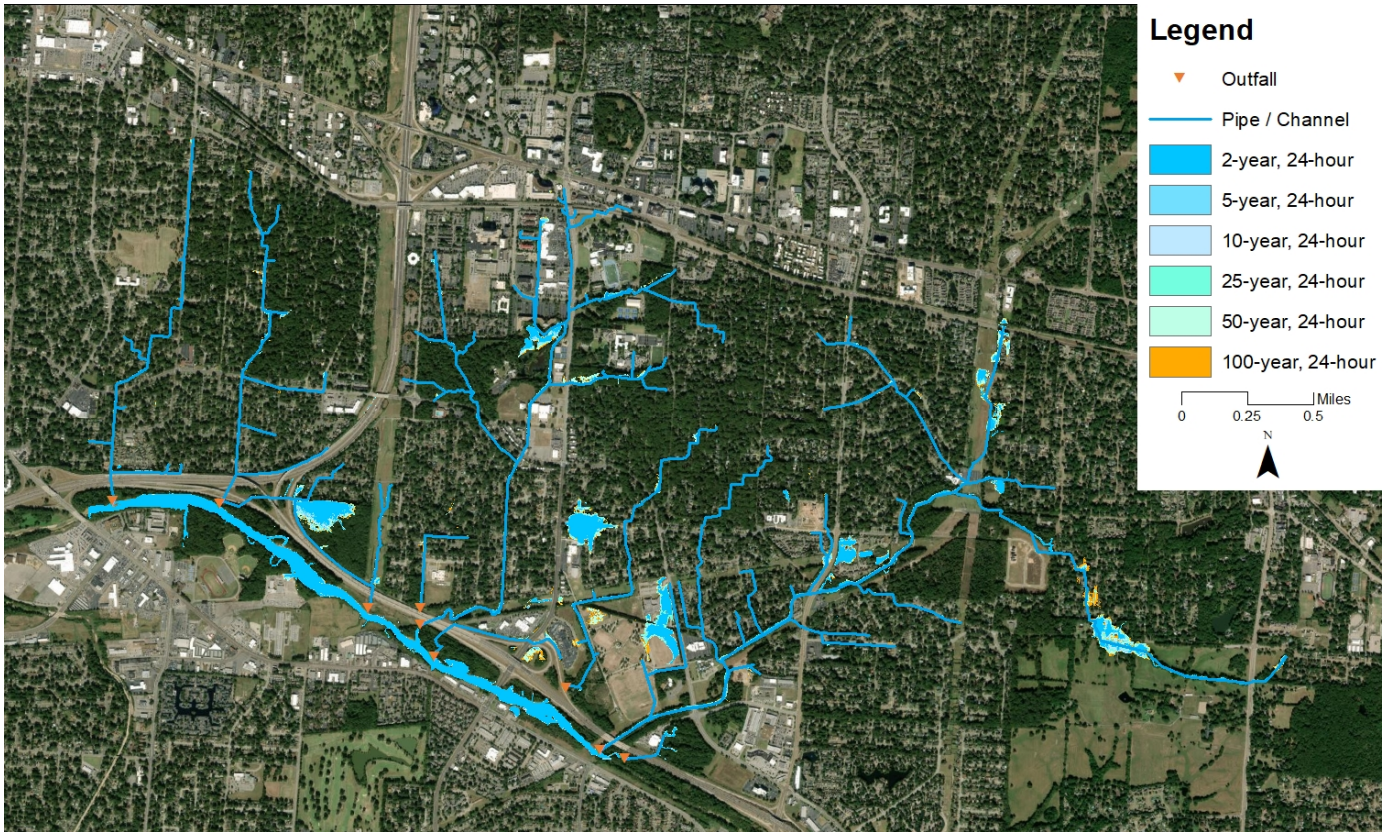


Figure C-1. Existing System Flood Extents