

# **MASTER PLAN**

Submitted to: Town of Erie



Submitted by:



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August 6, 2020

Town of Erie c/o Wendi Palmer, PE, Civil Engineer 645 Holbrook Street Erie, Colorado 80516

#### RE: WASTEWATER COLLECTION SYSTEM MASTER PLAN

Dear Wendi:

Submitted herewith is the Wastewater Collection System Master Plan for the Town. The Master Plan should serve as a long-range planning tool for the Town's wastewater system, providing guidance for implementing capital improvements to meet future growth needs. The Plan has been based on development projections as established in the Comprehensive Plan and North Water Reclamation Facility Master Plan. The Planning Area Boundary has been adopted as a logical service area.

Conclusions reached during development of the Master Plan include:

- The Town will continue to experience significant growth, with a projected 2030 population of 54,300.
- Ultimate maximum day wastewater flow is estimated to be 10.6 MGD.
- Recommended improvements include both needed upgrades to address existing capacity issues and new trunk sewer extensions, interceptors, upgrades, and improvements needed to meet projected flow increases in the next 20 years.

We appreciate the opportunity to work with you on this important planning project.

**Merrick & Company** 

Clare Stummager, PE

Terry Kenyon, PE

Enclosure: Wastewater Collection System Master Plan







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# Section I – Introduction

# **Background**

The Town of Erie is located in Boulder and Weld Counties, north of the Denver Metro area and east of the City of Boulder. The Town provides wastewater collection and treatment for approximately 28,310 residents as well as several commercial and industrial developments. The existing system is comprised of approximately 110 miles of sanitary sewer mains, over 3,000 manholes, and 2 flow monitoring vaults at the treatment plant. The North Wastewater Reclamation Facility (NWRF) was completed in 2011, replacing the South Water Reclamation Facility (SWRF). Anticipated expansions to the NWRF will result in a new permitted capacity of 3.03 MGD.

In recent years, the Town has experienced substantial growth and planned development within its planning boundary. Growth will impact the existing wastewater utility, necessitating significant investment in new infrastructure. The Town recognizes the need to update its comprehensive wastewater collection system master plan to help guide the growth of its utility system.

The Town has several previous updates to its Wastewater Master Plan. Burns and McDonnell completed the Wastewater Utility Plan in 2015. This latest collection system master plan updated the 2013 Wastewater Utility Plan (Indigo Water Group LLC) and 2006 Water and Wastewater Master Plan (Black and Veatch). The 2015 Master Plan provides corrected population projections, based on the original 2005 Town of Erie Comprehensive Plan and 2015 population estimate. The 2013 Plan offers a limited discussion of the collection system and updated hydraulic model using Innovyze software; modeling showed the system to under 70% capacity and did not identify any surcharges. The plan recommended two interceptors and two lift stations to serve undeveloped areas in the future, with temporary lift stations serving outlying developments until the permanent interceptor/lift station system is built. The 2006 Plan was amended based on results of the first hydraulic model of the collection system in H2OMap Sewer. However, this model was not calibrated with flow monitoring data. This Plan recommended four lift stations and four interceptors, two of which have been built – NWRF interceptor and Kenosha Farms Lift Station Bypass (now decommissioned).

In 2019, HDR competed a Master Plan for the expansion of the Northern Water Reclamation Facility (NWRF). While this master plan focused on the treatment plant, updated population and growth estimates were included that will influence this collection system master plan.

# Purpose

The purpose of this Wastewater Collection System Master Plan is to update the predictions and recommendations established in the 2015 Wastewater Utility Master Plan, particularly for the wastewater collection system. Since the last master plan, numerous developments have been



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constructed, the Town's Comprehensive Plan was updated (2015), the Town's Land Use Plan Map was updated (2017), and possible areas for annexation were identified. This information was used to reassess ultimate wastewater flow projections and evaluate the wastewater collection system.

This Master Plan updates the existing water utility assets to reflect existing conditions of regional facilities including major interceptors. This updated Master Plan addresses changes and issues within the wastewater collection system specifically. The goals of this Wastewater Collection System Master Plan update are to:

- Review the previous reports and models.
- Review planned development and establish future wastewater flow loadings.
- Summarize flow monitoring data previously collected.
- Assess the condition and operations of the major trunk sewer mains.
- Create an up-to-date hydraulic model of the collection system using Innovyze InfoSewer software.
- Prepare preliminary level cost estimates and timeline for any improvement phases recommended within the next (approximately) 15 years.



# Section II – Design Criteria and Flow Projections

#### Service Area

The study area for the Wastewater Collection System Master Plan Update is the Planning Area Boundary (approximately 46 square miles) established by Erie's 2015 Comprehensive Plan plus probable areas of annexation as identified with staff, e.g. the Parkdale development area. This defines a logical boundary for efficient expansion of municipal services to undeveloped areas, providing a basis of inclusion for determining future demands. Additionally, residential areas currently on septic may connect to the collection system in the future and were considered as an alternative to the ultimate build-out analysis. The Town's service area is tributary to the NWRF and is shown in the Wastewater Collection System Master Plan Map on Figure WW-1. The total service area comprises approximately 39 square miles and includes current undeveloped areas.

# Land Use Planning and Growth Projections

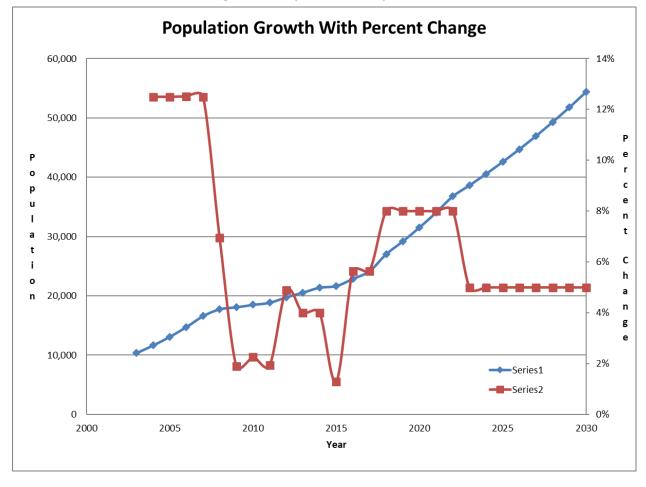
A number of planning and engineering reports have been completed over the last couple decades and have estimated current and projected growth and resulting population. Growth projections are based on the Town's various planning documents.

Merrick's analysis of the growth forecasts, combined with percent change, have been graphed on Figure 1. This illustrates the greatly varying growth experienced over the past 10 years. Years 2003 – 2007 showed growth well above 10% per year; yet, due to the economic downturn, the trend drastically decreased to approximately 2% per year in 2008 – 2012 and in 2015.

The previous Comprehensive Plan projected rapid growth: 6% through 2010 and a forecasted 4% average growth to build-out. The updated 2015 Comprehensive Plan revised its projected annual population growth to 3.3%, based on slow growth between 2012 and 2015. However, population growth rose again in 2016 and 2017 to 5.6%, so the previously forecasted 4% growth rate fits the average growth over the past 10 years.

As part of the 2019 NWRF Expansion Master Plan, HDR estimated future growth projections based on recent population data. From their analysis, the recommended population growth rate is 8% exponential growth rate until 2022, and then 5% exponential growth rate from 2023 and on. To be consistent across various master planning documents, Merrick has incorporated these growth rates and Figure 1 (below) illustrates the population and growth rate projections. The projected 2030 population is about 54,300.





**Figure 1: Population Projections** 

Population projections are frequently relied on for establishing wastewater flows. The assumption is that population increases are proportional to the wastewater usage (i.e. if population doubles, wastewater usage would also double). This approach is overly simplistic, particularly for communities where the relative mix of commercial and industrial customers with very different flow requirements, may change over time. The majority of Erie's existing and projected growth is residential, but there are several areas of commercial and industrial uses, especially along the Interstate 25 (I25) corridor.

The Equivalent Residential Unit (EQR) is considered to provide a more accurate estimate of historic and projected demands. This method uses a "common denominator" approach, establishing a typical single-family residence as one EQR, to equate wastewater flows for different user categories. More detail on EQR determination is provided in the Wastewater Flow Projections section.

Ultimate development projections, especially for undeveloped areas, were estimated from the land use categories and corresponding areas in the Town's 2015 Comprehensive Plan. The Land Use Plan

Map (updated 2017) is shown in Appendix A. The residential land use densities from the Comprehensive Plan are presented in Table 1 below:

**Table 1: Land Use Density** 

Land Use	Density
Rural Density	1 unit/acre
Low Density	4 units/acre
Medium Density	8 units/acre
High Density	16 units/acre
Mixed Use	50% Land Medium Density

# **Wastewater Flow Projections**

The Town's collection system serves single family and multi-family developments; various commercial developments, including restaurants and other retail establishments; some light industrial areas; and municipal facilities, such as schools, parks, and recreation centers. The wastewater flow varies diurnally (i.e. hourly, daily); design flows must be defined to properly design the collection system. Wastewater collection systems are typically analyzed for the following flow loadings: average day, maximum month, maximum day, and peak hour. The presence of inflow and infiltration (I/I) is another important component in understanding the temporal variations in wastewater flows.

The average day is used for estimating total water requirements based on average annual use. The maximum month is used to relate flows to the NWRF's discharge permit. The maximum day is the highest daily flow rate which can be expected and is used to size the water reclamation facility. The peak hour is the highest expected demand in any 60-minute period of one day and used to evaluate the collection system network, including mains, monitoring and lift stations.

# Maximum/Average Day Ratio

To establish the historical maximum month, the Town provided monthly wastewater influent flow records from the NWRF's for the years 2010-2017. Daily influent records between April 2016 – December 2018 (except for April 2017 when meter was offline) provided information on the average day, maximum day, and peak hour flows experienced at the NWRF. These flow records and the



relationship between average day, maximum month, maximum day, and peak hour flows were calculated and are shown in Table 2 below.

Max. Max. Peak Max. **Average** Month: Max. Day: Peak Hour: Month Day Day Hour Max. Avg. Avg. Year (MGD) (MGD) Day (MGD) Day (MGD) Day 2010 1.09 1.01 1.08 2011 1.19 1.07 1.10 2012 1.16 1.09 1.06 2013 1.67 1.22 1.38 2014 1.23 1.18 1.04 2015 1.50 1.25 1.20 2016 1.30 1.06 1.38 1.98 1.52 5.52 2.79 2017 1.60 1.42 1.12 2.66 1.86 4.89 1.84 2018 1.56 1.50 1.04 2.17 1.45 **MEAN** 1.07 1.61 2.32

**Table 2: Summary of NWRF Influent Flow Data** 

In recent years, the mean ratio of maximum day to average day flow has been 1.61, whereas the mean ratio of peak hour to maximum day flow is 2.32. The mean ratio of maximum month to average day flow over the past 9 years is 1.07.

The mean ratio of maximum day to maximum month is 1.50. This ratio was rounded to 2.0 for use with special cases such as schools, churches, municipal, and existing commercial properties to relate observed maximum month flow water use data to maximum day flows.

#### Peak Flow Demands

While wastewater flows vary throughout the day due to typical diurnal patterns, collection and transmission lines must be sized to handle the peak instantaneous flow rates. Peak wastewater flow rates are estimated by determining the average daily rate (for a maximum day) and then applying a peaking factor.

The Town's current design criteria specify that peaking factor shall not be less than 2.5 or greater than 5; the current Town peaking factor is calculated using the following equation:

$$PF = \frac{3.8}{ADF^{0.17}}$$
, where ADF is the average day flow in MGD.



Since peak flows are critical in appropriately designing the collection network, manhole monitoring would offer additional information on flow differences throughout the system. Merrick assisted the Town with manhole monitoring as part of a 2016-2017 Flow Monitoring Study. This study evaluated infiltration and inflow to the system leading to analysis of peaking factors throughout the collection system. This study is summarized in the Inflow/Infiltration Section below. As recommended in the Flow Monitoring Study, the analysis of peaking factors to-date have indicated that using the peaking factors from the City and County of Denver criteria would be more appropriate for determining Erie's collection system capacity. The City and County of Denver peaking factor is given by the formula:

$$PF = \frac{2.6}{ADF^{0.16}}$$
, where ADF is the average day flow on the Maximum Day in cfs.

# Infiltration and Inflow

Infiltration and inflow (I/I) also contribute to peak loadings experienced by the collection system. I/I must be limited because of its deleterious effects at the treatment facility and use of pipeline capacity.

In June 2016, the Town of Erie began monitoring sewer flow rates at 10 different manholes located throughout the collection system. The purpose of this study was to tabulate and evaluate the manhole monitoring data in order to investigate the effects of I/I on the system, as well as provide recommendations on additional actions to take to reduce I/I, if determined necessary. The Town does not have any permanent monitoring vaults, so monitoring equipment was contracted over the study period. Merrick aided the Town in data collection and analysis, culminating in Manhole Monitoring Evaluation Report (February 2018). This report is provided in Appendix B.

Initially, the data observed from June 2016 through February 2017 did not indicate any correlation between precipitation events and sewer flows throughout the collection system, both when considering daily flow trends as well as peak flows. However, monitoring data collected during the May 18, 2017 storm indicates that there are observable impacts of I/I on the system during a 7-year return period storm or during storm events, implying low lying manholes. Percentages of observed peak hour wastewater flow (PHWWF) attributed to rainfall derived infiltration/inflow (RDII) were between 25% and 70% at the monitoring locations. There was an estimated 50% RDII contribution for the entire system based on influent flows at the NWRF. Less significant storms (less than 1-year recurrence interval) observed over the study period did not correlate well with instances of peak flow at the monitoring locations.

By their nature, high-recurrence interval storms occur infrequently, making it unlikely to collect data on multiple storms with recurrence intervals greater than 1-year during a study period of 20 months. I/I response can also vary significantly from storm to storm, due to factors such as the spatial distribution of the rainfall and antecedent soil moisture conditions. This combination of a small



sample size with high sample variance results in a high degree of uncertainty for developing a predictive I/I model for capacity planning purposes. However, despite these limitations, incorporating the results into current system capacity modeling and design efforts are a significant improvement over not accounting for wet weather events in sewer capacity planning efforts or relying on typical I/I contribution values.

For this master plan, infiltration was incorporated into the EQR estimates per the land use type and flows found in the Town's design standards. An additional 20 gpd/EQR (unpeaked) was added to the maximum day flow. While it is highly unlikely for this storm event and the peak hour on the max day to occur at the same time, the conservative estimate of capacities will allow for longevity and resiliency in the collection system.

# Equivalent Flow per Residential Unit

The equivalent residential unit (EQR) is used to establish a "common denominator" approach to estimating demands. Relating the flow data to the number of existing service taps provides the calculated EQR for Erie. The Community Development Department provided updated numbers of constructed dwelling units by year. From this data, the maximum day flow per residential unit was calculated. Table 3 shows that the maximum day wastewater flow per residential unit is about 260 gpd. This figure is only slightly higher than the Town's current design criteria, i.e. 90 gpd per capita with 2.89 people per dwelling unit equals 248.4 gpd/EQR. Therefore, a value of 250 gpd/EQR was adapted for evaluating future developments.

**Table 3: Demand by Dwelling Unit** 

Year	Dwelling Units	Maximum Day Flow MGD	Maximum Day Flow per Residential Unit (gpd/EQR)
2016	8,203	1.98	241
2017	8,666	2.66	307
2018	9,000	2.17	241
Average			263
Master Plan			250

Dwelling units (2015-2017) based on building permit data.



An inventory of developable area was created based the Town's 2015 Comprehensive Plan, Land Use Plan Map (revised June 2017), and GIS information. See Appendix A for more information about the land use maps from the 2015 Comprehensive Plan.

Once developable parcels were identified, development density plans were referenced to determine local loads based on equivalent residential unit (EQR). In residential areas, development constitutes EQR per lot. The updated ultimate residential wastewater flow projection is:

In cases where specific residential development density information was not available, loads were calculated utilizing the Comprehensive Plan land use densities per area. As stated in the Comprehensive Plan, only 0.5% of the existing land use within Erie is commercial. However, almost 1,900 acres are assigned a land use of commercial/business in the Comprehensive Plan and the Land Use Plan. There were no specific high-water demands (and therefore high wastewater use) for industry identified in the Plan. The Town's current schedule for wastewater flow rates, which includes an allowance for infiltration, is provided in its sanitary sewer facility design standards and shown in Table 4 below:

**Table 4: Town of Erie Design Flow Criteria** 

User Type	Unit Wastewater Flow Rate
Residential	90 gpd/capita X 2.89 people/unit
Industrial	1,500 gpd/ acre
Commercial	1,000 gpd / acre
Park/Recreation	50 gpd / acre
Elementary Schools	15 gpd/ student
Middle/High Schools	20 gpd / student



Using water records and experience with similar systems, the updated the wastewater flow EQR schedule was developed to assign flows to undeveloped areas based on the 2015 Comprehensive Plan land use categories. The updated EQR schedule is presented in Table 5.

**Table 5: EQR Schedule** 

	Land Use Category	Loading (EQR/Acre)
	Rural Residential (RR)	1
Docidontial	Low Density Residential (LDR)	4
Residential	Medium Density Residential (MDR)	8
	High Density Residential (HDR)	16
NA: al III a	Mixed Use (MU)	4
Mixed Use	Downtown (DT)	4
	Neighborhood Commercial (NC)	4
Commercial	Community Commercial (CC)	4
	Regional Commercial (RC)	5
Business/	Business	4
Industrial	Industrial	6
School	School	2*

<sup>\*</sup> Existing schools used peak month flow with 2 safety factors. Future schools used 2 EQR/Acre if area was known, otherwise 25 EQR based on typical school use data.

This projection scenario does not include areas currently designated as Open Space or Agriculture or areas that are already served by other jurisdictions. Areas served by other jurisdictions or areas that will not be served by Erie in the future are shown hatched on the Wastewater Collection System Master Plan Map on Figure WW-1. Open space and agricultural areas were not included in wastewater loadings and are not called out on Figure WW-1. With the adjusted build-out projections, the Ultimate Maximum Day Flow for the Town of Erie is estimated to be 10.6 MGD. Table 6 presents the ultimate projected flows separated by customer classification.



**Table 6: Projected Wastewater Flows in Service Area** 

Customer Classification	EQR	Maximum Day Flow, gpd/EQR	Maximum Day Flow, gpd
Residential	30,695	250	7,673,750
Commercial	6,341	250	1,585,250
Industrial	4,704	250	1,176,000
Schools	375	250	93,750
Churches	38	250	9,500
Park/Recreation	70	250	17,500
Municipal / Other	40	250	10,000
	Estimated Maximun	n Day Flow	10,565,750

This projected build-out results in approximately 3 MGD greater flow than the previous Master Plan projected. This ultimate flow projection assumes extensive future growth; all recommended improvements should be based upon development and staged with appropriate trigger points.

This Master Plan also identified some existing homes with septic systems that may connect to the Town's collection system in the future. Under this scenario, an additional 0.15 MGD need to be added to the ultimate maximum day flow.

# **Section III – Existing Collection System**

# Basins/Sub-Basins

Fifteen drainage basins are identified in Figure WW-1. The existing collection system serves 9 of these basins, with 1 basin in development, and 5 undeveloped basins. Basins were further divided based on existing or future developments and their loading point locations. These subbasins are not included on Figure WW-1 for clarity.

#### Quantitative & Qualitative Assessment

The existing collection system consists of gravity pipelines; most of the system is relatively new and constructed of Polyvinyl Chloride (PVC). VCP in the "old Town" area have been lined using CIPP. The size range in the collection system is 6-inch to 36-inch diameter. There are approximately 591,600 lineal feet of pipe and 3,100 manholes currently installed.

The main collection interceptor (South Coal Creek) runs north through Town along Coal Creek and NE County Line Road to the NWRF. Other major existing collection mains include the West Side Interceptor, 119<sup>th</sup> Street (Orchard Glen) Interceptor, County Road 3 (Colliers Hill) Interceptor, and Coal Creek (Erie Parkway) Interceptor.

Since the collection system is relatively new and mostly constructed with PVC pipe, it is probable that manholes are the primary contributor of I/I. The results of the manhole monitoring evaluation suggest that I/I are not a regular concern for the collection system but high intensity storm events during the monitoring period did affect the peak hour wastewater flows. Town operators have also noted influent increases at the NWRF following snow fall events, which indicates that snowmelt may be pooling around manholes and entering the collection system. The Town has expressed interest in infiltration dishes to minimize inflow into sanitary sewer manholes.

The Town is developing rapidly with planned developments along Erie Parkway in the east, along Jay Road in the west, along Colorado Highway 7 in the south, and along I-25 and State Highway 52 in the northeast.

#### **Lift Stations**

The Town does not have any lift stations currently in service that serve along interceptors. The Kenosha Lift Station was decommissioned in 2010 when the NRWF was installed. However, there is a local lift station in Vista Ridge Filing 6 that connects to local sewers and eventually to the 10" in Bonanza Drive. This lift station was not part of the interceptor analysis. It is shown on Figure WW-1.



#### **Treatment Facilities**

The Town's North Water Reclamation Facility (NWRF) was constructed in 2010 north of State Highway 52, on the north side of Town. The NWRF has a permitted capacity of 1.5 MGD and 3,233 pounds BOD5 per day. The Town is currently in design to increase the NWRF's capacity to 3.03 MGD and 9,376 pounds BOD5 per day. The facility includes headworks screening and grit removal, staged aeration basins, clarifiers, effluent filters, and ultraviolet (UV) disinfection system. The effluent outfalls to the South Boulder Creek. During summer months, the NWRF facility reuses about 50% to 60% of its effluent to irrigate properties throughout Town via its non-potable water distribution system. The NWRF has a dedicated reservoir and pump station for returning reclaimed water to the non-potable water system.

The Town also owns the decommissioned South Water Reclamation Facility (SWRF) located north of downtown on Briggs Street.



# **Section IV – Collection System Master Plan**

#### Overview

The goal of the Wastewater Collection System Master Plan is to present an optimum system design – and provide overall guidance for extension of service for projected ultimate development.

Construction of future trunks, located schematically on Figure WW-1, should be undertaken on a schedule as dictated by development. The trunks have been laid out to provide gravity service, and to utilize existing capacity where applicable. The sizes noted on Figure WW-1 for ultimate trunks are to be considered approximate. Actual development would govern required sizing and should be reviewed during the design process.

# **Design Criteria**

To facilitate analysis and evaluation of the regional trunks and interceptors, the service area was segregated into basins and sub-basins. Basin boundaries are primarily dictated by existing flow patterns and topography to allow for gravity flows whenever possible.

## Pipe Capacities

Gravity sewer capacities are a function of pipe size, slope, and to some extent, pipe material and condition. Sewers should be designed to maintain a minimum velocity of 2.0 feet per second (fps), based on full pipe.

It is generally accepted practice to design new sewers at about 50 percent of pipe capacity (0.50 d/D or safety factor of 2) for 12-inch and smaller sewers and about 0.70 d/D for larger sewers. For evaluation of existing sewers, judgement is used in applying safety factors, i.e. we would not replace a sewer just because it was over 70 percent capacity.

#### Construction

The Town of Erie requires all new sewer mains to be PVC with a minimum 8-inch diameter. Since gravity sewers are greatly influenced by pipe slope and size, it is important for all sewer pipes to be installed correctly to maintain proper slopes. The proposed pipe sizes shown on Figure WW-1 are recommended sizes and actual development would govern final sizing requirements. For developments with future developments upstream, sewers shall be constructed for full build-out conditions as the Town will not be responsible for upsizing pipes in the future.



# **Hydraulic Modeling**

#### **Description**

Merrick used the Town's latest GIS information to update the Innovyze InfoSewer hydraulic model of the collection system. Additional information about the existing system was acquired through as-built construction plans and field visits. Conflicts in pipe sizes, lengths, or inverts were resolved with Town staff or as-built information. Existing and ultimate flows were used to evaluate the capacity of the pipes.

For the ultimate build-out conditions, existing pipes that connect known future developments to the existing interceptors were included in the modeling. Proposed pipes for several developments were also included in the model based on preliminary designs. These pipes are designated as "Planned Development" on the Master Plan in Figure WW-1.

For ultimate build-out conditions, conceptual level design for sewers were included in the hydraulic model, intended to help determine the viability of the master plan. More detailed design should be completed based on actual development plans (prior to construction). The typical depth for proposed sewer interceptors has been based on providing gravity service for basements, typically about 12-feet. However, in some areas along the I25 and Highway 52 (HWY52) corridors, the cover is shallower or deeper depending on topography. Final slopes must be confirmed during preliminary design.

#### **Assumptions and Calibration**

For all modeled pipes, a Manning's roughness coefficient of 0.012 was assumed, as the majority of the existing system is PVC.

This Master Plan model was loaded for max day flows with the Denver Peaking Factor. Loads were determined based on existing lots (residential), existing flows (schools, commercial, etc.), and Comprehensive Plan land use category flows. Loads were then applied to appropriate manholes in the model.

## **Analysis and Discussion**

The majority of the collection system has adequate capacity for ultimate build-out conditions. For items with marginal or inadequate capacities, please refer to the item numbers discussed and their corresponding location on the Wastewater Collection System Master Plan on Figure WW-1. Model manhole and pipe output tables are presented in Appendix C.



## Capacity Analysis

### **Adverse Slopes**

Based on the information provided by the Town through GIS data and as-built information, several sewers with either flat (0 percent) or adverse (negative) slopes were identified. In existing conditions, these slopes impact interceptor capacity locally, but could become problematic with future development. It is recommended that these sewers be further evaluated to address capacity issues with future development and replaced if determined necessary. Table 7 below describes the location and condition of the adverse or flat sloped pipes. The Map Number specified in the table corresponds to the location of these pipes on Figure WW-1.

**Table 7: Adverse or Flat Slopes** 

Map Number	Pipe ID	Interceptor Location Basin Description		Size (in)	Length (ft)	Slope (ft/ft)
1	TOE_2787-EVF4_46	West Side	South of Erie Village	21	495	0
2	TOE_2786-TOE_2784	West Side	West Side South of Erie Village		505	0
3	TOE_2781-TOE_2782	West Side	119 <sup>th</sup> St North of Jasper Road	18	388	0
4	TOE_2774-TOE_2775	West Side	North of Jasper Road, West of 119 <sup>th</sup> St	18	352	-0
5	OTF1_89-OTF1_90	Old Town	Along Evans St.	8	329	-0.007
6	TOE_2744-TOE_2591	Old Town	Under Coal Creek	30	437	0

#### **Pressurized Pipe**

In addition to the adverse or flat sloped pipes, there are several instances where existing pipes exceed capacity and become pressurized with ultimate build-out loadings, see Table 8 on the following page. This is typically due to these pipes having flatter slopes than upstream or downstream pipes. The Map Number specified in the table corresponds to the location of these pipes on Figure WW-1.



Table 8: Pressurized Pipes (d/D>1.0)

Map Number	Pipe ID	Interceptor Basin	Location Description	Size (in)	Length (ft)	Slope (ft/ft)
7	ECF4_134-ECF4_135	Canyon Creek	South of Erie Parkway	12	301	0.0017
8	TOE_2715 to TOE_2717	West Side	111 <sup>th</sup> St	10	282	0.004
9	TOE_2711 to TOE_2710	West Side	111 <sup>th</sup> St	10	701	0.004

# **Marginal Capacity**

There are also several instances where existing pipes exceed capacity criteria (above 50 percent full for 12-inch and smaller pipes or 0.70 d/D for larger pipes) and become marginal at ultimate build-out. The Town should monitor the sewers in Table 9 below. The Map Number specified in the table corresponds to the location of these pipes on Figure WW-1.

**Table 9: Marginal Capacity Pipes** 

Map Number	Pipe ID	Interceptor Basin	Location Description	Size (in)	Length (ft)	Slope (ft/ft)	d/D (max)
10	TOE_2904 to NWRF	Northwest	Southeast of NWRF	36	368	0.001/ 0.002	0.796
11	ECF21_120 to ECF4_134	Canyon Creek	Along Mason St near Austin Ave	12	2,407	0.005	0.653
12	TOE_2730 to TOE_2750	West Side	Erie Pkwy and 111 <sup>th</sup> St	10/ 12	1,922	0.002	0.809
13	TOE_2724 to TOE_2726	West Side	111 <sup>th</sup> St south of Erie Pkwy	10	800	0.007	0.665
14	TOE_2718 to TOE_2721	West Side	111 <sup>th</sup> St south of Erie Pkwy	10	1,204	0.004/ 0.009	0.807
15	TOE_2711-TOE_2715	West Side	111 <sup>th</sup> St North of Prince Lake No. 2	10	183	0.005	0.718



Map Number	Pipe ID	Interceptor Basin	Location Description	Size (in)	Length (ft)	Slope (ft/ft)	d/D (max)
16	TOE_2710-TOE_2712	West Side	111 <sup>th</sup> St East of Prince Lake No. 2	10	173	0.004	0.815
17	TOE_2948-TOE_2849	South Coal Creek	Near Coal Creek downstream of Compass	18	340	0.001	0.773

#### **Build-Out Capacity Discussion**

#### West Side Interceptor

For map items 1-4, it is recommended that actual slopes of these pipes be verified. If they do not have adequate slopes, it is recommended these sections of the West Side Interceptor be replaced.

#### **Old Town**

The 8-inch sewer along Evans in Old Town (map item 5) appears to have an adverse slope. It is recommended to verify the slope in the field and replace if it is adverse.

The 30-inch sewer under Coal Creek (map item 6) is pressurized, but there is sufficient drop upstream, so the pressurization is local to that pipe only and will not impact upstream interceptors. The cost/benefit to replace this pipe under the creek is not justified.

#### Canyon Creek Interceptor

The 12-inch system near the Coal Creek Center between Erie Parkway and Bonnell Avenue (map items 7 and 11) has marginal capacity and 301 feet of pressurized pipe. This system should be monitored and be considered for replacement if the loadings upstream are greater than what was assumed in this master plan.

### West Side and 111th Street Interceptor

The 10 and 12-inch system along 111<sup>th</sup> Street from near Prince Lake Number 2 to just north of Erie Parkway (map items 8-9 and 12-16) has capacity issues at full build-out conditions including marginal and pressurized pipe. The only proposed development that adds loads to this interceptor for build-out conditions is the Nine Mile Development at Arapahoe Road and 111<sup>th</sup> Street. Service to Nine Mile was previously reviewed by Merrick on behalf of the Town.



Although several portions of the 111<sup>th</sup> Street interceptor exceed the design criteria of d/D<0.5 for 12" or smaller pipes, this sewer can safely surcharge if necessary, with the flows from Nine Mile. Therefore, it may not be necessary to replace these over-capacity pipes. As mentioned in our previous analysis, these pipes should be monitored as development occurs. However, any additional development or addition of septic systems must come in downstream (north) of Prince Lake.

#### **NWRF** Interceptor

Near the NWRF, the existing 36-inch sewer (map Item 10) above the junction with the future 36-inch sewer is close to capacity. However, because the depth of flow approaches an acceptable level within a short distance upstream (based on an analysis of the hydraulic grade line), and no service connections are anticipated, this is considered acceptable. The Town should monitor this sewer as development occurs to verify adequate capacity.

#### South Coal Creek/ Parkdale Interceptor

Capacity of the existing 18-inch sewer connecting the Compass development to the Coal Creek Interceptor (map item 17) becomes marginal with build-out of Parkdale (2,072 EQR). This pipe and those downstream should be monitored as new developments occur.

## **Build-Out Proposed Interceptors**

Alignments for proposed interceptors under build-out conditions were determined based on the drainage basins discussed in Section III. Recommended sizes for these interceptors were determined using the hydraulic model.

#### Highway 52 and I-25 Interceptors

Interceptors along I-25 and along Highway 52 will be needed to serve developments along these two major thoroughfares. The Town provided a preliminary alignment for these interceptors (marked "18" on Figure WW-1). This alignment would likely result in sewers over 40 feet deep in places due to varied topography. Excessively deep sewers are not recommended because excavation and maintenance would be expensive, access to pipes limited, and safety concerns. Merrick has shown an alternative alignment that would provide an interceptor less than 30 feet deep without any lift stations. This alignment was used for hydraulic analysis and recommended improvements for this corridor. An additional alternative alignment (marked "19" on Figure WW-1) could further reduce the depth of the proposed interceptor.



#### Weld County Road 5/7 Interceptors

Although there are several existing developments within the Weld County Road (WCR) 5 and 7 drainage basins, they are currently on septic systems. New developments within these drainage basins would require new interceptors.

While the proposed interceptors typically follow the exiting drainage patterns, there are two areas south of the Scotts Acre development (approximately northwest of WCR 10 and WCR 7) that were rerouted. These areas topographically drain to the northeast to WCR 7 (map item 20). However, unless the Scotts Acre development converts from septic to Town sanitary sewers, it would be difficult to connect the south areas to the proposed WCR 7 system. It is possible for these areas to go against grade and be a part of the WCR 5 system. The model shows that the 12-inch/15-inch WCR 5 system would have the capacity to include this area. See Figure WW-1 that shows this system.

# **Lift Stations**

There are currently no lift stations that serve along the major interceptors. There is a lift station in Vista Ridge Filing 6, but it was not included in the interceptor analysis since it is serves local flows. Previous Master Plans have proposed several lift stations to serve Erie. However, Merrick's Master Plan proposes gravity sewer pipe to serve the Town. Temporary or local lift stations may be needed to serve outlying developments in interim conditions.

The Town should avoid lift stations when at all possible due to higher possibilities of overflows and backups, increased maintenance requirements, and regulatory complications. The Town should require gravity collection systems whenever possible.

#### Septic Systems Connection

There are several existing developments within the planning boundary that use septic systems for their wastewater. There is potential in the future that these communities may want to connect to the Town's collection system. The additional loads from areas with septic systems were added to the ultimate buildout as a separate scenario. The additional septic loads did not significantly affect the hydraulics of the ultimate build-out system and so no additional changes for pipe improvements are recommended to include these areas. Manhole and pipe results tables for the septic/ultimate scenario are presented in Appendix C.

However, there is a potential for nutrient credits to the NWRF permit with the increase in nutrients from converting the septic systems to the Town's collection system. Analysis of individual conversions and impact on the reclamation facility should be conducted prior to inclusion in the Town's system.



# **Section V – Conclusions/Recommendations**

#### General

Components of the collection system with capacity issues at full build-out are shown on Figure WW-1, Wastewater Collection System Master Plan. The Recommended Improvements described below outline future improvements to serve the growing population within the planning area. While small diameter interceptors and laterals can be constructed by developers, the Town should take an active role in the development, construction, and funding of major (regional) interceptors to serve currently undeveloped portions of the planning area.

The utilities have been laid out to accommodate probable roadways/corridors, to provide gravity service, and to utilize existing facilities where applicable, but should be considered schematic. Actual development will govern final routing and required sizing and should be reviewed during the predesign process. Long range planning is a continuing process since development never occurs at the exact location, pace, or densities predicted. Preliminary comprehensive planning should, therefore, take place before significant investments in new wholesale facilities.

Two categories of recommended improvements were identified: capacity improvements and development driven extensions.

- Capacity Improvements: Projects needed to address capacity issues in the collection system.
   These upgrades would include addressing pipe sizes and slopes to provide pipes that meet design criteria.
- Development Driven Improvements: New sewer extensions, new interceptors, upgrades, and improvements needed to meet projected flow increases in the next 20 years due to development.

## **Preliminary Cost Estimates**

Preliminary capital cost estimates for the recommended improvements are presented in Table 10. These capital cost estimates are based on similar projects, engineering experience, and other standard cost-estimating methods. Contingencies and engineering/administrative costs were included in the capital cost estimates at 25-percent. All recommendations and costs are preliminary, and more detail should be completed during pre-design to establish pipe sizes, alignments, slopes, and costs based on the actual conditions.

# **Capacity Improvements**

The collection system upgrades are to improve the capacity within the system by addressing pipe size or slopes of surcharging pipes. These improvements include portions of the West Side Interceptor and Canyon Creek Interceptor.



# Development Driven Improvements and Value Engineering

As new development occurs with connections to the collection system, the Town should continue to require developers to provide adequate capacity for future upstream development. Proposed interceptors identified for build-out conditions include major interceptors along Highway 52, I-25, Weld County Road (WCR) 5, and WCR 7. Development along Highway 52 and/or I-25 will trigger these improvements. Additionally, the South Coal Creek interceptor would serve Parkdale and other nearby developments. These proposed interceptors are shown on Figure WW-1. Development within these tributary basins will trigger these improvements.

Table 10: Capital Improvements Plan Recommendations and Opinion of Capital Costs

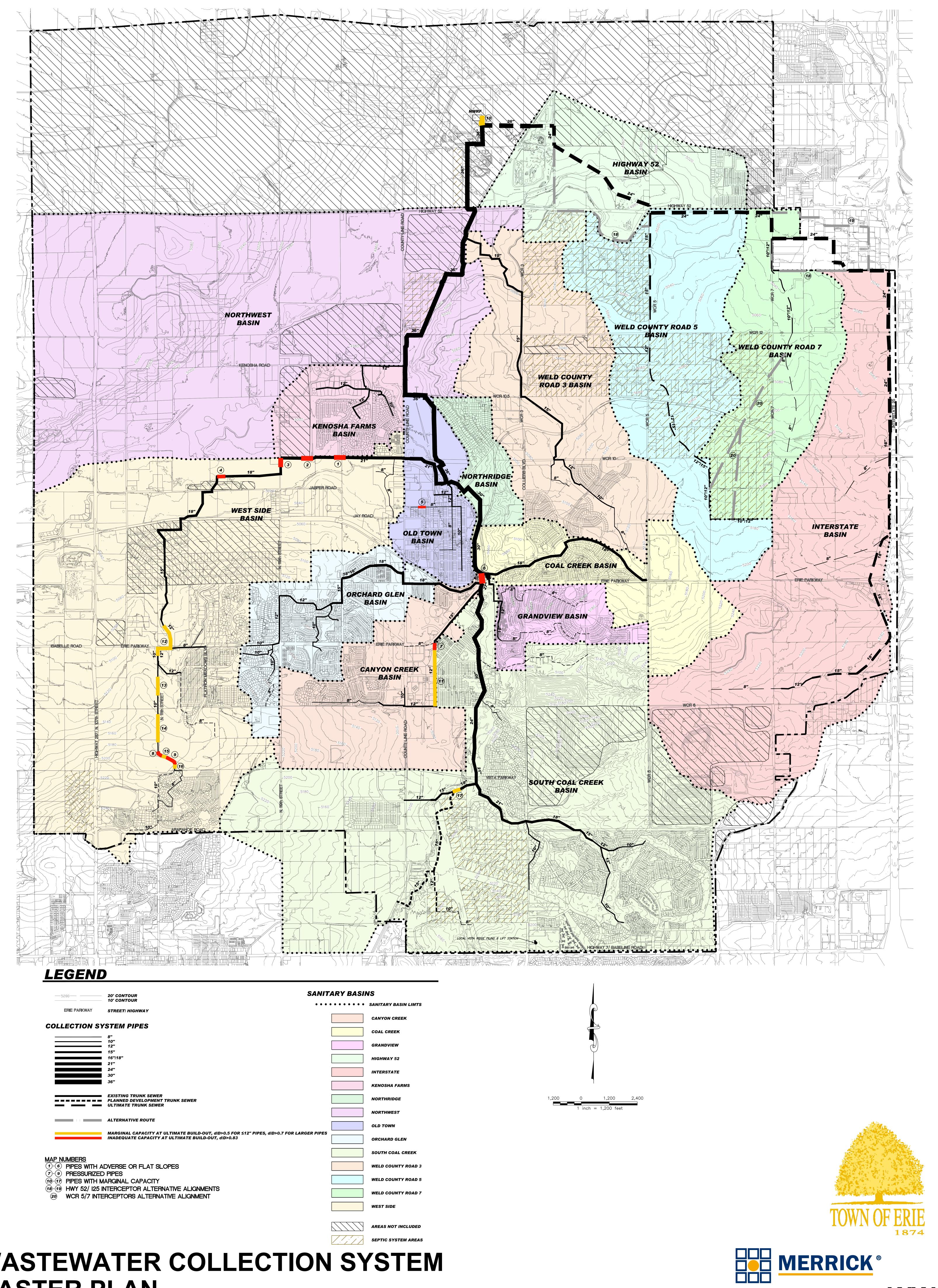
ltem	Map Number (See Figure WW-1)	Type of Improvement	Description	Opinion of Capital Costs* (\$)	Trigger for Project Initiation**
West Side Interceptor Capacity Improvements	1-4	Capacity	Replace approximately 612 feet of 18-inch sewer, 2,002 feet of 21-inch sewer, and upsize 683 feet of 18-inch to 21-inch sewer at appropriate slopes.	\$1,211,000	Developments upstream of Arapahoe Ridge and Flatiron Meadows
Canyon Creek Interceptor Capacity Improvements	7, 11	Capacity	Replace approximately 2,710 feet of 12-inch sewer with 15-inch sewer from Bonnell Ave to Erie Parkway along Mason St.	\$762,000	Development upstream of Canyon Creek
South Coal Creek Interceptor		Development Driven	Install approximately 7,800 feet of 8-inch, 10-inch, 12-inch and 15-inch sewers.	\$1,862,000	Parkdale, Fuller, or Sierra Vista developments.
Highway 52 Interceptor		Development Driven	Install approximately 14,400 feet of 24-inch and 36-inch sewer from NRWF along HWY 52 to WCR 7.	\$7,000,000	**Developments along Highway 52
Interstate Interceptor		Development Driven	Install approximately 39,500 feet of 8-inch, 12- inch, 15-inch and 24-inch sewer from HWY 52 & WCR 7, along I-25 to WCR 6.	\$12,129,000	**Development along I-25



ltem	Map Number (See Figure WW-1)	Type of Improvement	Description	Opinion of Capital Costs* (\$)	Trigger for Project Initiation**
Weld County Road 5 Interceptor		Development Driven	Install approximately 16,200 feet of 10-inch, 12- inch, and 15-inch sewer from HWY 52 along WCR 5 to south of WCR 10.	\$3,402,000	**Development along WCR 5
Weld County Road 7 Interceptor		Development Driven	Install approximately 10,600 feet of 8-inch and 10-inch sewer from HWY 52 along WCR 7 to WCR 10.	\$1,749,000	**Development along WCR 7

<sup>\*</sup>All Budgets include 25% for contingencies, engineering, inspection, legal and administrative costs.

<sup>\*\*</sup> May be constructed in phases depending on location and timing of developments.



WASTEWATER COLLECTION SYSTEM MASTER PLAN

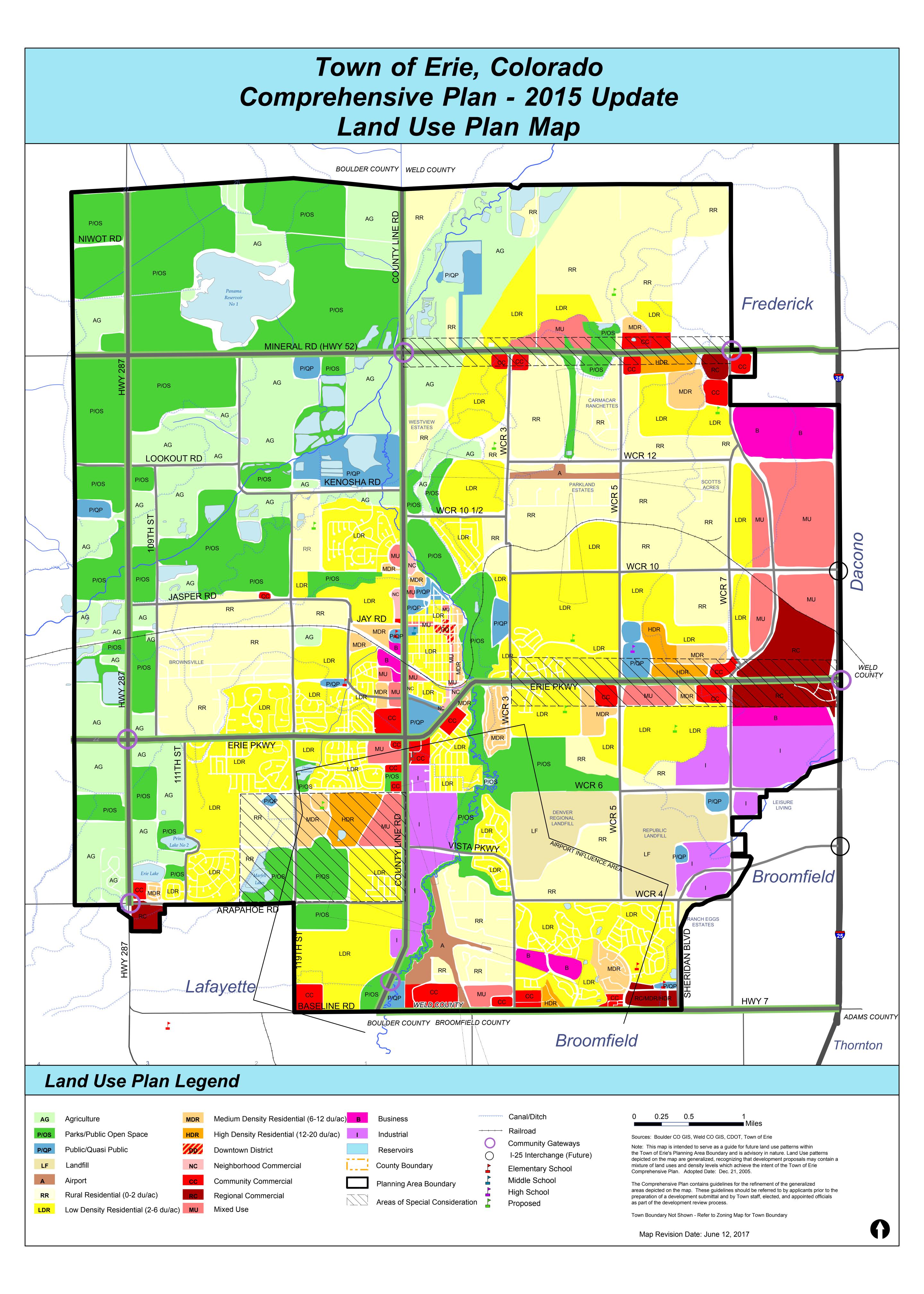


# **APPENDICES**



Appendix A – Land Use Maps





Appendix B – Manhole Monitoring Evaluation Report





2480 W. 26<sup>th</sup> Avenue, Unit B225 Denver, Colorado 80211 Tel: +1 303-964-3333 Fax: +1 303-964-3355

www.merrick.com

February 13, 2017

Town of Erie c/o Wendi Palmer and Matt Wiederspahn 645 Holbrook St. Erie, CO 80516

**Subject:** Re: Erie Manhole Monitoring Evaluation

Dear Wendi and Matt:

Attached is the final report on the monitoring and evaluation efforts for the Town of Erie's sewer collection system. The period of study covers 20 months of monitoring data from 10 manhole meters, beginning June 2016 and ending in January 2018.

Our analysis consists of both dry weather and wet weather flow characterization. Dry weather flows have been characterized by base sanitary flow, base infiltration, and total average dry weather flow at each monitoring location. We have also analyzed peaking factors for dry weather peak day and peak hour flow rates.

Wet weather flows have been characterized by peak hour rainfall derived inflow and infiltration. There was one significant storm over the study period, which occurred on May 18<sup>th</sup>, 2017 and had an estimated 7-year recurrence interval. Rainfall derived inflow and infiltration for this storm accounted for approximately 50% of observed peak flow at Erie's North Water Reclamation Facility. Less significant storms (less than 1-year recurrence interval) observed over the study period did not correlate well with instances of peak flow at the monitoring locations.

Based on the amount of inflow and infiltration observed in the May 18<sup>th</sup> storm, we recommend including an allocation for wet weather flows in future capacity planning for the Town of Erie's sewer collection system, dependent on the Town's desired level of service. We also recommend an investigation to determine the cause of wet weather inflow and infiltration and possible corrective measures.

Yours truly, MERRICK & COMPANY

Steven Walton, EIT

Terry Kenyon, PE Principal/Senior Project Manager

# 1 Introduction

# 1.1 Background

In June 2016, the Town of Erie began monitoring sewer flow rates at 10 different manholes located throughout Erie's sewer collection system. The purpose of this study is to tabulate and evaluate the manhole monitoring data, investigate the effects of infiltration and inflow (I/I) on the system, and provide recommendations on additional actions to take to reduce I/I if determined necessary. Peaking factors were also evaluated, as prior to these monitoring efforts, collection system peak flow rates were based primarily on published peaking data.

This report provides a final update on the monitoring and evaluation efforts through the end of the data collection period, which began in June 2016 and ended in January 2018.

#### 1.2 Previous Studies

A previous monitoring update was provided to the Town of Erie by Merrick in April 2017, which included data through February 2017. The conclusions drawn by the monitoring update were:

- Peak hour and max day events did not coincide with wet weather events for the period monitored.
- A regression analysis on the effects of precipitation on average daily flow rate, as well as peak
  hour flow rates, indicated there was no significant correlation between rainfall events and
  increased sewer flows.

Based on these results, the small (less than 1-year recurrence interval) storms observed from June 2016 through February 2017 had little to no observable effects on sewer flows. Due to the availability of new monitoring data, which includes an estimated 7-year recurrence interval storm in May 2017, this wet weather assessment has been revised to consider effects of high recurrence interval storms on flows in the system.

# 2 Data

#### 2.1 Manhole Locations

Monitoring data was collected at 10 manholes. Table 1 lists the manhole ID for each monitoring site, as well as the corresponding aliases ('A', 'B'...), which will be used for this report.

Table 1: Manhole ID's

Manhole ID	Alias
SMH-37	A
SSMH-2A	В
MH-58	С
SSMH-VR1	D
MH-16	Е
MH-3	F
MH-5	G
MH-4G	Н
SSMH-VR26.A	I
SMH-VR37	J

A map of the collection system showing the location of each manhole is included as Figure 1.

# 2.2 Metering Data

Metering data for flow rate, velocity, depth, and temperature were recorded at each site at 15-minute intervals, beginning in June 2016 and ending in January 2018.

#### 2.3 Precipitation Data

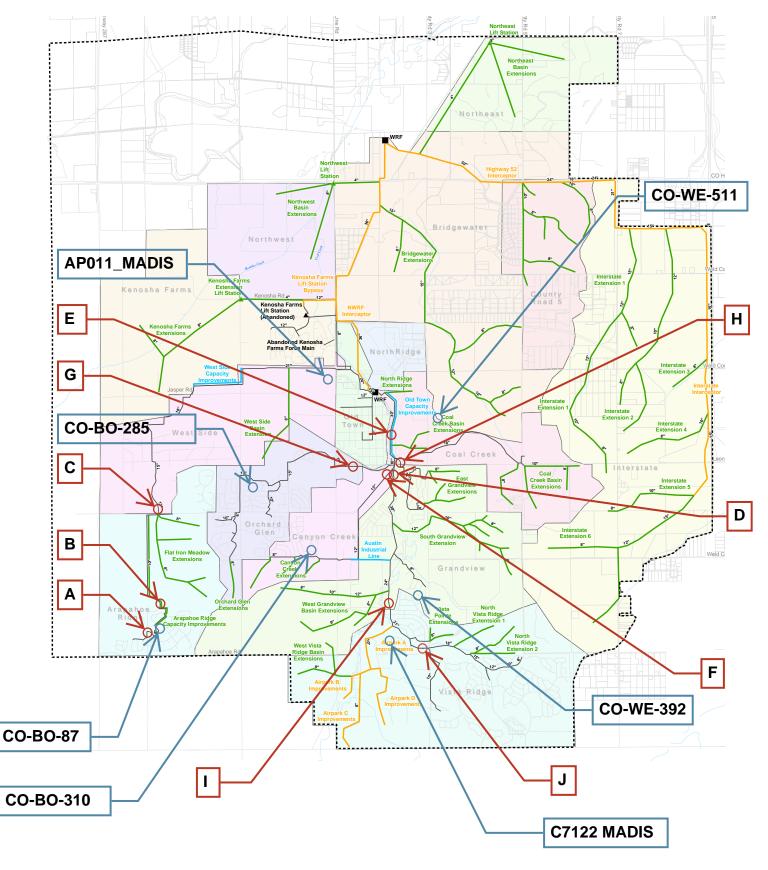
Precipitation data at 1-hour intervals was obtained from National Operational Hydrologic Remote Sensing Center (NOHRSC) Station CO-BO-285, including both non-snow precipitation and snow melt events. The location of the station is shown on the collection system map in **Figure 1**.

# 2.4 Plotting of Raw Data

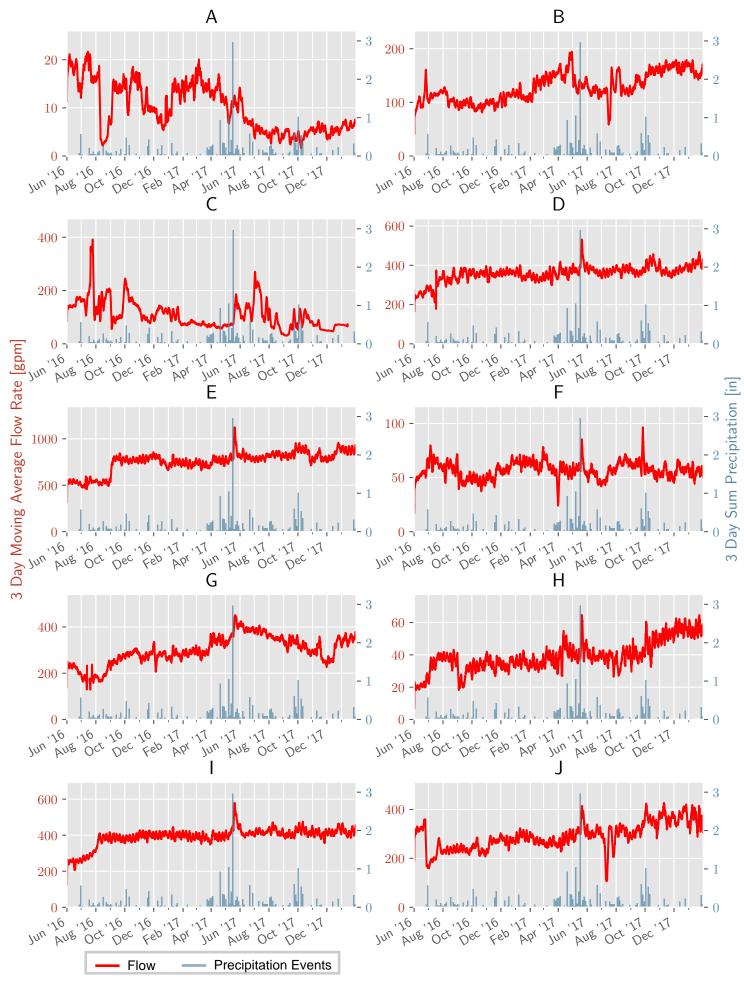
A summary plot of all monitoring data from June 2016 to January 2018 is included as **Figure 2**. More detailed monthly plots are included in **Appendix A**.

#### 2.5 Diurnal Patterns

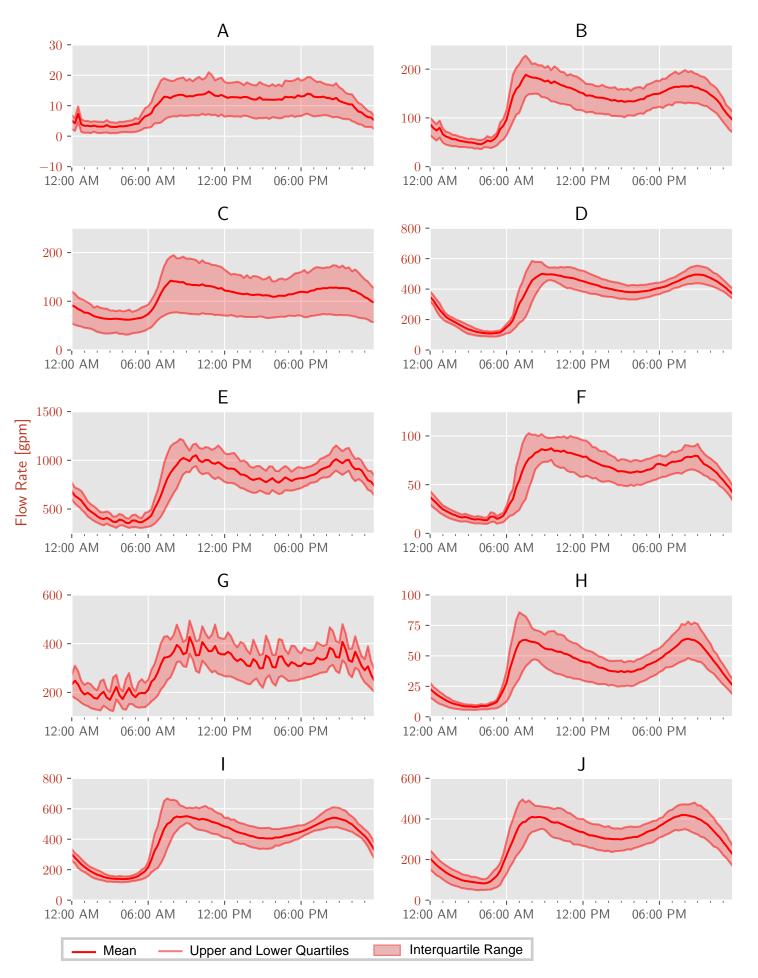
A plot of mean diurnal flow patterns through each monitoring location is shown in **Figure 3**. The interquartile range (25%-75%) is included in these plots to aid in visualizing the typical range in variability at each monitoring location.



**Figure 1:** Map of manhole monitoring locations and weather stations. Manhole locations are marked in red, weather stations are marked in blue. Map sourced from Town of Erie Wastewater Utility Plan, Jan 2013.



**Figure 2**: Plot of 3 day moving averages for manhole monitoring flow data from June 2016 to January 2018. Precipitation data was sourced from NOAA, Station SHEF ID CO-BO-285.



**Figure 3**: Plot of mean diurnal flow patterns through monitoring locations, based on data from June 2016 - January 2018. The shaded area is the interquartile range (25% - 75%), used here to show the typical variability in diurnal peaks.

# 3 Analysis

### 3.1 Average Dry Weather Analysis

Average dry weather (ADWF) flows consist of flows observed in the system outside of direct influence of individual rainfall events. ADWF at each monitoring location was determined by taking the median value of daily average flows over the course of the monitoring period.

ADWF can be characterized into two components:

- Base Sanitary Flow (BSF) Daily average flow in the system attributed to sanitary wastewater
- Base Infiltration (BI) Dry weather infiltration not directly influenced by rainfall events

It is possible to estimate what flows in the system are sanitary flows versus infiltration flows using the Steven-Schutzbach method, which compares the minimum hourly flows observed in the system overnight to the average flow in the system. The rationale behind this method is that flows observed during times of minimum use, typically between midnight and 4 AM, largely consist of infiltration flow. The percentage of minimum overnight flows attributed to infiltration is a function of basin size, with larger basins having a smaller percentage of infiltration.

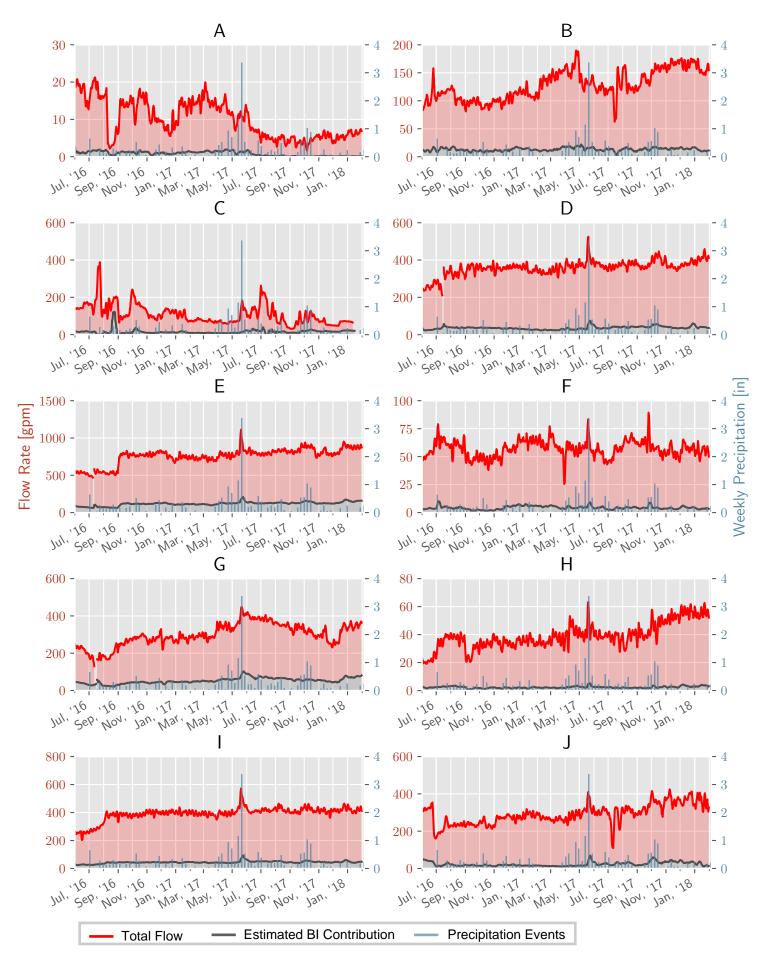
The Stevens-Schutzbach method does not account for industrial or commercial wastewater sources that may produce consistent flows overnight. In basins with significant industrial users, this method will typically overestimate the contribution of infiltration.

The characterization of system BSF, BI, and ADWF is provided in **Table 2**.

Table 2: Dry Weather Flow Characterization

ID	Base Sanitary Flow (gpm)	Base Infiltration (gpm)	Average Dry Weather Flow (gpm)	Percentage of Average Dry Weather Flow due to Infiltration
A	8	1	9	11%
В	111	13	124	10%
С	77	15	92	16%
D	327	35	362	10%
Е	657	121	778	16%
F	54	4	58	7%
G	245	51	296	17%
Н	36	2	38	5%
I	354	44	398	11%
J	267	19	286	7%

Since these calculations are based on median daily mean and minimum flows, the results capture flows for a typical dry weather day, with approximately half of the days over the study period having greater ADWF or BI, and half having less. To understand how infiltration might vary seasonal, BI was also determined on a rolling basis over the study period. Results are plotted in **Figure 4**.



**Figure 4**: Rolling estimate of base infiltration (BI) contribution to total flow through the study period. BI did not appear to depend strongly on seasonal variations; however, an increase in BI was observed in some manholes following wet weather in May 2017 and September 2017.

## 3.3 Dry Weather Peaking Factors

For determination of peaking factors, dry weather flows were characterized into average day, max day, and peak hour flows. Values for each manhole are plotted in **Figure 5**. Max day and peak hour flows were determined as the 95<sup>th</sup> percentile flows to occur over the monitoring period.

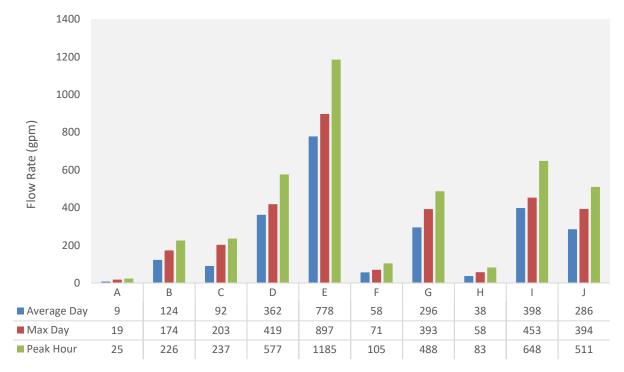


Figure 5: Dry Weather Peak Flows

Peaking factors based on the ratio of max day to average day, and peak hour to max day, are provided in **Table 3**.

Table 3: Max Day and Peak Hour Peaking Factors

ID	Peaking Factor (Max Day: Average Day)	Peaking Factor (Peak Hour: Max Day)
A	2.1	1.3
В	1.4	1.3
С	2.2	1.2
D	1.2	1.4
Е	1.2	1.3
F	1.2	1.5
G	1.3	1.2
Н	1.5	1.4
Ι	1.1	1.4
J	1.4	1.3

#### 3.4 Wet Weather Events

A comparison of the five most significant storm events over the study period and their respective recurrence intervals is provided below in **Table 4.** <sup>1</sup>

Table 4: Recurrence Intervals of Most Significant Storm Events

Date	Magnitude (in)	<b>Duration (hrs)</b>	Recurrence Interval
			(yrs)
21-Apr-17	0.9	27	0.1
8-May-17	0.8	9	0.4
18-May-17	2.7	30	6.6
23-Jun-17	0.5	5	0.1
2-Oct-17	1.0	20	0.2

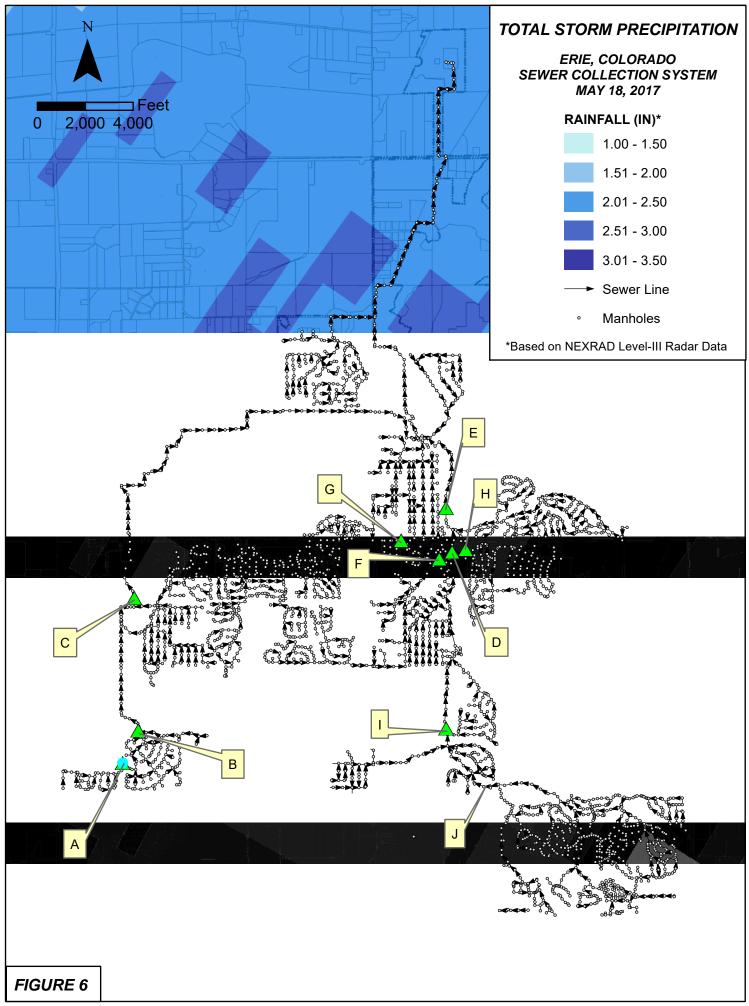
The May 18<sup>th</sup>, 2017 storm had three characteristics which make it a strong candidate for wet weather flow analysis:

- The 2.7 inches of rainfall over a 30-hour period observed during this storm marks an approximate 7-year recurrence interval storm. This was the only storm observed with a recurrence interval greater than 1-year, which is typically the minimum to be considered valuable for analysis of rainfall driven I/I.
- Mapping of the distribution of total storm precipitation based on NEXRAD radar data indicated that the storm was well-distributed over the study area (See **Figure 6**). While some basins received higher concentrations of rainfall than others (I, J, and H), the overall distribution of the storm is well-suited for system-wide I/I analysis.
- The storm correlated well with observed peaks in manhole flow meters, in addition to peak influent flows observed at the North Water Reclamation Facility (NWRF).

A plot of the flows observed at each monitoring location during the May 18<sup>th</sup> storm is provided in **Figure 7** and **Figure 8**.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Storm recurrence intervals were calculated from NOAA Atlas 14 Point Precipitation Frequency Estimates for the Town of Erie. Regression analysis was used to interpolate between storm duration and magnitude values provided by NOAA. It's important to note that recurrence intervals on storm events have wide confidence intervals. The 90% confidence interval on the Atlas 14 values puts the storm recurrence for the May 18<sup>th</sup> storm between 3.5 and 18.4 years.

<sup>&</sup>lt;sup>2</sup> Some peaking occurred at manhole meters later in the week which did not correspond with any wet weather events (see Figures 7 and 8). For manhole C, this was attributed to debris which interfered with flow meter accuracy. Some peaking was also observed on manholes F, G, H, I, and J on May 21. This may have been related to increased number of visitors to Erie during its annual town fair, and was likely not I/I related.



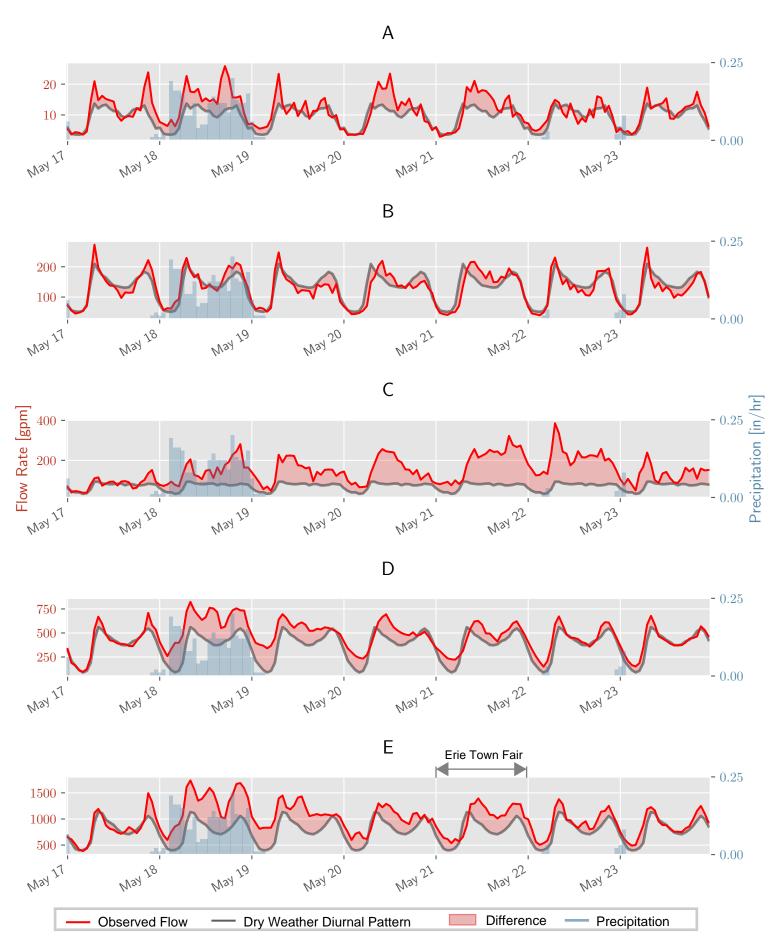


Figure 7: Plot comparing sewer flows for manhole monitors A, B, C, D, and E on May 17 through May 23, 2017 with mean diurnal flow patterns of the previous two weeks.

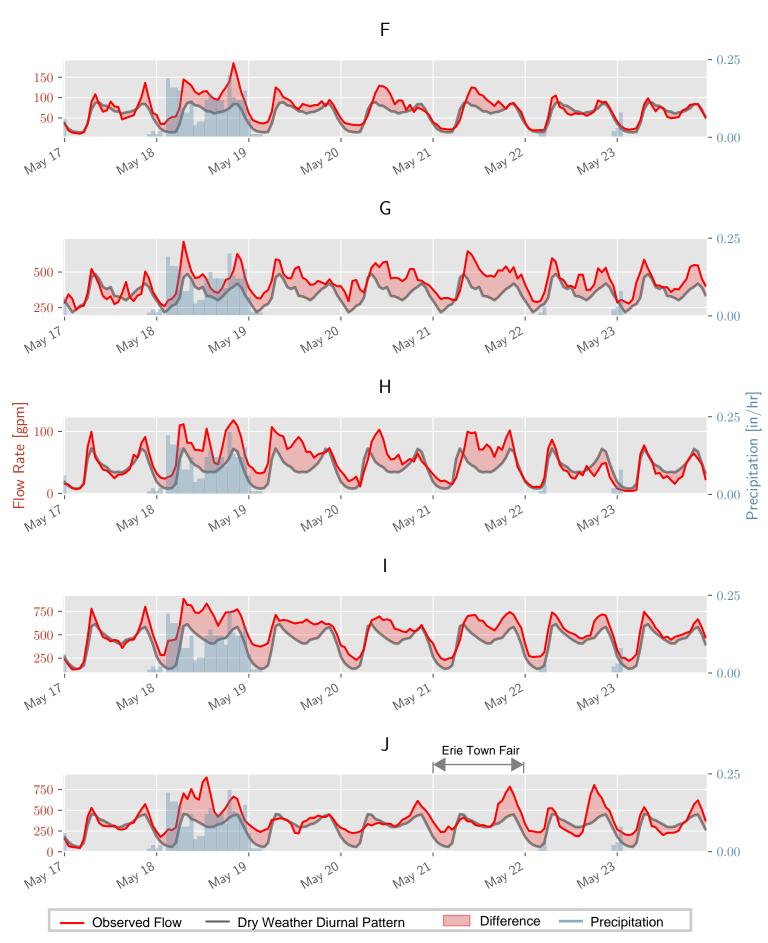


Figure 8: Plot comparing sewer flows for manhole monitors F, G, H, I, and J on May 17 through May 23, 2017 with mean diurnal flow patterns of the previous two weeks.

### 3.4 Wet Weather Analysis

Peak Hour Wet Weather Flow (PHWWF) can be characterized into two components:

- **Dry weather flow (DWF)** The portion of observed peak wet weather flows attributed to normal dry weather sanitary and infiltration flows.
- Rainfall-derived inflow and infiltration (RDII) The additional flows in the system attributed to inflow and infiltration caused by the storm event.

The DWF component for the May  $18^{th}$  storm was determined by calculating mean diurnal flow patterns at each manhole location during the two weeks prior to the storm (May  $3^{rd} - 17^{th}$ ). During this period, there were no rainfall events with significant I/I response, making this approach appropriate for determining DWF contributions.

To determine RDII contribution, DWF is subtracted from PHWWF based on the hour of observed peak flow.

The calculated DWF, RDII, and PHWWF of each monitoring basin during the May 18<sup>th</sup> storm are provided in **Table 5**.

Table 5: Wet Weather Flow Characterization

ID	Dry Weather Flow (gpm) <sup>3</sup>	Rainfall-Derived Inflow and Infiltration (gpm)	Total Peak Hour Wet Weather Flow (gpm)	Percentage of Peak Flow due to Rainfall- Derived Inflow and Infiltration
A	11	15	26	58%
В	146	49	195	25%
$C^4$	75	206	281	73%
D	356	398	754	53%
Е	787	808	1595	51%
F	84	101	185	55%
G	471	243	714	34%
Н	32	73	105	70%
I	413	420	833	50%
J	294	603	897	67%
NWRF Influent	1214	1230	2444	50%

<sup>&</sup>lt;sup>3</sup> Dry weather flow is estimated at the hour of peak RDII contribution

<sup>&</sup>lt;sup>4</sup> Meter data for manhole C during the storm was not reliable due to debris interfering with the flow meter sensor. Flow at monitor C was erratic for the period of May 17 – 23 compared to the diurnal pattern at C observed during the two previous weeks, and the peak flows did not correspond well with the May 18 rainfall event. See **Figure 7**.

## 4 Discussion

The availability of new monitoring data collected during the May 18, 2017 storm indicates that there are observable impacts of I/I on the system during a 7-year return period storm. Apart from manhole C, which was not producing reliable data at the time of the storm, percentages of observed PHWWF attributed to RDII were between 25% and 70% at the monitoring locations. There was an estimated 50% RDII contribution for the entire system based on influent flows at the NWRF.

#### Recommendations based on these results:

- An allowance for wet weather flow may be appropriate when revising collection system design
  criteria. This allowance would be determined by estimating RDII contribution for a selected
  design storm based on Erie's desired level of service for example, providing an allowance for a
  5-year or 10-year storm. Monitoring data from the observed 7-year storm could be scaled to the
  selected design storm if there is sufficient availability of historical wet weather influent flow data
  at the NWRF.
- We recommend an investigation to determine the cause of wet weather I/I and possible corrective
  measures. Assumptions based on the predominately newer PVC sewer mains, saddles, and wye
  taps is that manholes may be the primary contributor of I/I.

If an allowance for I/I is incorporated into Erie's collection system capacity model, the limitations of this study and its extendibility are an important topic of discussion. By their nature, high-recurrence interval storms occur infrequently, making it unlikely to collect data on multiple storms with recurrence intervals greater than 1-year during a study period of 20 months. I/I response can also vary significantly from storm to storm, due to factors such as the spatial distribution of the rainfall and antecedent soil moisture conditions. This combination of a small sample size with high sample variance results in a high degree of uncertainty for developing a predictive I/I model for capacity planning purposes.

However, despite these limitations, incorporating the results into current system capacity modeling and design efforts would be a significant improvement over not accounting for wet weather events in sewer capacity planning efforts or relying on typical I/I contribution values.

Appendix C – Model Manhole and Pipe Output Tables



	ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
	AIF1_119	5,068.710	0.000	0.000	0.000	5,058.002	Not Full	Yes	-0.628	10.708
	ARF1_12	5,190.400	0.000	0.000	0.000	5,179.325	Not Full	Yes	-0.361	11.075
	ARF1_16	5,191.000	0.000	0.000	0.000	5,181.046	Not Full	No	-0.440	9.954
	ARF1_17	5,195.200	0.000	0.000	0.000	5,184.039	Not Full	No	-0.428	11.161
	ARF1_2	5,190.990	0.000	0.000	0.000	5,173.835	Not Full	Yes	-0.568	17.155
	ARF1_28	5,201.050	0.000	0.000	0.000	5,189.726	Not Full	No	-0.470	11.324
	ARF1_29	5,202.190	0.000	0.000	0.000	5,190.762	Not Full	No	-0.445	11.428
	ARF1_3	5,188.520	0.000	0.000	0.000	5,176.105	Not Full	No	-0.402	12.415
	ARF1_31	5,204.680	0.000	0.000	0.000	5,193.923	Not Full	No	-0.424	10.757
	ARF1_32	5,205.700	0.000	0.000	0.000	5,194.954	Not Full	No	-0.412	10.746
	ARF1_33	5,208.560	0.000	0.000	0.000	5,197.197	Not Full	No	-0.430	11.363
	ARF1_34	5,209.050	0.000	0.000	0.000	5,198.223	Not Full	No	-0.394	10.827
	ARF1_35	5,209.820	0.000	0.000	0.000	5,198.953	Not Full	Yes	-0.384	10.867
	ARF1_36	5,213.560	0.000	0.000	0.000	5,201.344	Not Full	No	-0.422	12.216
П	ARF1_37	5,213.040	0.000	0.000	0.000	5,202.254	Not Full	No	-0.402	10.786
	ARF1_4	5,189.400	0.000	0.000	0.000	5,178.020	Not Full	No	-0.456	11.380
	ARF2_1	5,214.270	0.000	0.000	0.000	5,205.588	Not Full	No	-0.418	8.682
	ARF2_2	5,217.170	59,250.218	225,620.011	0.000	5,206.685	Not Full	No	-0.401	10.485
Ħ	BFF1_61	5,112.000	0.000	0.000	0.000	5,100.440	Not Full	No	-0.667	11.560
Ħ	BFF1_62	5,110.000	0.000	0.000	0.000	5,098.440	Not Full	No	-0.667	11.560
Ħ	BFF1_63	5,110.000	16,750.074	67,000.295	0.000	5,096.848	Not Full	No	-0.529	13.152
Ħ	CCF3_39E	5,127.025	0.000	0.000	0.000	5,116.649	Not Full	No	-0.599	10.376
Ħ	CCF3_60	5,134.515	0.000	0.000	0.000	5,123.515	Not Full	No	-0.833	11.000
Ħ	CCF3_60A	5,126.015	42,999.824	167,114.552	0.000	5,118.147	Not Full	No	-0.602	7.868
Ħ	CCF4_41	5,130.900	36,750.226	144,266.023	0.000	5,119.318	Not Full	No	-0.428	11.582
	CCF4_42	5,139.500	0.000	0.000	0.000	5,127.781	Not Full	No	-0.536	11.719
Ħ	CCF4_43	5,148.430	0.000	0.000	0.000	5,136.711	Not Full	No	-0.536	11.719
Ħ	CCF4_44	5,154.330	0.000	0.000	0.000	5,142.559	Not Full	No	-0.518	11.771
Ħ	CCF4_45	5,160.270	0.000	0.000	0.000	5,148.499	Not Full	No	-0.518	11.771
	CCF6_105	5,098.110	68,749.894	255,135.505	0.000	5,086.989	Not Full	No	-0.741	11.121
Ħ	CCF6_106	5,098.070	0.000	0.000	0.000	5,082.063	Not Full	No	-0.737	16.007
Ħ	CCF6_610	5,118.330	0.000	0.000	0.000	5,107.882	Not Full	No	-0.454	10.448
Ħ۱	CCF6_611	5,120.270	0.000	0.000	0.000	5,109.711		No	-0.446	10.559
Ħ۱	CCF6_612	5,123.450	0.000	0.000	0.000	5,112.276		No	-0.451	11.174
ΠI	CCF6 613	5,124.860	0.000	0.000	0.000	5,113.857		No	-0.429	11.003
ΠI	CCF6_614	5,125.820	0.000	0.000	0.000	5,114.978		No	-0.418	10.842
Ħ	CCF6_615	5,110.580	0.000	0.000	0.000	5,095.868		No	-0.842	14.712
Ħ	CCF6_68	5,111.480	0.000	0.000	0.000	5,098.505		No	-0.452	12.975
Ħ	CCF6_69	5,113.690	0.000	0.000	0.000	5,102.377		No	-0.450	11.313
H	CCF9_46	5,168.820	31,499.988	125,071.153	0.000	5,150.273		No	-0.463	18.547
H	CFF1_17	5,094.225	0.000	0.000	0.000	5,082.878		No	-0.917	11.347

	ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
П	CFF1_18	5,096.025	0.000	0.000	0.000	5,085.215	Not Full	No	-0.920	10.810
	CFF1_19	5,097.625	0.000	0.000	0.000	5,086.753	Not Full	No	-0.912	10.872
	CFF1_19B1	5,098.735	0.000	0.000	0.000	5,087.701	Not Full	No	-0.734	11.034
	CFF1_19B2	5,100.735	0.000	0.000	0.000	5,088.805	Not Full	No	-0.720	11.930
	CFF1_20	5,101.125	0.000	0.000	0.000	5,089.657	Not Full	No	-0.708	11.468
	CFF1_21	5,103.925	33,750.707	133,299.782	0.000	5,091.990	Not Full	No	-0.705	11.935
	CFF1_22	5,106.175	0.000	0.000	0.000	5,093.649	Not Full	No	-0.716	12.526
	CFF1_22A	5,112.405	0.000	0.000	0.000	5,100.576	Not Full	No	-0.662	11.829
	CFF1_22B	5,106.965	0.000	0.000	0.000	5,095.236	Not Full	No	-0.662	11.729
Ħ	CFF1_22C	5,104.765	56,250.699	215,559.751	0.000	5,093.015	Not Full	No	-0.583	11.750
Ħ	CFF1_22D	5,107.255	0.000	0.000	0.000	5,095.055	Not Full	No	-0.833	12.200
Ħ	CFF1_22E	5,106.875	0.000	0.000	0.000	5,096.885	Not Full	No	-0.833	9.990
Ħ	CFF1_22F1	5,108.455	0.000	0.000	0.000	5,098.345	Not Full	No	-0.833	10.110
Ħ	CFF1_23	5,105.785	0.000	0.000	0.000	5,095.077	Not Full	No	-0.728	10.708
Ħ	CFF1 24	5,106.475	0.000	0.000	0.000	5,096.245	Not Full	No	-0.730	10.230
Ħ	CFF1_25	5,107.655	0.000	0.000	0.000	5,097.640	Not Full	No	-0.725	10.015
Ħ	CFF1_26	5,110.015	0.000	0.000	0.000	5,100.236	Not Full	No	-0.729	9.779
Ħ	CFF1_27	5,113.825	0.000	0.000	0.000	5,103.561	Not Full	No	-0.734	10.264
Ħ	CFF1 28	5,116.225	0.000	0.000	0.000	5,105.491	Not Full	No	-0.734	10.734
Ħ	CFF1 29	5,122.135	0.000	0.000	0.000	5,109.231	Not Full	No	-0.784	12.904
Ħ	CFF1_30	5,125.325	0.000	0.000	0.000	5,114.991	Not Full	No	-0.784	10.334
Ħ	CFF1_31	5,128.455	0.000	0.000	0.000	5,116.591	Not Full	No	-0.734	11.864
Ħ	CHF1A_22	5,068.620	73,249.892	269,117.000	0.000	5,055.729	Not Full	No	-1.271	12.891
Ħ	CHF1A_23	5,070.640	0.000	0.000	0.000	5,052.429	Not Full	No	-1.281	18.211
Ħ	CHF1A_24	5,052.800	0.000	0.000	0.000	5,042.267		No	-1.233	10.533
Ħ	CHF1A_25	5,050.970	0.000	0.000	0.000	5,039.092	Not Full	No	-1.208	11.878
Ħ,	CHF1A_A1A	5,049.900	0.000	0.000	0.000	5,038.203	Not Full	No	-1.207	11.697
Ħ	CHF1A_C1	5,075.600	0.000	0.000	0.000	5,061.558	Not Full	No	-1.362	14.042
Ħ	CHF1B_12	5,105.600	0.000	0.000	0.000	5,083.475	Not Full	No	-1.335	22.125
Ħ.	CHF1B_14A	5,122.490	0.000	0.000	0.000	5,101.902	Not Full	No	-1.338	20.588
	CHF1B_15A	5,119.230	0.000	0.000	0.000	5,102.501	Not Full	No	-1.199	16.729
Ħ	CHF1B_17	5,116.660	0.000	0.000	0.000	5,099.145		No	-1.295	17.515
Ħ	CHF1B_18	5,112.550	22,999.671	91,998.685	0.000	5,096.847		No	-1.343	15.703
Ħ	CHF1B_20	5,085.470	0.000	0.000	0.000	5,073.889		No	-1.331	11.581
Ħ	CHF3A_15	5,125.860	0.000	0.000	0.000	5,103.823		No	-1.247	22.037
Ħ.	CHF3A_15B	5,119.230	0.000	0.000	0.000	5,103.134		No	-1.246	16.096
Ħ	CHF3C_8	5,125.190	0.000	0.000	0.000	5,115.959		Yes	-1.331	9.231
Ħ	CHF3C 9	5,124.720	0.000	0.000	0.000	5,114.465		No	-1.325	10.255
Ħ	CMF2_22G	5,109.075	0.000	0.000	0.000	5,099.925		No	-0.833	9.150
Ħ	CMF2_32	5,114.005	0.000	0.000	0.000	5,102.206		No	-0.642	11.799
H	CMF2_33	5,113.055	0.000	0.000	0.000	5,103.012		No	-0.606	10.043

ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
CMF2_34	5,113.115	0.000	0.000	0.000	5,103.346	Not Full	No	-0.602	9.769
CMF2_35	5,114.465	0.000	0.000	0.000	5,104.086	Not Full	Yes	-0.613	10.379
CMF2_36	5,117.345	0.000	0.000	0.000	5,107.009	Not Full	No	-0.659	10.336
CMF2_37	5,118.695	0.000	0.000	0.000	5,108.362	Not Full	No	-0.656	10.333
CMF2_38	5,119.295	0.000	0.000	0.000	5,108.931	Not Full	No	-0.647	10.364
CMF2_39	5,120.035	0.000	0.000	0.000	5,109.725	Not Full	No	-0.643	10.310
CMF2_39A	5,121.225	0.000	0.000	0.000	5,110.348	Not Full	Yes	-0.600	10.877
CMF2_39B	5,120.725	0.000	0.000	0.000	5,114.184	Not Full	No	-0.674	6.541
CMF2_39C	5,124.225	0.000	0.000	0.000	5,114.960	Not Full	No	-0.598	9.265
CMF2_39D	5,128.225	0.000	0.000	0.000	5,115.709	Not Full	No	-0.599	12.516
COMPF1_101	5,102.060	38,000.146	148,835.729	0.000	5,084.557	Not Full	No	-0.803	17.503
CSF1_C2A	5,068.715	0.000	0.000	0.000	5,050.047	Not Full	Yes	-1.018	18.668
CSF1_C2C	5,068.425	0.000	0.000	0.000	5,050.264	Not Full	No	-1.141	18.161
CSF1_C3A	5,080.635	0.000	0.000	0.000	5,068.089	Not Full	No	-1.056	12.546
CSF1_C3B	5,076.545	0.000	0.000	0.000	5,066.925	Not Full	No	-1.030	9.620
CSF1_C4B	5,073.805	0.000	0.000	0.000	5,065.272	Not Full	No	-1.063	8.533
CSF1_C5B	5,073.395	0.000	0.000	0.000	5,063.404	Not Full	No	-1.081	9.991
CSF1 C6C	5,069.785	18,074.873	72,299.493	0.000	5,062.424	Not Full	Yes	-1.011	7.361
ECF1_100	5,047.600	0.000	0.000	0.000	5,025.105	Not Full	No	-1.865	22.495
ECF1 102	5,047.000	0.000	0.000	0.000	5,024.670	Not Full	No	-1.850	22.330
ECF1_108	5,032.950	107,999.959	373,521.459	0.000	5,017.805	Not Full	No	-2.025	15.145
ECF1_118	5,028.750	0.000	0.000	0.000	5,020.704	Not Full	No	-0.586	8.046
ECF1_119	5,026.890	0.000	0.000	0.000	5,018.156	Not Full	No	-0.574	8.734
ECF1 2271	5,029.400	1,350.719	5,402.878	0.000	5,010.139	Not Full	Yes	-1.631	19.261
ECF1_24	5,038.000	0.000	0.000	0.000	5,027.704	Not Full	No	-1.696	10.296
ECF1_25	5,035.470	0.000	0.000	0.000	5,026.250	Not Full	No	-1.820	9.220
ECF1_26	5,036.230	0.000	0.000	0.000	5,023.676	Not Full	No	-1.934	12.554
ECF1_27	5,033.480	0.000	0.000	0.000	5,022.012	Not Full	No	-2.058	11.468
ECF1_28	5,032.150	0.000	0.000	0.000	5,014.642	Not Full	No	-2.028	17.508
ECF1_29	5,030.800	0.000	0.000	0.000	5,011.389	Not Full	No	-1.981	19.411
ECF1 44	5,039.800	0.000	0.000	0.000	5,027.050	Not Full	No	-1.700	12.750
ECF1_97	5,040.000	0.000	0.000	0.000	5,026.677	Not Full	No	-1.723	13.323
ECF1A2_131	5,060.000	22,374.712	89,498.846	0.000	5,048.664	Not Full	No	-0.666	11.336
ECF1A2_132	5,059.800	0.000	0.000	0.000	5,046.505		Yes	-0.625	13.295
ECF21 120	5,065.390	1,175.040	4,700.158	0.000	5,055.905	Not Full	No	-0.655	9.485
ECF21_121	5,065.000	0.000	0.000	0.000	5,054.642		Yes	-0.638	10.358
ECF21_123	5,065.000	0.000	0.000	0.000	5,053.222		No	-0.658	11.778
ECF21_124	5,065.000	0.000	0.000	0.000	5,051.695		No	-0.655	13.305
ECF21_130	5,062.000	0.000	0.000	0.000	5,050.197		Yes	-0.633	11.803
ECF21_131	5,050.560	0.000	0.000	0.000	5,033.259		No	-0.508	17.301
ECF21_132	5,050.500	0.000	0.000	0.000	5,032.163		No	-0.503	18.337

ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
ECF21_133	5,050.800	0.000	0.000	0.000	5,029.790	Not Full	Yes	-1.710	21.010
ECF21_22A	5,054.700	0.000	0.000	0.000	5,032.988	Not Full	No	-1.522	21.712
ECF21_23	5,050.000	0.000	0.000	0.000	5,029.278	Not Full	No	-1.722	20.722
ECF21_24	5,050.000	0.000	0.000	0.000	5,029.550	Not Full	No	-1.710	20.450
ECF21_9	5,047.000	17,749.433	70,997.733	0.000	5,028.509	Not Full	No	-1.791	18.491
ECF3_217	5,026.385	0.000	0.000	0.000	5,017.166	Not Full	Yes	-0.939	9.219
ECF3_218	5,027.535	0.000	0.000	0.000	5,015.946	Not Full	No	-0.989	11.589
ECF4_133	5,060.500	0.000	0.000	0.000	5,044.542	Not Full	No	-0.638	15.958
ECF4_134	5,053.280	0.000	0.000	0.000	5,042.484	Not Full	Yes	-0.496	10.796
ECF4_135	5,056.270	22,174.552	88,698.207	0.000	5,041.726	Not Full	No	-0.794	14.544
ECF5_204	5,046.995	0.000	0.000	0.000	5,036.054	Not Full	No	-1.121	10.941
ECF5_205	5,049.085	0.000	0.000	0.000	5,035.126	Not Full	No	-1.121	13.959
ECF5_208	5,047.375	0.000	0.000	0.000	5,032.694	Not Full	No	-1.121	14.681
ECF5_209	5,042.395	0.000	0.000	0.000	5,032.204	Not Full	Yes	-0.971	10.191
ECF5_213	5,046.395	0.000	0.000	0.000	5,031.644	Not Full	No	-0.971	14.751
ECF5_214	5,041.285	17,749.433	70,997.733	0.000	5,031.050	Not Full	No	-0.995	10.235
ECF5_215	5,041.125	0.000	0.000	0.000	5,029.538	Not Full	No	-1.137	11.587
ECF5_216	5,036.155	0.000	0.000	0.000	5,023.037	Not Full	No	-1.138	13.118
EHF1_2	5,109.900	0.000	0.000	0.000	5,099.100	Not Full	No	-0.667	10.800
EHF1_3	5,108.400	0.000	0.000	0.000	5,100.300	Not Full	No	-0.667	8.100
EHF1_4	5,112.700	0.000	0.000	0.000	5,101.700	Not Full	No	-0.667	11.000
EHF1_5	5,115.000	0.000	0.000	0.000	5,103.400	Not Full	No	-0.667	11.600
EHF1_6	5,118.300	0.000	0.000	0.000	5,106.900	Not Full	No	-0.667	11.400
EHF1_7	5,127.100	0.000	0.000	0.000	5,114.500	Not Full	No	-0.667	12.600
EHF1_8	5,131.700	0.000	0.000	0.000	5,120.300	Not Full	No	-0.667	11.400
EHF10_11	5,145.910	0.000	0.000	0.000	5,131.710	Not Full	No	-0.667	14.200
EHF10_12	5,147.180	0.000	0.000	0.000	5,132.750	Not Full	No	-0.667	14.430
EHF10_13	5,149.870	0.000	0.000	0.000	5,134.970	Not Full	No	-0.667	14.900
EHF10_14	5,149.450	0.000	0.000	0.000	5,136.140	Not Full	No	-0.667	13.310
EHF10_15	5,150.380	0.000	0.000	0.000	5,137.370	Not Full	No	-0.667	13.010
EHF10_16	5,151.800	0.000	0.000	0.000	5,138.570	Not Full	No	-0.667	13.230
EHF10_17	5,152.630	0.000	0.000	0.000	5,139.320	Not Full	No	-0.667	13.310
EHF10_18	5,153.120	0.000	0.000	0.000	5,139.820	Not Full	No	-0.667	13.300
EHF11_146	5,162.560	0.000	0.000	0.000	5,146.200	Not Full	No	-0.667	16.360
EHF11_147	5,158.690	0.000	0.000	0.000	5,145.180	Not Full	No	-0.667	13.510
EHF11_148	5,153.110	0.000	0.000	0.000	5,143.060	Not Full	No	-0.667	10.050
EHF3_10	5,147.800	0.000	0.000	0.000	5,136.200	Not Full	No	-0.667	11.600
EHF3_11	5,159.100	0.000	0.000	0.000	5,146.400	Not Full	No	-0.667	12.700
EHF3_12	5,169.300	0.000	0.000	0.000	5,149.400	Not Full	No	-0.667	19.900
EHF3_42	5,168.000	0.000	0.000	0.000	5,150.400	Not Full	No	-0.667	17.600
EHF3_9	5,136.500	0.000	0.000	0.000	5,125.000	Not Full	No	-0.667	11.500

	ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
	EHF4_1	5,109.600	0.000	0.000	0.000	5,098.600	Not Full	No	-0.667	11.000
	EHF7_1	5,166.480	0.000	0.000	0.000	5,151.430	Not Full	No	-0.667	15.050
	EHF7_6	5,164.680	0.000	0.000	0.000	5,153.030	Not Full	No	-0.667	11.650
	EHF9_1	5,078.280	0.000	0.000	0.000	5,068.280	Not Full	No	-0.667	10.000
	EHF9_10	5,140.060	0.000	0.000	0.000	5,128.020	Not Full	No	-0.667	12.040
	EHF9_19	5,155.080	0.000	0.000	0.000	5,141.550	Not Full	No	-0.667	13.530
	EHF9_2	5,102.420	0.000	0.000	0.000	5,085.790	Not Full	No	-0.667	16.630
	EHF9_3	5,107.570	0.000	0.000	0.000	5,095.570	Not Full	No	-0.667	12.000
	EHF9_4	5,118.840	0.000	0.000	0.000	5,103.440	Not Full	No	-0.667	15.400
	EHF9_5	5,127.680	0.000	0.000	0.000	5,115.660	Not Full	No	-0.667	12.020
	EHF9_6	5,127.520	0.000	0.000	0.000	5,116.990	Not Full	No	-0.667	10.530
	EHF9_7	5,137.990	0.000	0.000	0.000	5,123.580	Not Full	No	-0.667	14.410
	EHF9_8	5,137.740	0.000	0.000	0.000	5,125.420	Not Full	No	-0.667	12.320
Ħ	EHF9 9	5,139.150	0.000	0.000	0.000	5,127.150	Not Full	No	-0.667	12.000
Ħ	EP_1	5,194.550	0.000	0.000	0.000	5,181.800	Not Full	No	-0.667	12.750
Ħ	EP 2	5,134.160	0.000	0.000	0.000	5,120.810	Not Full	No	-0.667	13.350
Ħ	EP 3	5,114.460	0.000	0.000	0.000	5,101.610	Not Full	No	-0.667	12.850
Ħ	EVF1 7	4,998.450	47,001.582	181,744.981	0.000	4,988.419	Not Full	No	-0.564	10.031
Ħ	EVF1A1_51	5,012.830	0.000	0.000	0.000	4,996.911	Not Full	No	-1.269	15.919
Ħ	EVF1A1_52	5,010.640	0.000	0.000	0.000	4,996.136	Not Full	No	-1.124	14.504
Ħ	EVF1A2 1	5,014.410	0.000	0.000	0.000	4,997.647	Not Full	No	-1.153	16.763
Ħ	EVF1A2_50	5,014.510	0.000	0.000	0.000	4,997.485	Not Full	No	-1.115	17.025
Ħ	EVF2_1A	4,997.540	0.000	0.000	0.000	4,985.020	Not Full	No	-1.000	12.520
Ħ	EVF2 2	4,996.690	0.000	0.000	0.000	4,985.219		Yes	-0.761	11.471
Ħ	EVF2 3	4,996.740	0.000	0.000	0.000	4,986.275		No	-0.805	10.465
Ħ	EVF2 4	4,998.320	0.000	0.000	0.000	4,986.420		No	-0.554	11.900
Ħ	EVF2_4A	4,994.440	15,249.594	60,998.377	0.000	4,983.351		No	-0.659	11.089
Ħ	EVF2_5	4,994.950	0.000	0.000	0.000	4,983.903	Not Full	No	-0.737	11.047
Ħ	EVF2_5A	4,998.320	0.000	0.000	0.000	4,987.033		No	-0.570	11.287
Ħ	EVF2_6	4,997.130	0.000	0.000	0.000	4,987.731		No	-0.563	9.399
Ħ	EVF2_6A	4,995.080	0.000	0.000	0.000	4,984.114		No	-0.766	10.966
Ħ	EVF2_7	4,995.890	0.000	0.000	0.000	4,984.378	Not Full	No	-0.732	11.512
Ħ	EVF2 8	4,996.820	0.000	0.000	0.000	4,984.681		No	-0.749	12.139
Ħ	EVF3_47	5,015.880	0.000	0.000	0.000	4,998.487		No	-1.143	17.393
H	EVF3 48	5,014.910	0.000	0.000	0.000	4,997.982		No	-1.148	16.928
H	EVF4_46	5,017.080	0.000	0.000	0.000	4,999.003		No	-1.147	18.077
Ħ	FMF4 4 4	5,116.700	0.000	0.000	0.000	5,105.234		No	-0.766	11.466
Ħ	FMF6_1	5,127.260	0.000	0.000	0.000	5,114.540		No	-0.667	12.720
Ħ	FMF6_2	5,129.260	0.000	0.000	0.000	5,116.520		No	-0.667	12.740
H	FMF6_4_6	5,124.560	47,999.502	185,393.375	0.000	5,106.428		No	-0.772	18.132
H	FMF7_3	5,131.760	0.000	0.000	0.000	5,119.260		No	-0.667	12.500

	ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
	FMF7_4	5,136.220	0.000	0.000	0.000	5,123.320	Not Full	No	-0.667	12.900
	FMF7_5	5,140.390	0.000	0.000	0.000	5,126.970	Not Full	No	-0.667	13.420
	FMF8_1	5,148.970	0.000	0.000	0.000	5,136.070	Not Full	No	-0.667	12.900
	FMF8_10	5,160.550	0.000	0.000	0.000	5,145.290	Not Full	No	-0.667	15.260
	FMF8_11	5,159.940	0.000	0.000	0.000	5,145.740	Not Full	No	-0.667	14.200
	FMF8_2	5,149.930	0.000	0.000	0.000	5,137.020	Not Full	No	-0.667	12.910
	FMF8_3	5,151.500	0.000	0.000	0.000	5,138.680	Not Full	No	-0.667	12.820
	FMF8_4	5,153.490	0.000	0.000	0.000	5,139.790	Not Full	No	-0.667	13.700
	FMF8_6	5,146.040	0.000	0.000	0.000	5,129.900	Not Full	No	-0.667	16.140
	FMF8_8	5,155.950	0.000	0.000	0.000	5,143.360	Not Full	No	-0.667	12.590
	FMF8_9	5,159.460	0.000	0.000	0.000	5,144.700	Not Full	No	-0.667	14.760
	FMF9_1	5,189.630	0.000	0.000	0.000	5,172.170	Not Full	No	-0.603	17.460
	FMF9_10	5,162.750	0.000	0.000	0.000	5,153.780	Not Full	No	-0.667	8.970
	FMF9_11	5,164.610	0.000	0.000	0.000	5,150.360	Not Full	No	-0.667	14.250
	FMF9_12	5,162.750	0.000	0.000	0.000	5,148.260	Not Full	No	-0.667	14.490
	FMF9_13	5,162.520	0.000	0.000	0.000	5,147.740	Not Full	No	-0.667	14.780
	FMF9_15	5,172.560	0.000	0.000	0.000	5,159.590	Not Full	No	-0.667	12.970
=	FMF9_22	5,178.510	0.000	0.000	0.000	5,157.820	Not Full	No	-0.667	20.690
=	FMF9_23	5,173.130	0.000	0.000	0.000	5,159.130		No	-0.667	14.000
=	FMF9_3	5,162.290	0.000	0.000	0.000	5,147.130		No	-0.667	15.160
=	FMF9_35	5,174.800	0.000	0.000	0.000	5,158.660	Not Full	No	-0.667	16.140
=	FMF9 9	5,174.730	0.000	0.000	0.000	5,156.260		No	-0.667	18.470
=11	GVF1 0	5,069.880	18,999.353	75,997.411	0.000	5,061.119	Not Full	No	-0.578	8.761
=11	GVF1_100	5,086.630	0.000	0.000	0.000	5,074.838		No	-0.429	11.792
=11	GVF1_101	5,083.880	0.000	0.000	0.000	5,072.157		No	-0.390	11.723
=11	GVF1_102	5,079.520	0.000	0.000	0.000	5,067.873		No	-0.384	11.647
=11	GVF1_103	5,078.780	0.000	0.000	0.000	5,067.080		No	-0.357	11.700
=11	GVF1_104	5,078.130	0.000	0.000	0.000	5,066.398		No	-0.438	11.732
=11	GVF1_105	5,074.200	0.000	0.000	0.000	5,062.357		No	-0.460	11.843
=11	GVF1_106	5,071.440	0.000	0.000	0.000	5,059.580		No	-0.447	11.860
=11	GVF1_107	5,070.010	0.000	0.000	0.000	5,058.014		No	-0.463	11.996
=11	GVF1_108	5,064.570	0.000	0.000	0.000	5,052.752		No	-0.424	11.818
=	GVF1_109	5,062.860	0.000	0.000	0.000	5,050.502		No	-0.505	12.358
=	GVF1_111	5,041.130	0.000	0.000	0.000	5,029.687		No	-0.410	11.443
=	GVF1_113	5,037.460	0.000	0.000	0.000	5,025.711		No	-0.365	11.749
=	GVF1_114	5,036.980	0.000	0.000	0.000	5,025.114		No	-0.372	11.866
-	GVF1_115	5,036.250	0.000	0.000	0.000	5,024.157		No	-0.389	12.093
=	GVF1_116	5,036.640	0.000	0.000	0.000	5,023.275		Yes	-0.585	13.365
=	GVF1_117	5,036.520	60,750.697	230,282.000	0.000	5,023.273		No	-0.598	13.618
=	GVF1_117	5,063.750	0.000	0.000	0.000	5,049.699		No	-0.528	14.051
-	GVF1_37	5,061.780	0.000	0.000	0.000	5,043.099		No	-0.520	14.214

	ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
	GVF1_40	5,062.570	0.000	0.000	0.000	5,046.560	Not Full	No	-0.527	16.010
	GVF1_41	5,060.770	0.000	0.000	0.000	5,045.633	Not Full	No	-0.543	15.137
	GVF1_48	5,053.840	0.000	0.000	0.000	5,041.894	Not Full	No	-0.543	11.946
	GVF1_50	5,052.490	0.000	0.000	0.000	5,039.569	Not Full	No	-0.548	12.921
	GVF1_51	5,052.020	39,599.985	154,684.742	0.000	5,035.100	Not Full	Yes	-0.563	16.920
	GVF1_52	5,051.260	0.000	0.000	0.000	5,034.283	Not Full	No	-0.570	16.977
	GVF1_53	5,049.200	0.000	0.000	0.000	5,033.772	Not Full	No	-0.591	15.428
	GVF1_56	5,047.700	0.000	0.000	0.000	5,033.155	Not Full	Yes	-0.559	14.545
	GVF1_57	5,046.840	0.000	0.000	0.000	5,032.775	Not Full	No	-0.559	14.065
	GVF1_58	5,044.590	0.000	0.000	0.000	5,032.060	Not Full	No	-0.583	12.530
	GVF1_59	5,042.030	0.000	0.000	0.000	5,031.109	Not Full	Yes	-0.575	10.921
	GVF1_60	5,038.910	0.000	0.000	0.000	5,030.065	Not Full	No	-0.715	8.845
	GVF1_61	5,040.570	0.000	0.000	0.000	5,029.444	Not Full	No	-0.756	11.126
	GVF1_78	5,041.100	0.000	0.000	0.000	5,028.951	Not Full	No	-0.699	12.149
	GVF1 80	5,041.000	0.000	0.000	0.000	5,028.268	Not Full	No	-0.702	12.732
	GVF1_90	5,038.390	0.000	0.000	0.000	5,027.537	Not Full	No	-0.713	10.853
	GVF1_91	5,037.800	0.000	0.000	0.000	5,027.196	Not Full	No	-0.824	10.604
	GVF1_95	5,106.750	97,499.483	342,629.059	0.000	5,094.270	Not Full	No	-0.417	12.480
	GVF1_96	5,104.310	0.000	0.000	0.000	5,092.549	Not Full	No	-0.448	11.761
	GVF1_97	5,099.330	0.000	0.000	0.000	5,087.644	Not Full	No	-0.452	11.686
H	GVF1_98	5,095.600	0.000	0.000	0.000	5,083.524	Not Full	No	-0.473	12.076
	GVF1_99	5,090.720	0.000	0.000	0.000	5,078.834	Not Full	No	-0.472	11.886
	HWY52_1	5,018.000	0.000	0.000	0.000	5,003.760	Not Full	No	-2.000	14.240
	HWY52_10	4,949.000	0.000	0.000	0.000	4,935.500	Not Full	No	-2.000	13.500
	HWY52_11	4,945.000	0.000	0.000	0.000	4,932.150	Not Full	No	-2.000	12.850
	HWY52_12	4,942.120	0.000	0.000	0.000	4,928.150	Not Full	No	-3.000	13.970
	HWY52_2	5,035.250	0.000	0.000	0.000	4,999.110	Not Full	No	-2.000	36.140
	HWY52_3	5,025.320	0.000	0.000	0.000	4,997.050	Not Full	No	-2.000	28.270
	HWY52_4	5,010.170	0.000	0.000	0.000	4,991.150	Not Full	No	-2.000	19.020
	HWY52_5	5,002.380	0.000	0.000	0.000	4,981.190	Not Full	No	-2.000	21.190
	HWY52_6	4,990.000	0.000	0.000	0.000	4,971.240	Not Full	No	-2.000	18.760
	HWY52_7	4,977.000	0.000	0.000	0.000	4,963.970	Not Full	No	-2.000	13.030
П	HWY52_8	4,979.360	0.000	0.000	0.000	4,959.150		No	-2.000	20.210
П	HWY52_9	4,948.500	0.000	0.000	0.000	4,938.320		No	-2.000	10.180
H	I25 1	5,220.000	0.000	0.000	0.000	5,206.500		No	-0.667	13.500
H	125_10	5,156.010	0.000	0.000	0.000	5,146.780		No	-1.500	9.230
H	125_11	5,154.000	0.000	0.000	0.000	5,145.850		No	-1.500	8.150
H	125_12	5,155.000	0.000	0.000	0.000	5,144.520		No	-1.500	10.480
H	125_13	5,155.070	0.000	0.000	0.000	5,144.180		No	-1.500	10.890
H	125_14	5,157.090	0.000	0.000	0.000	5,143.770		No	-1.500	13.320
H	125_15	5,158.050	0.000	0.000	0.000	5,143.370		No	-1.500	14.680

ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
I25_16	5,176.000	0.000	0.000	0.000	5,142.040	Not Full	No	-1.500	33.960
125_17	5,153.000	0.000	0.000	0.000	5,140.320	Not Full	No	-1.500	12.680
125_18	5,120.000	0.000	0.000	0.000	5,106.400	Not Full	No	-1.500	13.600
125_19	5,101.320	0.000	0.000	0.000	5,092.000	Not Full	No	-1.500	9.320
125_2	5,192.000	0.000	0.000	0.000	5,178.500	Not Full	No	-0.667	13.500
125_20	5,100.300	0.000	0.000	0.000	5,090.320	Not Full	No	-1.500	9.980
125_21	5,104.180	0.000	0.000	0.000	5,085.650	Not Full	No	-1.500	18.530
125_22	5,091.630	0.000	0.000	0.000	5,078.780	Not Full	No	-1.500	12.850
125_23	5,065.480	0.000	0.000	0.000	5,052.730	Not Full	No	-1.500	12.750
125_24	5,058.000	0.000	0.000	0.000	5,044.900	Not Full	No	-2.000	13.100
125_25	5,060.930	0.000	0.000	0.000	5,043.730	Not Full	No	-2.000	17.200
125_26	5,061.820	0.000	0.000	0.000	5,042.580	Not Full	No	-2.000	19.240
125_27	5,053.670	0.000	0.000	0.000	5,039.370	Not Full	No	-2.000	14.300
125_28	5,057.640	0.000	0.000	0.000	5,037.750	Not Full	No	-2.000	19.890
125_29	5,053.000	0.000	0.000	0.000	5,036.650	Not Full	No	-2.000	16.350
125_3	5,183.000	0.000	0.000	0.000	5,169.400	Not Full	No	-1.000	13.600
125_30	5,029.050	0.000	0.000	0.000	5,017.890	Not Full	No	-2.000	11.160
125_31	5,046.550	0.000	0.000	0.000	5,015.020	Not Full	No	-2.000	31.530
125_32	5,046.000	0.000	0.000	0.000	5,014.310	Not Full	No	-2.000	31.690
125_33	5,050.000	0.000	0.000	0.000	5,013.680	Not Full	No	-2.000	36.320
125_34	5,033.000	0.000	0.000	0.000	5,012.020	Not Full	No	-2.000	20.980
125_35	5,033.180	0.000	0.000	0.000	5,010.370	Not Full	No	-2.000	22.810
125_36	5,024.780	0.000	0.000	0.000	5,006.390	Not Full	No	-2.000	18.390
125_4	5,181.940	0.000	0.000	0.000	5,168.400	Not Full	No	-1.000	13.540
I25_5	5,180.000	0.000	0.000	0.000	5,166.400	Not Full	No	-1.000	13.600
I25_6	5,176.000	0.000	0.000	0.000	5,163.400	Not Full	No	-1.000	12.600
125_7	5,172.980	0.000	0.000	0.000	5,160.090	Not Full	No	-1.000	12.890
125_8	5,171.000	0.000	0.000	0.000	5,157.400	Not Full	No	-1.250	13.600
I25_9	5,168.930	0.000	0.000	0.000	5,155.330	Not Full	No	-1.250	13.600
KEF1_1	4,993.140	0.000	0.000	0.000	4,982.466	Not Full	No	-0.584	10.674
KEF1_10	4,994.650	6,000.478	24,001.911	0.000	4,982.856	Not Full	No	-0.894	11.794
KEF1_1A	4,992.460	0.000	0.000	0.000	4,987.630	Not Full	No	-1.000	4.830
KEF1_2	4,992.940	0.000	0.000	0.000	4,982.714	Not Full	No	-0.566	10.226
KEF1_2A	4,993.170	0.000	0.000	0.000	4,986.910	Not Full	No	-1.000	6.260
KEF1_3	4,992.980	0.000	0.000	0.000	4,982.777	Not Full	No	-0.633	10.203
KEF1_3A	4,992.130	0.000	0.000	0.000	4,986.450	Not Full	No	-1.000	5.680
KEF1_4	4,992.310	0.000	0.000	0.000	4,985.750	Not Full	No	-1.000	6.560
KEF1_5	4,991.820	0.000	0.000	0.000	4,985.470	Not Full	No	-1.000	6.350
KEF1_6	4,991.120	0.000	0.000	0.000	4,985.080	Not Full	No	-1.000	6.040
KEF1_7	4,992.280	0.000	0.000	0.000	4,984.100	Not Full	No	-1.000	8.180
KEF1_8	4,992.920	0.000	0.000	0.000	4,983.870	Not Full	No	-1.000	9.050

	ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
	KEF1_80	4,993.540	0.000	0.000	0.000	4,982.034	Not Full	No	-0.596	11.506
	KEF1_81	4,992.760	0.000	0.000	0.000	4,981.719	Not Full	No	-0.591	11.041
	KEF1_82	4,990.810	0.000	0.000	0.000	4,981.017	Not Full	No	-0.563	9.793
	KEF1_83	4,989.710	0.000	0.000	0.000	4,980.344	Not Full	No	-0.686	9.366
	KEF1_9	4,994.310	0.000	0.000	0.000	4,983.190	Not Full	No	-1.000	11.120
	KFF1_10	4,997.270	59,250.218	225,620.011	0.000	4,983.957	Not Full	No	-0.673	13.313
	KFF1_11	4,998.630	0.000	0.000	0.000	4,984.070	Not Full	No	-1.000	14.560
	KFF1_14	5,000.070	0.000	0.000	0.000	4,984.910	Not Full	No	-1.000	15.160
	KFF1_15	5,000.120	0.000	0.000	0.000	4,986.020	Not Full	No	-1.000	14.100
	KFF1_16	5,001.010	0.000	0.000	0.000	4,986.750	Not Full	No	-1.000	14.260
	KFF1_9	4,995.240	0.000	0.000	0.000	4,983.349	Not Full	No	-0.691	11.891
	LCFA_1	5,012.427	0.000	0.000	0.000	4,996.682	Not Full	No	-1.268	15.745
	LCFA_10	5,023.387	0.000	0.000	0.000	5,010.367	Not Full	No	-0.667	13.020
	LCFA_11	5,026.087	0.000	0.000	0.000	5,013.187	Not Full	No	-0.667	12.900
	LCFA_12	5,027.167	0.000	0.000	0.000	5,014.177	Not Full	No	-0.667	12.990
	LCFA_13	5,028.197	0.000	0.000	0.000	5,015.437	Not Full	No	-0.667	12.760
	LCFA_14	5,030.217	0.000	0.000	0.000	5,017.167	Not Full	No	-0.667	13.050
	LCFA_15	5,031.377	0.000	0.000	0.000	5,018.497	Not Full	No	-0.667	12.880
	LCFA_16	5,033.227	0.000	0.000	0.000	5,020.197	Not Full	No	-0.667	13.030
	LCFA_17	5,041.107	0.000	0.000	0.000	5,029.007	Not Full	No	-0.667	12.100
	LCFA_3	5,013.587	0.000	0.000	0.000	5,001.827	Not Full	No	-0.667	11.760
	LCFA_4	5,016.087	0.000	0.000	0.000	5,002.897	Not Full	No	-0.667	13.190
	LCFA_5	5,016.697	0.000	0.000	0.000	5,004.297	Not Full	No	-0.667	12.400
	LCFA_6	5,018.577	0.000	0.000	0.000	5,005.317	Not Full	No	-0.667	13.260
	LCFA_7	5,018.577	0.000	0.000	0.000	5,006.317	Not Full	No	-0.667	12.260
	LCFA_8	5,019.587	0.000	0.000	0.000	5,007.187	Not Full	No	-0.667	12.400
	LCFA_9	5,020.547	0.000	0.000	0.000	5,007.827	Not Full	No	-0.667	12.720
	LCFB_1	5,019.517	0.000	0.000	0.000	5,007.037	Not Full	No	-0.667	12.480
	LCFB_2	5,020.547	0.000	0.000	0.000	5,008.057	Not Full	No	-0.667	12.490
	LCFB_3	5,022.307	0.000	0.000	0.000	5,009.797	Not Full	No	-0.667	12.510
	LCFB_4	5,023.587	0.000	0.000	0.000	5,010.737	Not Full	No	-0.667	12.850
	NMS_1	5,190.130	0.000	0.000	0.000	5,179.940	Not Full	No	-0.833	10.190
	NMS_10	5,211.030	0.000	0.000	0.000	5,202.770	Not Full	No	-0.833	8.260
	NMS_11	5,214.550	0.000	0.000	0.000	5,206.970	Not Full	No	-0.833	7.580
	NMS_12	5,217.140	0.000	0.000	0.000	5,210.370	Not Full	No	-0.833	6.770
	NMS_13	5,223.610	0.000	0.000	0.000	5,213.770	Not Full	No	-0.833	9.840
	NMS_14	5,225.100	0.000	0.000	0.000	5,214.870	Not Full	No	-0.833	10.230
Ī	NMS_15	5,226.430	0.000	0.000	0.000	5,216.370	Not Full	No	-0.833	10.060
	 NMS_16	5,233.130	0.000	0.000	0.000	5,219.290	Not Full	No	-0.833	13.840
	_ NMS_17	5,241.740	0.000	0.000	0.000	5,226.140		No	-0.833	15.600
	 NMS_18	5,250.320	0.000	0.000	0.000	5,237.300		No	-0.833	13.020

	ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
	NMS_19	5,252.800	0.000	0.000	0.000	5,240.720	Not Full	No	-0.833	12.080
	NMS_2	5,190.240	0.000	0.000	0.000	5,183.630	Not Full	No	-0.833	6.610
	NMS_20	5,251.790	0.000	0.000	0.000	5,241.900	Not Full	No	-0.833	9.890
	NMS_3	5,191.230	0.000	0.000	0.000	5,184.970	Not Full	No	-0.833	6.260
	NMS_4	5,195.030	0.000	0.000	0.000	5,187.870	Not Full	No	-0.833	7.160
	NMS_5	5,196.680	0.000	0.000	0.000	5,189.750	Not Full	No	-0.833	6.930
	NMS_6	5,198.380	0.000	0.000	0.000	5,191.650	Not Full	No	-0.833	6.730
	NMS_7	5,200.000	0.000	0.000	0.000	5,193.510	Not Full	No	-0.833	6.490
	NMS_8	5,203.910	0.000	0.000	0.000	5,197.710	Not Full	No	-0.833	6.200
	NMS_9	5,210.370	0.000	0.000	0.000	5,201.290	Not Full	No	-0.833	9.080
	OGF1_1	5,165.050	0.000	0.000	0.000	5,151.065	Not Full	No	-0.833	13.985
	OGF1_17	5,150.610	0.000	0.000	0.000	5,138.985	Not Full	No	-0.833	11.625
	OGF1_18	5,148.840	0.000	0.000	0.000	5,137.445	Not Full	No	-0.833	11.395
	OGF1_2	5,160.050	0.000	0.000	0.000	5,146.865	Not Full	No	-0.833	13.185
	OGF1_25	5,148.140	0.000	0.000	0.000	5,136.135	Not Full	No	-0.833	12.005
	OGF1_3	5,159.350	0.000	0.000	0.000	5,146.225	Not Full	No	-0.833	13.125
=	OGF1_4	5,152.800	0.000	0.000	0.000	5,140.735	Not Full	No	-0.833	12.065
=	OGF1_5	5,150.890	0.000	0.000	0.000	5,139.645	Not Full	No	-0.833	11.245
=	OGF1_69	5,151.490	0.000	0.000	0.000	5,139.592	Not Full	Yes	-0.596	11.898
=	OGF1_70	5,150.690	0.000	0.000	0.000	5,138.945	Not Full	No	-0.593	11.745
	OGF1_71	5,149.600	0.000	0.000	0.000	5,138.308	Not Full	No	-0.510	11.292
=	OGF1_72	5,148.590	0.000	0.000	0.000	5,137.849	Not Full	No	-0.630	10.741
=	OGF1_73	5,149.230	0.000	0.000	0.000	5,137.128	Not Full	Yes	-0.591	12.102
=	OGF1_74	5,148.230	0.000	0.000	0.000	5,135.928		No	-0.630	12.302
=	OGF1_75	5,148.230	0.000	0.000	0.000	5,135.051		No	-0.608	13.179
=	OGF2_29	5,177.635	0.000	0.000	0.000	5,163.675		No	-0.667	13.960
=	OGF2_31	5,172.695	0.000	0.000	0.000	5,161.185		No	-0.667	11.510
=	OGF2_32	5,167.395	0.000	0.000	0.000	5,155.755		No	-0.667	11.640
=	OGF2_33	5,162.905	0.000	0.000	0.000	5,150.925		No	-0.667	11.980
=	OGF2_34	5,162.905	0.000	0.000	0.000	5,149.215		No	-0.667	13.690
7	OGF2_46	5,158.455	0.000	0.000	0.000	5,146.495		No	-0.667	11.960
=	OGF2_49	5,156.745	0.000	0.000	0.000	5,144.495		No	-0.667	12.250
	OGF2_50	5,155.135	0.000	0.000	0.000	5,143.135		No	-0.667	12.000
	OGF2_65	5,153.045	49,150.061	189,599.821	0.000	5,142.941		No	-0.558	10.104
	OGF2 68	5,154.360	0.000	0.000	0.000	5,142.403		No	-0.635	11.957
	OTF1_101	5,021.153	0.000	0.000	0.000	5,004.293		No	-1.000	16.860
=	OTF1_102	5,011.353	0.000	0.000	0.000	5,003.307		No	-0.936	8.046
=	OTF1_103	5,010.453	0.000	0.000	0.000	5,003.307		No	-0.676	7.146
=	OTF1_108	5,011.000	0.000	0.000	0.000	4,999.134		No	-1.199	11.866
	OTF1_30	5,023.393	0.000	0.000	0.000	5,016.723		No	-0.667	6.670
	OTF1_37	5,021.223	0.000	0.000	0.000	5,016.053		No	-0.667	5.170

	ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
	OTF1_43	5,019.833	54,450.699	208,978.954	0.000	5,014.624	Not Full	No	-0.375	5.209
	OTF1_44	5,018.643	0.000	0.000	0.000	5,012.824	Not Full	No	-0.366	5.819
	OTF1_46	5,021.543	0.000	0.000	0.000	5,015.263	Not Full	No	-0.833	6.280
	OTF1_47	5,021.643	0.000	0.000	0.000	5,015.223	Not Full	No	-0.833	6.420
	OTF1_48	5,019.783	0.000	0.000	0.000	5,013.303	Not Full	No	-0.833	6.480
	OTF1_60A	5,011.220	0.000	0.000	0.000	4,993.108	Not Full	No	-1.582	18.112
	OTF1_61A	5,011.010	0.000	0.000	0.000	4,992.770	Not Full	No	-1.600	18.240
	OTF1_62	5,017.723	27,499.670	109,998.679	0.000	5,012.205	Not Full	No	-0.621	5.518
	OTF1_64	5,015.763	0.000	0.000	0.000	5,010.970	Not Full	No	-0.627	4.793
	OTF1_65	5,016.743	0.000	0.000	0.000	5,011.178	Not Full	No	-0.381	5.565
	OTF1_80	5,013.043	0.000	0.000	0.000	5,009.150	Not Full	No	-0.379	3.893
	OTF1_82	5,013.773	0.000	0.000	0.000	5,009.653	Not Full	No	-0.624	4.120
	OTF1_87	5,013.123	20,600.632	82,402.529	0.000	5,008.530	Not Full	No	-0.567	4.593
	OTF1_88	5,027.903	16,699.674	66,798.695	0.000	5,019.137	Not Full	No	-0.553	8.766
	OTF1_89	5,022.873	0.000	0.000	0.000	5,017.140	Not Full	Yes	2.360	5.733
	OTF1_90	5,023.493	0.000	0.000	0.000	5,016.609	Not Full	No	-0.510	6.884
	OTF1_92	5,022.393	0.000	0.000	0.000	5,015.904	Not Full	No	-0.516	6.489
	OTF1_93	5,021.323	0.000	0.000	0.000	5,015.787	Not Full	No	-0.532	5.536
Ħ	OTF1_94	5,017.163	0.000	0.000	0.000	5,012.827	Not Full	No	-0.563	4.336
Ħ	OTF1_95	5,012.943	29,024.629	116,021.240	0.000	5,008.917	Not Full	Yes	-0.403	4.026
Ħ	OTF1_96	5,013.243	0.000	0.000	0.000	5,007.334	Not Full	No	-0.779	5.909
Ħ	OTF1_97	5,012.803	0.000	0.000	0.000	5,006.960	Not Full	No	-0.653	5.843
П	OTF1_98	5,011.373	0.000	0.000	0.000	5,005.717	Not Full	No	-0.676	5.656
	RMF1_114	5,083.790	0.000	0.000	0.000	5,069.115	Not Full	No	-0.775	14.675
П	RMF1_118	5,074.620	0.000	0.000	0.000	5,060.012	Not Full	No	-0.658	14.608
	SCC_01	5,118.460	0.000	0.000	0.000	5,101.560	Not Full	No	-0.667	16.900
	SCC_02	5,113.610	0.000	0.000	0.000	5,096.360	Not Full	No	-0.833	17.250
П	SCC_03	5,106.940	0.000	0.000	0.000	5,091.850	Not Full	No	-0.833	15.090
	SCC_04	5,111.500	0.000	0.000	0.000	5,090.060	Not Full	No	-0.833	21.440
	SCC_05	5,108.930	0.000	0.000	0.000	5,088.460	Not Full	No	-0.833	20.470
	SCC_06	5,106.410	0.000	0.000	0.000	5,087.230	Not Full	No	-0.833	19.180
П	SCC_07	5,102.770	0.000	0.000	0.000	5,084.320	Not Full	No	-1.000	18.450
	SCC_08	5,097.960	0.000	0.000	0.000	5,081.030	Not Full	No	-1.000	16.930
П	SCC_09	5,094.160	0.000	0.000	0.000	5,076.580	Not Full	No	-1.000	17.580
	SCC_10	5,093.370	0.000	0.000	0.000	5,075.480	Not Full	No	-1.000	17.890
fi	SCC_11	5,089.070	0.000	0.000	0.000	5,073.420	Not Full	No	-1.000	15.650
Ħ١	SCC_11A	5,087.810	0.000	0.000	0.000	5,065.150		No	-1.250	22.660
Πl	SCC_12	5,087.290	0.000	0.000	0.000	5,064.660	Not Full	No	-1.250	22.630
Ħ	SCC_13	5,085.400	0.000	0.000	0.000	5,063.710	Not Full	No	-1.250	21.690
Ħ١	SCC_14	5,081.740	0.000	0.000	0.000	5,062.520	Not Full	No	-1.250	19.220
fi	SCC_15	5,079.780	0.000	0.000	0.000	5,061.320		No	-1.250	18.460

	ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
П	SCC_16	5,077.060	0.000	0.000	0.000	5,060.100	Not Full	No	-1.250	16.960
	SCC_17	5,074.870	0.000	0.000	0.000	5,058.870	Not Full	No	-1.250	16.000
	SCC_18	5,073.800	0.000	0.000	0.000	5,058.120	Not Full	No	-1.250	15.680
	SCC_19	5,072.830	0.000	0.000	0.000	5,056.960	Not Full	No	-1.250	15.870
	SCC_20	5,071.610	0.000	0.000	0.000	5,055.930	Not Full	No	-1.250	15.680
	SCC_21	5,069.850	0.000	0.000	0.000	5,055.280	Not Full	No	-1.250	14.570
	SUN_1	5,117.830	0.000	0.000	0.000	5,104.140	Not Full	No	-0.667	13.690
	SUN_10	5,081.060	0.000	0.000	0.000	5,068.960	Not Full	No	-0.667	12.100
	SUN_11	5,071.850	0.000	0.000	0.000	5,059.080	Not Full	No	-0.667	12.770
Ħ	SUN 12	5,054.840	0.000	0.000	0.000	5,042.070	Not Full	No	-0.667	12.770
Ħ	SUN_13	5,053.120	0.000	0.000	0.000	5,040.220	Not Full	No	-0.667	12.900
Ħ	SUN_14	5,050.790	0.000	0.000	0.000	5,036.730	Not Full	No	-0.667	14.060
Ħ	SUN_15	5,035.740	0.000	0.000	0.000	5,029.000	Not Full	No	-0.667	6.740
Ħ	SUN_2	5,109.460	0.000	0.000	0.000	5,097.360	Not Full	No	-0.667	12.100
Ħ	SUN_3	5,103.540	0.000	0.000	0.000	5,091.440	Not Full	No	-0.667	12.100
Ħ	SUN_4	5,096.140	0.000	0.000	0.000	5,088.190	Not Full	No	-0.667	7.950
Ħ	SUN_5	5,099.970	0.000	0.000	0.000	5,086.950	Not Full	No	-0.667	13.020
Ħ	SUN_6	5,104.710	0.000	0.000	0.000	5,085.300	Not Full	No	-0.667	19.410
Ħ	SUN_7	5,112.510	0.000	0.000	0.000	5,084.050	Not Full	No	-0.667	28.460
Ħ	SUN_8	5,094.800	0.000	0.000	0.000	5,082.700	Not Full	No	-0.667	12.100
Ħ	SUN_9	5,087.680	0.000	0.000	0.000	5,076.580	Not Full	No	-0.667	11.100
Ħ	TOE_2576	5,140.690	0.000	0.000	0.000	5,129.003	Not Full	No	-1.337	11.687
Ħ	TOE_2577	5,137.370	0.000	0.000	0.000	5,127.188	Not Full	No	-1.372	10.182
Ħ	TOE_2578	5,132.730	0.000	0.000	0.000	5,123.058	Not Full	No	-1.372	9.672
Ħ	TOE_2579	5,129.120	0.000	0.000	0.000	5,118.614	Not Full	No	-1.356	10.506
Ħ	TOE_2580	5,123.350	0.000	0.000	0.000	5,112.860	Not Full	No	-1.330	10.490
Ħ	TOE_2581	5,125.960	0.000	0.000	0.000	5,110.864	Not Full	Yes	-1.276	15.096
Ħ	TOE_2582	5,126.690	0.000	0.000	0.000	5,109.082	Not Full	No	-1.278	17.608
Ħ	TOE_2583	5,127.830	0.000	0.000	0.000	5,107.194	Not Full	No	-1.266	20.636
Ħ	TOE_2584	5,127.830	0.000	0.000	0.000	5,105.510	Not Full	No	-1.270	22.320
Ħ	TOE_2585	5,078.040	0.000	0.000	0.000	5,064.027	Not Full	No	-1.293	14.013
Ħ	TOE 2586	5,048.720	0.000	0.000	0.000	5,036.904	Not Full	No	-1.216	11.816
Ħ	TOE 2587	5,051.780	0.000	0.000	0.000	5,034.827	Not Full	No	-1.273	16.953
Ħ	TOE_2588	5,042.550	0.000	0.000	0.000	5,024.447	Not Full	No	-1.283	18.103
Πĺ	TOE_2589	5,027.940	39,250.065	153,405.435	0.000	5,012.271		No	-1.259	15.669
Ħ	TOE_2590	5,029.380	0.000	0.000	0.000	5,009.330		No	-1.310	20.050
Πĺ	TOE_2591	5,026.905	0.000	0.000	0.000	5,008.344		Yes	-1.581	18.561
Ħ	TOE_2592	5,109.510	0.000	0.000	0.000	5,097.470		No	-0.667	12.040
Πĺ	TOE_2593	5,110.100	0.000	0.000	0.000	5,097.090	Not Full	No	-0.667	13.010
H	TOE 2594	5,034.380	0.000	0.000	0.000	5,016.319		Yes	-0.811	18.061
Ħ	TOE_2595	5,027.210	0.000	0.000	0.000	5,015.526		No	-0.754	11.684

	ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
	TOE_2596	5,030.630	0.000	0.000	0.000	5,014.777	Not Full	No	-2.133	15.853
П	TOE_2597	5,029.850	0.000	0.000	0.000	5,014.429	Not Full	No	-2.081	15.421
П	TOE_2598	5,030.780	0.000	0.000	0.000	5,013.857	Not Full	No	-0.983	16.923
П	TOE_2609	5,049.595	0.000	0.000	0.000	5,039.702	Not Full	Yes	-0.963	9.893
	TOE_2610	5,049.965	0.000	0.000	0.000	5,040.652	Not Full	No	-1.163	9.313
П	TOE_2612	5,052.325	0.000	0.000	0.000	5,042.807	Not Full	No	-1.168	9.518
П	TOE_2615	5,011.000	49,249.421	189,963.081	0.000	4,994.659	Not Full	Yes	-1.466	16.341
П	TOE_2619	5,011.075	0.000	0.000	0.000	4,993.977	Not Full	No	-1.548	17.098
П	TOE_2620	5,141.225	0.000	0.000	0.000	5,129.354	Not Full	Yes	-0.771	11.871
Ħ	TOE 2621	5,148.225	0.000	0.000	0.000	5,131.885	Not Full	No	-0.830	16.340
Ħ	TOE_2622	5,148.225	0.000	0.000	0.000	5,133.791	Not Full	No	-0.784	14.434
Ħ	TOE_2623	5,158.225	0.000	0.000	0.000	5,144.065	Not Full	No	-0.833	14.160
Ħ	TOE_2624	5,168.225	0.000	0.000	0.000	5,154.505	Not Full	No	-0.833	13.720
Ħ	TOE_2625	5,173.225	0.000	0.000	0.000	5,160.575	Not Full	No	-0.833	12.650
Ħ	TOE_2626	5,185.225	0.000	0.000	0.000	5,168.505	Not Full	No	-0.667	16.720
Ħ	TOE_2628	5,083.085	0.000	0.000	0.000	5,068.782	Not Full	Yes	-1.053	14.303
Ħ	TOE_2629	5,085.095	0.000	0.000	0.000	5,070.446		No	-0.829	14.649
Ħ	TOE_2630	5,088.805	0.000	0.000	0.000	5,074.457		Yes	-0.708	14.348
Ħ	TOE 2631	5,095.275	44,999.983	174,427.134	0.000	5,076.059		No	-0.826	19.216
Ħ	TOE_2635	5,080.000	0.000	0.000	0.000	5,072.240		No	-0.833	7.760
Ħ	TOE_2636	5,085.000	0.000	0.000	0.000	5,071.110		No	-0.833	13.890
Ħ	TOE_2637	5,085.000	0.000	0.000	0.000	5,072.738		No	-0.772	12.262
Ħ	TOE_2638	5,085.000	0.000	0.000	0.000	5,071.604		No	-0.736	13.396
Ħ	TOE_2639	5,085.000	0.000	0.000	0.000	5,070.843	Not Full	No	-0.727	14.157
Ħ	TOE_2640	5,091.070	0.000	0.000	0.000	5,077.210		No	-0.750	13.860
Ħ	TOE_2646	5,212.890	0.000	0.000	0.000	5,202.610		No	-0.266	10.280
Ħ	TOE_2647	5,214.610	0.000	0.000	0.000	5,204.195		Yes	-0.382	10.415
Ħ	TOE_2648	5,057.225	0.000	0.000	0.000	5,037.080	Not Full	No	-0.855	20.145
Ħ	TOE_2649	5,058.225	0.000	0.000	0.000	5,037.757	Not Full	No	-0.858	20.468
Ħ	TOE_2650	5,051.225	11,999.515	47,998.062	0.000	5,035.312		No	-0.983	15.913
Ħ	TOE_2651	5,033.085	0.000	0.000	0.000	5,017.564		Yes	-0.861	15.521
Ħ	TOE_2652	5,031.225	0.000	0.000	0.000	5,017.509		No	-0.846	13.716
Ħ	TOE_2653	5,048.625	0.000	0.000	0.000	5,015.939		No	-0.846	32.686
H	TOE_2654	5,029.225	26,625.590	106,502.360	0.000	5,014.219		No	-0.926	15.006
H	TOE 2655	5,028.225	0.000	0.000	0.000	5,010.121		Yes	-1.109	18.104
H	TOE_2656	5,040.685	0.000	0.000	0.000	5,027.970		No	-1.005	12.715
H	TOE_2657	5,072.520	0.000	0.000	0.000	5,058.720		No	-0.667	13.800
H	TOE_2659	5,069.950	0.000	0.000	0.000	5,055.850		No	-0.667	14.100
H	TOE_2660	5,063.730	0.000	0.000	0.000	5,051.030		No	-0.667	12.700
H	TOE 2661	5,060.080	0.000	0.000	0.000	5,047.680		No	-0.667	12.400
H	TOE_2662	5,055.000	0.000	0.000	0.000	5,041.274		No	-0.961	13.726

ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
TOE_2663	5,059.350	0.000	0.000	0.000	5,046.580	Not Full	No	-0.667	12.770
TOE_2664	5,051.225	0.000	0.000	0.000	5,038.714	Not Full	Yes	-0.861	12.511
TOE_2673	5,142.740	0.000	0.000	0.000	5,127.330	Not Full	No	-0.543	15.410
TOE_2710	5,188.970	121,000.274	411,089.749	0.000	5,171.649	Not Full	Yes	-0.374	17.321
TOE_2711	5,175.840	0.000	0.000	0.000	5,168.472	Not Full	No	-0.412	7.368
TOE_2712	5,183.520	0.000	0.000	0.000	5,170.859	Not Full	No	-0.364	12.661
TOE_2713	5,179.770	0.000	0.000	0.000	5,170.322	Not Full	No	-0.371	9.448
TOE_2714	5,179.540	0.000	0.000	0.000	5,169.882	Not Full	No	-0.371	9.658
TOE_2715	5,171.960	0.000	0.000	0.000	5,167.512	Not Full	No	-0.312	4.448
TOE_2716	5,173.770	0.000	0.000	0.000	5,166.922	Not Full	No	-0.361	6.848
TOE_2717	5,171.760	0.000	0.000	0.000	5,166.266	Not Full	No	-0.528	5.494
TOE_2718	5,169.220	0.000	0.000	0.000	5,159.705	Not Full	Yes	-0.378	9.515
TOE_2719	5,171.870	0.000	0.000	0.000	5,157.334	Not Full	No	-0.469	14.536
TOE_2720	5,162.710	0.000	0.000	0.000	5,153.466	Not Full	Yes	-0.377	9.244
TOE_2721	5,160.580	0.000	0.000	0.000	5,151.354	Not Full	No	-0.559	9.226
TOE_2722	5,153.520	0.000	0.000	0.000	5,144.435	Not Full	No	-0.558	9.085
TOE_2723	5,149.910	0.000	0.000	0.000	5,140.746	Not Full	No	-0.567	9.164
TOE_2724	5,137.860	0.000	0.000	0.000	5,129.177	Not Full	No	-0.436	8.683
TOE_2725	5,133.820	0.000	0.000	0.000	5,126.327	Not Full	No	-0.446	7.493
TOE_2726	5,130.690	0.000	0.000	0.000	5,123.015	Not Full	No	-0.558	7.675
TOE_2727	5,121.990	0.000	0.000	0.000	5,112.723	Not Full	No	-0.601	9.267
TOE_2728	5,115.430	0.000	0.000	0.000	5,104.549	Not Full	No	-0.595	10.881
TOE_2729	5,114.600	0.000	0.000	0.000	5,101.829	Not Full	No	-0.554	12.771
TOE_2730	5,107.960	0.000	0.000	0.000	5,095.258	Not Full	No	-0.475	12.702
TOE_2731	5,101.300	0.000	0.000	0.000	5,092.494	Not Full	No	-0.423	8.806
TOE_2732	5,104.000	0.000	0.000	0.000	5,094.351	Not Full	No	-0.335	9.649
TOE_2733	5,112.400	0.000	0.000	0.000	5,095.633	Not Full	Yes	-0.344	16.767
TOE_2734	5,010.600	0.000	0.000	0.000	4,998.241	Not Full	No	-1.784	12.359
TOE_2735	5,014.525	0.000	0.000	0.000	4,999.058	Not Full	No	-1.567	15.467
TOE_2736	5,017.825	0.000	0.000	0.000	4,999.982	Not Full	No	-1.543	17.843
TOE_2737	5,023.625	0.000	0.000	0.000	5,002.767	Not Full	No	-1.558	20.858
TOE_2738	5,023.325	0.000	0.000	0.000	5,003.650	Not Full	No	-1.475	19.675
TOE_2739	5,020.425	0.000	0.000	0.000	5,004.686	Not Full	No	-1.539	15.739
TOE_2740	5,022.425	0.000	0.000	0.000	5,005.710	Not Full	No	-1.515	16.715
TOE_2741	5,025.425	0.000	0.000	0.000	5,006.643	Not Full	No	-1.482	18.782
TOE_2742	5,025.825	0.000	0.000	0.000	5,006.973	Not Full	No	-1.552	18.852
TOE_2743	5,026.525	0.000	0.000	0.000	5,007.575	Not Full	No	-1.650	18.950
TOE_2744	5,029.425	0.000	0.000	0.000	5,010.088	Not Full	Yes	0.063	19.337
TOE_2745	5,028.225	0.000	0.000	0.000	5,010.120		No	-0.555	18.105
TOE_2746	5,027.525	0.000	0.000	0.000	5,014.757	Not Full	No	-1.068	12.768
TOE 2747	5,053.435	50,250.221	193,622.005	0.000	5,038.651	Not Full	No	-1.074	14.784

ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
TOE_2748	5,094.000	0.000	0.000	0.000	5,081.159	Not Full	No	-0.591	12.841
TOE_2749	5,090.550	0.000	0.000	0.000	5,077.927	Not Full	No	-0.573	12.623
TOE_2750	5,087.000	0.000	0.000	0.000	5,074.095	Not Full	No	-0.655	12.905
TOE_2751	5,081.000	0.000	0.000	0.000	5,068.674	Not Full	No	-0.906	12.326
TOE_2752	5,075.220	0.000	0.000	0.000	5,062.850	Not Full	No	-0.870	12.370
TOE_2753	5,069.870	0.000	0.000	0.000	5,058.758	Not Full	No	-0.882	11.112
TOE_2754	5,066.730	0.000	0.000	0.000	5,054.746	Not Full	No	-0.844	11.984
TOE_2755	5,064.690	0.000	0.000	0.000	5,053.604	Not Full	No	-0.866	11.086
TOE_2756	5,059.960	0.000	0.000	0.000	5,047.007	Not Full	No	-0.873	12.953
TOE_2757	5,058.890	0.000	0.000	0.000	5,046.223	Not Full	No	-0.907	12.667
TOE_2758	5,033.130	0.000	0.000	0.000	5,019.850	Not Full	No	-0.940	13.280
TOE_2759	5,062.630	0.000	0.000	0.000	5,050.493	Not Full	No	-0.877	12.137
TOE_2760	5,053.320	0.000	0.000	0.000	5,039.861	Not Full	No	-0.929	13.459
TOE_2761	5,030.160	0.000	0.000	0.000	5,019.033	Not Full	No	-1.037	11.127
TOE_2762	5,029.520	0.000	0.000	0.000	5,018.875	Not Full	No	-0.945	10.645
TOE_2763	5,031.630	0.000	0.000	0.000	5,016.862	Not Full	No	-0.968	14.768
TOE_2764	5,030.240	0.000	0.000	0.000	5,017.958	Not Full	No	-0.982	12.282
TOE_2765	5,031.520	0.000	0.000	0.000	5,015.944	Not Full	No	-0.906	15.576
TOE_2766	5,029.380	0.000	0.000	0.000	5,015.665	Not Full	No	-0.955	13.715
TOE_2767	5,028.000	0.000	0.000	0.000	5,015.190	Not Full	No	-1.080	12.810
TOE_2768	5,027.030	0.000	0.000	0.000	5,013.263	Not Full	No	-1.167	13.767
TOE_2769	5,021.960	0.000	0.000	0.000	5,009.085	Not Full	No	-0.975	12.875
TOE_2770	5,018.710	0.000	0.000	0.000	5,007.989	Not Full	No	-0.971	10.721
TOE_2771	5,019.010	0.000	0.000	0.000	5,007.003	Not Full	No	-1.087	12.007
TOE_2772	5,020.000	0.000	0.000	0.000	5,006.542	Not Full	Yes	-0.988	13.458
TOE_2773	5,019.000	0.000	0.000	0.000	5,005.894	Not Full	No	-0.756	13.106
TOE_2774	5,017.000	0.000	0.000	0.000	5,005.854	Not Full	No	0.204	11.146
TOE_2775	5,015.840	0.000	0.000	0.000	5,004.880	Not Full	No	-0.920	10.960
TOE_2776	5,014.980	0.000	0.000	0.000	5,004.190	Not Full	No	-0.850	10.790
TOE_2777	5,012.960	0.000	0.000	0.000	5,003.666	Not Full	No	-0.864	9.294
TOE_2778	5,012.130	0.000	0.000	0.000	5,003.188	Not Full	No	-0.852	8.942
TOE_2779	5,009.900	0.000	0.000	0.000	5,002.732	Not Full	No	-0.848	7.168
TOE_2780	5,011.970	0.000	0.000	0.000	5,002.301	Not Full	No	-0.809	9.669
TOE_2781	5,011.660	0.000	0.000	0.000	5,002.255	Not Full	No	-0.545	9.405
TOE_2782	5,011.310	0.000	0.000	0.000	5,001.798	Not Full	No	-1.142	9.512
TOE_2783	5,008.830	0.000	0.000	0.000	5,001.328	Not Full	No	-1.232	7.502
TOE_2784	5,006.790	0.000	0.000	0.000	5,000.407	Not Full	No	-1.143	6.383
TOE_2785	5,012.690	0.000	0.000	0.000	5,000.277		No	-1.143	12.413
TOE_2786	5,008.290	0.000	0.000	0.000	5,000.881		No	-0.759	7.409
TOE_2787	5,016.850	0.000	0.000	0.000	4,999.502		No	-0.728	17.348
TOE_2788	5,014.290	0.000	0.000	0.000	4,999.911	Not Full	No	-1.229	14.379

ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
TOE_2789	5,007.240	0.000	0.000	0.000	4,995.751	Not Full	No	-1.399	11.489
TOE_2790	5,012.380	9,999.356	39,997.425	0.000	4,995.941	Not Full	No	-1.139	16.439
TOE_2791	5,004.080	0.000	0.000	0.000	4,995.311	Not Full	No	-1.389	8.769
TOE_2792	5,003.840	0.000	0.000	0.000	4,995.094	Not Full	No	-1.456	8.746
TOE_2793	5,008.860	0.000	0.000	0.000	4,994.497	Not Full	No	-1.493	14.363
TOE_2794	5,009.670	0.000	0.000	0.000	4,993.891	Not Full	No	-1.429	15.779
TOE_2795	5,011.010	0.000	0.000	0.000	4,993.486	Not Full	No	-1.334	17.524
TOE_2798	5,011.503	34,915.667	137,558.874	0.000	5,000.933	Not Full	Yes	-0.500	10.570
TOE_2799	5,007.780	0.000	0.000	0.000	5,000.189	Not Full	No	-0.897	7.591
TOE_2800	5,010.450	0.000	0.000	0.000	4,992.433	Not Full	No	-2.467	18.017
TOE_2801	5,055.525	0.000	0.000	0.000	5,045.271	Not Full	No	-1.184	10.254
TOE_2802	5,061.985	0.000	0.000	0.000	5,047.209	Not Full	No	-1.056	14.776
TOE_2803	5,065.905	0.000	0.000	0.000	5,048.118	Not Full	No	-1.037	17.787
TOE_2804	5,067.345	0.000	0.000	0.000	5,049.113	Not Full	No	-1.032	18.232
TOE_2805	5,093.920	0.000	0.000	0.000	5,081.838	Not Full	No	-1.072	12.082
TOE_2806	5,098.000	0.000	0.000	0.000	5,085.154	Not Full	No	-1.086	12.846
TOE_2807	5,096.900	0.000	0.000	0.000	5,087.404	Not Full	No	-0.976	9.496
TOE_2808	5,105.750	0.000	0.000	0.000	5,094.798	Not Full	No	-1.082	10.952
TOE_2809	5,152.350	0.000	0.000	0.000	5,133.996	Not Full	No	-0.587	18.354
TOE_2817	5,046.820	0.000	0.000	0.000	5,031.697	Not Full	No	-0.953	15.123
TOE_2818	5,034.360	0.000	0.000	0.000	5,020.910	Not Full	Yes	-1.030	13.450
TOE_2819	5,101.240	0.000	0.000	0.000	5,090.279	Not Full	No	-1.021	10.961
TOE_2825	5,011.300	0.000	0.000	0.000	4,991.318	Not Full	No	-2.182	19.982
TOE_2826	5,010.820	0.000	0.000	0.000	4,990.533	Not Full	Yes	-1.917	20.287
TOE_2827	5,010.790	0.000	0.000	0.000	4,989.949	Not Full	No	-2.091	20.841
TOE_2828	5,009.220	0.000	0.000	0.000	4,988.973	Not Full	No	-1.897	20.247
TOE_2829	5,007.990	0.000	0.000	0.000	4,987.737	Not Full	Yes	-2.083	20.253
TOE_2830	5,007.630	0.000	0.000	0.000	4,987.499	Not Full	No	-1.931	20.131
TOE_2831	5,006.030	0.000	0.000	0.000	4,987.001	Not Full	No	-1.899	19.029
TOE_2832	5,004.210	0.000	0.000	0.000	4,986.678	Not Full	No	-2.032	17.532
TOE_2833	5,004.410	0.000	0.000	0.000	4,986.357	Not Full	No	-1.923	18.053
TOE_2834	5,004.240	0.000	0.000	0.000	4,985.430	Not Full	No	-2.010	18.810
TOE_2835	5,001.480	0.000	0.000	0.000	4,984.425	Not Full	No	-1.975	17.055
TOE_2836	5,000.540	0.000	0.000	0.000	4,983.522	Not Full	No	-1.938	17.018
TOE_2837	5,000.330	0.000	0.000	0.000	4,982.934	Not Full	No	-1.736	17.396
TOE_2838	5,005.660	0.000	0.000	0.000	4,981.881	Not Full	No	-1.899	23.779
TOE_2839	5,002.590	0.000	0.000	0.000	4,982.400		No	-1.910	20.190
TOE_2840	5,006.110	0.000	0.000	0.000	4,981.269		No	-1.991	24.841
TOE_2841	5,002.460	0.000	0.000	0.000	4,980.489		No	-2.121	21.971
TOE_2842	5,002.920	0.000	0.000	0.000	4,979.537		Yes	-2.073	23.383
TOE_2843	5,000.380	0.000	0.000	0.000	4,980.140		No	-2.230	20.240

ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
TOE_2844	4,994.190	0.000	0.000	0.000	4,978.034	Not Full	No	-2.286	16.156
TOE_2845	4,993.980	0.000	0.000	0.000	4,978.031	Not Full	Yes	-1.949	15.949
TOE_2846	4,991.150	0.000	0.000	0.000	4,977.509	Not Full	No	-1.991	13.641
TOE_2847	4,990.880	0.000	0.000	0.000	4,976.700	Not Full	No	-2.170	14.180
TOE_2848	4,990.370	0.000	0.000	0.000	4,976.173	Not Full	No	-2.187	14.197
TOE_2849	4,990.000	0.000	0.000	0.000	4,973.659	Not Full	No	-2.321	16.341
TOE_2850	4,988.020	0.000	0.000	0.000	4,969.505	Not Full	No	-2.305	18.515
TOE_2851	4,987.060	0.000	0.000	0.000	4,967.242	Not Full	No	-2.168	19.818
TOE_2852	4,985.500	0.000	0.000	0.000	4,966.831	Not Full	Yes	-1.909	18.669
TOE_2853	4,986.910	0.000	0.000	0.000	4,966.951	Not Full	No	-2.129	19.959
TOE_2854	4,987.460	0.000	0.000	0.000	4,970.109	Not Full	No	-0.641	17.351
TOE_2855	4,986.200	0.000	0.000	0.000	4,971.112	Not Full	No	-0.568	15.088
TOE_2856	4,988.050	0.000	0.000	0.000	4,971.871	Not Full	No	-0.609	16.179
TOE_2857	4,987.820	0.000	0.000	0.000	4,972.235	Not Full	Yes	-0.615	15.585
TOE_2858	4,988.840	0.000	0.000	0.000	4,975.907	Not Full	No	-0.723	12.933
TOE_2859	4,989.490	0.000	0.000	0.000	4,977.896	Not Full	Yes	-0.654	11.594
TOE_2860	4,985.430	0.000	0.000	0.000	4,966.045	Not Full	No	-1.875	19.385
TOE_2861	4,983.250	0.000	0.000	0.000	4,964.957	Not Full	No	-2.223	18.293
TOE_2862	4,982.380	0.000	0.000	0.000	4,964.929	Not Full	Yes	-1.781	17.451
TOE_2863	4,982.420	0.000	0.000	0.000	4,964.417	Not Full	No	-1.993	18.003
TOE_2864	4,980.720	0.000	0.000	0.000	4,963.638	Not Full	No	-2.072	17.082
TOE_2865	4,981.960	0.000	0.000	0.000	4,963.328	Not Full	No	-1.882	18.632
TOE_2866	4,982.300	0.000	0.000	0.000	4,962.787	Not Full	No	-1.883	19.513
TOE_2867	4,984.250	0.000	0.000	0.000	4,962.026	Not Full	No	-2.074	22.224
TOE_2868	4,980.960	0.000	0.000	0.000	4,960.858	Not Full	No	-1.932	20.102
TOE_2869	4,978.450	0.000	0.000	0.000	4,959.991	Not Full	No	-1.899	18.459
TOE_2870	4,976.690	0.000	0.000	0.000	4,959.188	Not Full	No	-1.912	17.502
TOE_2871	4,974.820	0.000	0.000	0.000	4,958.333	Not Full	No	-1.877	16.487
TOE_2872	4,973.300	0.000	0.000	0.000	4,957.529	Not Full	No	-1.951	15.771
TOE_2873	4,970.750	0.000	0.000	0.000	4,956.827	Not Full	No	-1.813	13.923
TOE_2874	4,969.570	0.000	0.000	0.000	4,956.507	Not Full	No	-1.943	13.063
TOE_2875	4,967.820	0.000	0.000	0.000	4,956.100	Not Full	No	-1.990	11.720
TOE_2876	4,970.850	0.000	0.000	0.000	4,955.738	Not Full	No	-1.952	15.112
TOE_2877	4,969.020	0.000	0.000	0.000	4,955.062	Not Full	No	-1.878	13.958
TOE_2878	4,975.470	0.000	0.000	0.000	4,954.402	Not Full	No	-1.908	21.068
TOE_2879	4,993.130	0.000	0.000	0.000	4,953.667	Not Full	No	-1.873	39.463
TOE_2880	4,992.470	0.000	0.000	0.000	4,953.341	Not Full	No	-2.059	39.129
TOE_2881	4,986.390	0.000	0.000	0.000	4,952.851	Not Full	No	-1.869	33.539
TOE_2882	4,983.690	0.000	0.000	0.000	4,952.418	Not Full	No	-1.902	31.272
TOE_2883	4,977.290	0.000	0.000	0.000	4,952.044	Not Full	No	-1.926	25.246
TOE_2884	4,973.860	0.000	0.000	0.000	4,951.145	Not Full	No	-1.915	22.715

	ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
П	TOE_2885	4,966.950	0.000	0.000	0.000	4,950.258	Not Full	No	-1.992	16.692
Π	TOE_2886	4,962.980	0.000	0.000	0.000	4,949.407	Not Full	No	-1.973	13.573
Π	TOE_2887	4,963.360	0.000	0.000	0.000	4,948.742	Not Full	No	-2.038	14.618
Π	TOE_2888	4,965.190	0.000	0.000	0.000	4,947.772	Not Full	No	-1.788	17.418
	TOE_2889	4,956.350	0.000	0.000	0.000	4,940.695	Not Full	No	-2.075	15.655
	TOE_2890	4,957.260	0.000	0.000	0.000	4,940.309	Not Full	No	-2.051	16.951
Π	TOE_2891	4,956.430	0.000	0.000	0.000	4,939.157	Not Full	No	-2.183	17.273
Π	TOE_2892	4,952.720	0.000	0.000	0.000	4,938.937	Not Full	Yes	-1.873	13.783
Π	TOE_2893	4,951.610	0.000	0.000	0.000	4,938.064	Not Full	No	-1.996	13.546
Ħ	TOE_2894	4,950.110	0.000	0.000	0.000	4,937.112	Not Full	No	-1.948	12.998
Ħ	TOE_2895	4,948.680	0.000	0.000	0.000	4,936.110	Not Full	No	-1.960	12.570
Ħ	TOE_2896	4,945.630	0.000	0.000	0.000	4,935.305	Not Full	No	-1.875	10.325
Ħ	TOE_2897	4,944.050	0.000	0.000	0.000	4,934.291	Not Full	No	-2.179	9.759
Ħ	TOE_2898	4,942.250	0.000	0.000	0.000	4,932.401		Yes	-1.909	9.849
Ħ	TOE_2899	4,941.010	0.000	0.000	0.000	4,931.606	Not Full	No	-1.994	9.404
Ħ	TOE_2900	4,939.280	0.000	0.000	0.000	4,930.668	Not Full	No	-2.072	8.612
Ħ	TOE_2901	4,939.080	0.000	0.000	0.000	4,930.532	Not Full	No	-1.998	8.548
Ħ	TOE_2902	4,941.290	0.000	0.000	0.000	4,929.749		No	-1.961	11.541
Ħ	TOE_2903	4,936.850	0.000	0.000	0.000	4,928.773	Not Full	No	-1.917	8.077
Ħ	TOE_2904	4,934.060	0.000	0.000	0.000	4,927.962	Not Full	No	-1.908	6.098
Ħ	TOE 2905	5,019.625	0.000	0.000	0.000	5,001.643	Not Full	No	-1.382	17.982
Ħ	TOE_2906	5,019.725	0.000	0.000	0.000	5,000.893		No	-1.532	18.832
Ħ	TOE_2914	5,023.740	0.000	0.000	0.000	5,009.708		Yes	-0.972	14.032
Ħ	TOE_2915	5,115.200	0.000	0.000	0.000	5,100.407		No	-0.460	14.793
Ħ	TOE_2916	5,116.100	0.000	0.000	0.000	5,103.370	Not Full	No	-0.497	12.730
Ħ	TOE_2917	5,127.100	53,949.580	207,146.860	0.000	5,116.964		No	-0.502	10.136
Ħ	TOE_2920	4,988.020	0.000	0.000	0.000	4,970.181	Not Full	No	-2.309	17.839
Ħ	TOE_2921	5,009.220	0.000	0.000	0.000	4,988.413		No	-2.117	20.807
Ħ	TOE_2941	5,101.560	0.000	0.000	0.000	5,083.466		No	-0.834	18.094
Ħ	TOE_2942	5,095.220	0.000	0.000	0.000	5,079.665	Not Full	No	-0.865	15.555
Ħ	TOE_2943	5,086.380	0.000	0.000	0.000	5,070.317	Not Full	No	-0.863	16.063
Ħ	TOE 2944	5,080.970	0.000	0.000	0.000	5,057.485	Not Full	Yes	-1.035	23.485
Ħ	TOE_2945	5,071.410	0.000	0.000	0.000	5,056.919		No	-1.001	14.491
Ħ	TOE_2946	5,070.940	0.000	0.000	0.000	5,056.263		No	-1.017	14.677
Ħ	TOE 2947	5,070.110	0.000	0.000	0.000	5,055.700		No	-1.010	14.410
Ħ	TOE 2948	5,070.560	0.000	0.000	0.000	5,055.210		No	-1.250	15.350
H	TOE 2949	5,067.830	0.000	0.000	0.000	5,054.705		No	-1.265	13.125
Ħ	TOE 2950	4,930.000	0.000	0.000	0.000	4,927.241		No	-1.889	2.759
H	TOE_2951	4,934.060	0.000	0.000	0.000	4,927.880		No	-1.870	6.180
H	TOE_2960	5,099.000	0.000	0.000	0.000	5,087.326		No	-0.634	11.674
H	TOE_2962	5,098.360	0.000	0.000	0.000	5,087.888		Yes	-0.452	10.472

ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
TOE_2964	5,098.200	0.000	0.000	0.000	5,087.353	Not Full	No	-0.847	10.847
TOE_2965	5,099.700	0.000	0.000	0.000	5,088.728	Not Full	Yes	-0.772	10.972
TOE_2966	5,104.500	0.000	0.000	0.000	5,095.946	Not Full	No	-0.854	8.554
TOE_2967	5,109.100	0.000	0.000	0.000	5,098.024	Not Full	Yes	-0.776	11.076
TOE_2968	5,110.300	0.000	0.000	0.000	5,099.961	Not Full	No	-0.839	10.339
TOE_2969	5,111.800	0.000	0.000	0.000	5,099.004	Not Full	No	-0.796	12.796
TOE_2970	5,116.500	0.000	0.000	0.000	5,103.638	Not Full	No	-0.762	12.862
TOE_2971	5,115.900	0.000	0.000	0.000	5,102.425	Not Full	No	-0.775	13.475
TOE_2972	5,117.400	0.000	0.000	0.000	5,101.112	Not Full	No	-0.788	16.288
TOE_2973	5,120.000	0.000	0.000	0.000	5,105.741	Not Full	No	-0.759	14.259
TOE_2977	5,105.640	13,249.435	52,997.740	0.000	5,099.332	Not Full	No	-0.484	6.308
TOE_2978	5,133.570	29,250.709	116,847.788	0.000	5,112.430	Not Full	No	-1.290	21.140
TOE_2979	5,125.960	0.000	0.000	0.000	5,110.483	Not Full	No	-1.277	15.477
TOE_2980	5,135.280	0.000	0.000	0.000	5,108.967	Not Full	Yes	-1.273	26.313
TOE_2981	5,129.120	0.000	0.000	0.000	5,117.788	Not Full	No	-1.356	11.332
TOE_2982	5,156.250	0.000	0.000	0.000	5,134.500	Not Full	No	-1.500	21.750
TOE_2983	5,156.910	33,949.427	134,026.302	0.000	5,133.568	Not Full	No	-1.392	23.342
TOE_2984	5,083.315	0.000	0.000	0.000	5,073.502	Not Full	No	-0.883	9.813
TOE_2985	5,135.145	0.000	0.000	0.000	5,119.059	Not Full	No	-0.706	16.086
TOE_2986	5,135.995	37,500.466	147,008.900	0.000	5,119.329	Not Full	No	-0.726	16.666
TOE_2987	5,143.225	0.000	0.000	0.000	5,124.295	Not Full	Yes	-0.720	18.930
TOE_2988	5,151.225	0.000	0.000	0.000	5,126.257	Not Full	No	-0.728	24.968
TOE_2989	5,151.225	27,999.349	111,997.398	0.000	5,128.316	Not Full	No	-0.729	22.909
TOE_2990	5,127.040	0.000	0.000	0.000	5,116.776	Not Full	No	-0.431	10.264
TOE_2991	5,143.225	0.000	0.000	0.000	5,122.344	Not Full	No	-0.741	20.881
TOE_2992	5,107.670	0.000	0.000	0.000	5,092.118	Not Full	No	-0.485	15.552
TOE_2994	5,011.000	0.000	0.000	0.000	4,993.030	Not Full	No	-2.040	17.970
TOE_2997	5,102.000	0.000	0.000	0.000	5,087.069	Not Full	No	-0.464	14.931
TOE_3003	5,171.230	0.000	0.000	0.000	5,155.175	Not Full	No	-0.833	16.055
TOE_3005	5,011.000	0.000	0.000	0.000	4,992.819	Not Full	No	-2.451	18.181
VPF1_1	5,067.160	0.000	0.000	0.000	5,054.079	Not Full	No	-1.281	13.081
VPF1_103	5,067.570	0.000	0.000	0.000	5,052.476	Not Full	No	-1.174	15.094
VPF1_11	5,075.480	0.000	0.000	0.000	5,064.484	Not Full	No	-1.266	10.996
VPF1_12	5,071.900	0.000	0.000	0.000	5,060.950	Not Full	No	-1.200	10.950
VPF1_126	5,074.140	0.000	0.000	0.000	5,055.890	Not Full	No	-0.667	18.250
VPF1_127	5,066.000	0.000	0.000	0.000	5,051.180	Not Full	No	-0.667	14.820
VPF1_128	5,059.140	0.000	0.000	0.000	5,046.440	Not Full	No	-0.667	12.700
VPF1_129	5,058.660	20,999.512	83,998.048	0.000	5,045.548	Not Full	No	-0.528	13.112
VPF1_13	5,078.400	0.000	0.000	0.000	5,059.060	Not Full	No	-1.290	19.340
VPF1_130	5,056.230	0.000	0.000	0.000	5,043.799	Not Full	No	-0.567	12.431
VPF1_14	5,069.300	0.000	0.000	0.000	5,055.151	Not Full	Yes	-0.899	14.149

ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
VPF1_15	5,069.300	0.000	0.000	0.000	5,054.704	Not Full	No	-0.946	14.596
VPF1_15A	5,064.530	40,750.545	158,891.188	0.000	5,050.918	Not Full	No	-1.132	13.612
VPF1_16	5,062.560	0.000	0.000	0.000	5,049.289	Not Full	No	-1.611	13.271
VPF1_17	5,058.600	0.000	0.000	0.000	5,037.899	Not Full	Yes	-1.251	20.701
VPF1_18A	5,058.100	0.000	0.000	0.000	5,036.846	Not Full	No	-1.304	21.254
VPF1_19A	5,056.800	0.000	0.000	0.000	5,035.879	Not Full	No	-1.301	20.921
VPF1_20A	5,054.500	0.000	0.000	0.000	5,034.753	Not Full	No	-1.287	19.747
VPF1_21A	5,054.700	0.000	0.000	0.000	5,033.703	Not Full	No	-1.427	20.997
VPF1_32A	5,080.000	15,999.834	63,999.336	0.000	5,066.618	Not Full	No	-1.332	13.382
VPF1_58	5,067.590	18,499.673	73,998.692	0.000	5,053.934	Not Full	No	-1.016	13.656
VPF1 7	5,085.770	0.000	0.000	0.000	5,075.223	Not Full	No	-1.027	10.547
VPF1 718	5,092.100	0.000	0.000	0.000	5,079.083	Not Full	No	-1.017	13.017
VPF1_8	5,082.650	0.000	0.000	0.000	5,071.867	Not Full	No	-0.893	10.783
VPFE 10A	5,083.640	0.000	0.000	0.000	5,069.733	Not Full	No	-0.967	13.907
VPFE_717	5,098.830	0.000	0.000	0.000	5,085.411	Not Full	No	-0.552	13.419
VRF1D_702	5,136.180	0.000	0.000	0.000	5,123.214	Not Full	No	-0.600	12.966
VRF1D_703	5,125.680	0.000	0.000	0.000	5,113.593	Not Full	No	-0.570	12.087
VRF1D_704	5,119.340	0.000	0.000	0.000	5,107.255	Not Full	No	-0.568	12.085
VRF1D_705	5,116.570	0.000	0.000	0.000	5,104.432	Not Full	No	-0.571	12.138
VRF1D_707	5,113.290	0.000	0.000	0.000	5,101.316	Not Full	No	-0.557	11.974
VRF1D_708	5,111.140	0.000	0.000	0.000	5,099.274	Not Full	No	-0.499	11.866
VRF1D_709	5,108.490	0.000	0.000	0.000	5,098.089	Not Full	Yes	-0.434	10.401
VRF1D_710	5,110.890	0.000	0.000	0.000	5,097.488	Not Full	No	-0.435	13.402
VRF1D_711	5,115.620	0.000	0.000	0.000	5,096.609	Not Full	No	-0.445	19.011
VRF1D_712	5,119.540	0.000	0.000	0.000	5,095.796	Not Full	No	-0.427	23.744
VRF1D_713	5,116.910	0.000	0.000	0.000	5,095.045	Not Full	No	-0.428	21.865
VRF1D_714	5,112.260	0.000	0.000	0.000	5,094.114	Not Full	No	-0.479	18.146
VRF1D_715	5,110.280	0.000	0.000	0.000	5,092.853	Not Full	No	-0.561	17.427
VRF1D_716	5,102.500	39,500.625	154,321.482	0.000	5,088.955	Not Full	No	-0.479	13.545
VRF1G_186	5,145.220	0.000	0.000	0.000	5,136.098	Not Full	No	-0.555	9.122
VRF1G_188	5,141.220	0.000	0.000	0.000	5,128.680	Not Full	No	-0.474	12.540
VRF1G_204	5,146.770	0.000	0.000	0.000	5,127.034	Not Full	Yes	-0.626	19.736
VRF1G_205	5,137.330	0.000	0.000	0.000	5,125.809		No	-0.621	11.521
VRGC1 698	5,157.760	152,524.743	499,387.665	0.000	5,137.670	Not Full	No	-0.524	20.090
VRGC1 699	5,153.370	0.000	0.000	0.000	5,134.947		No	-0.557	18.423
VRGC2_206	5,137.400	0.000	0.000	0.000	5,124.559		No	-0.741	12.841
VRGC2_526	5,142.130	0.000	0.000	0.000	5,131.828		No	-0.702	10.302
VRGC2 527	5,138.210	72,750.213	267,564.495	0.000	5,127.213		No	-0.697	10.997
VRGC2 543	5,134.310	0.000	0.000	0.000	5,119.087		Yes	-0.513	15.223
VRGC2_544	5,125.790	0.000	0.000	0.000	5,117.235		No	-0.555	8.555
VRGC2_545	5,121.520	0.000	0.000	0.000	5,111.950		Yes	-0.720	9.570

	ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
V	/RGC2_580	5,120.220	0.000	0.000	0.000	5,110.419	Not Full	No	-0.751	9.801
□ v	/RGC2_581	5,123.750	0.000	0.000	0.000	5,108.912	Not Full	No	-0.788	14.838
Πv	/RGC2_582	5,116.400	69,000.454	255,913.995	0.000	5,107.186	Not Full	No	-0.794	9.214
Πv	/RGC2_583	5,116.440	0.000	0.000	0.000	5,104.432	Not Full	No	-1.168	12.008
v	/RGC4_365	5,191.820	151,250.343	495,900.908	0.000	5,179.367	Not Full	No	-0.426	12.453
v	/RGC4_366	5,189.850	0.000	0.000	0.000	5,178.006	Not Full	No	-0.477	11.844
ΠV	/RGC4_389	5,191.830	0.000	0.000	0.000	5,176.793	Not Full	No	-0.470	15.037
ΠV	/RGC4_415	5,189.660	0.000	0.000	0.000	5,175.379	Not Full	Yes	-0.415	14.281
ΠV	/RGC4_416	5,192.130	0.000	0.000	0.000	5,173.503	Not Full	No	-0.461	18.627
ΠV	/RGC4_417	5,183.930	0.000	0.000	0.000	5,170.985	Not Full	No	-0.629	12.945
ΠV	/RGC4_418	5,153.010	21,424.312	85,697.248	0.000	5,147.076	Not Full	No	-0.467	5.934
ΠV	/RGC4_419	5,150.600	0.000	0.000	0.000	5,143.500	Not Full	No	-0.533	7.100
	/RGC4_420	5,150.350	0.000	0.000	0.000	5,140.048	Not Full	No	-0.536	10.302
	/RGC6_183	5,175.770	155,600.581	507,803.160	0.000	5,146.520	Not Full	No	-0.453	29.250
	/RGC6_184	5,155.730	0.000	0.000	0.000	5,145.130	Not Full	No	-0.534	10.600
	/RGC6_185	5,152.370	0.000	0.000	0.000	5,140.333	Not Full	No	-0.571	12.037
Ħ	WCR10	5,106.000	0.000	0.000	0.000	5,094.000	Not Full	No	-0.667	12.000
Πv	WCR3_100	5,023.010	0.000	0.000	0.000	5,015.280	Not Full	No	-1.250	7.730
	VCR3_100A	5,026.060	0.000	0.000	0.000	5,017.020	Not Full	No	-1.250	9.040
	VCR3_100B	5,027.500	0.000	0.000	0.000	5,018.810	Not Full	No	-1.250	8.690
	WCR3_101	5,028.990	0.000	0.000	0.000	5,020.600	Not Full	No	-1.250	8.390
	WCR3_102	5,029.520	0.000	0.000	0.000	5,021.750	Not Full	No	-1.250	7.770
	WCR3_103	5,030.990	0.000	0.000	0.000	5,024.200	Not Full	No	-1.250	6.790
	WCR3_11A	5,068.180	0.000	0.000	0.000	5,055.400	Not Full	No	-1.250	12.780
	WCR3_184	5,094.790	0.000	0.000	0.000	5,082.500	Not Full	No	-0.833	12.290
	WCR3_80	4,964.020	0.000	0.000	0.000	4,951.000	Not Full	No	-1.250	13.020
	WCR3_81	4,964.350	0.000	0.000	0.000	4,953.080	Not Full	No	-1.250	11.270
	WCR3_82	4,964.780	0.000	0.000	0.000	4,953.720	Not Full	No	-1.250	11.060
	WCR3_83	4,967.250	0.000	0.000	0.000	4,956.630	Not Full	No	-1.250	10.620
	WCR3_84	4,968.740	0.000	0.000	0.000	4,958.290	Not Full	No	-1.250	10.450
	WCR3_85	4,974.200	0.000	0.000	0.000	4,962.290	Not Full	No	-1.250	11.910
	WCR3_86	4,976.960	0.000	0.000	0.000	4,965.040	Not Full	No	-1.250	11.920
	WCR3_86A	4,989.610	0.000	0.000	0.000	4,973.150		No	-1.250	16.460
	WCR3_86B	4,983.490	0.000	0.000	0.000	4,970.090		No	-1.250	13.400
	NCR3 86C	4,983.460	0.000	0.000	0.000	4,967.160		No	-1.250	16.300
	WCR3_87	4,990.560	0.000	0.000	0.000	4,975.670		No	-1.250	14.890
	WCR3_88	4,994.080	0.000	0.000	0.000	4,977.810		No	-1.250	16.270
	WCR3_89	4,988.470	0.000	0.000	0.000	4,980.600		No	-1.250	7.870
	WCR3_90	5,000.230	0.000	0.000	0.000	4,984.730		No	-1.250	15.500
	WCR3 91	4,999.540	0.000	0.000	0.000	4,986.460		No	-1.250	13.080
	WCR3_92	4,999.290	0.000	0.000	0.000	4,988.340		No	-1.250	10.950

ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
WCR3_93	4,998.750	0.000	0.000	0.000	4,989.850	Not Full	No	-1.250	8.900
WCR3_94	5,007.400	0.000	0.000	0.000	4,995.040	Not Full	No	-1.250	12.360
WCR3_94A	5,010.850	0.000	0.000	0.000	4,997.090	Not Full	No	-1.250	13.760
WCR3_95	5,012.370	0.000	0.000	0.000	4,998.240	Not Full	No	-1.250	14.130
WCR3_96	5,013.040	0.000	0.000	0.000	5,001.030	Not Full	No	-1.250	12.010
WCR3_97	5,013.510	0.000	0.000	0.000	5,003.640	Not Full	No	-1.250	9.870
WCR3_98	5,018.000	0.000	0.000	0.000	5,007.900	Not Full	No	-1.250	10.100
WCR3_99	5,021.010	0.000	0.000	0.000	5,009.670	Not Full	No	-1.250	11.340
WCR3_H125	5,085.240	0.000	0.000	0.000	5,072.800	Not Full	No	-0.667	12.440
WCR3_H126	5,080.230	0.000	0.000	0.000	5,071.780	Not Full	No	-0.667	8.450
WCR3_H127	5,081.120	0.000	0.000	0.000	5,071.100	Not Full	No	-0.667	10.020
WCR3_H128	5,077.710	0.000	0.000	0.000	5,068.900	Not Full	No	-0.667	8.810
WCR3_H129	5,079.410	0.000	0.000	0.000	5,067.000	Not Full	No	-0.667	12.410
WCR3_H130	5,078.600	0.000	0.000	0.000	5,065.300	Not Full	No	-0.667	13.300
WCR3_H131	5,076.050	0.000	0.000	0.000	5,061.800	Not Full	No	-0.833	14.250
WCR3_H132	5,077.020	0.000	0.000	0.000	5,061.000	Not Full	No	-0.833	16.020
WCR3_H133	5,074.230	0.000	0.000	0.000	5,060.000	Not Full	No	-0.833	14.230
WCR3_H134	5,072.210	0.000	0.000	0.000	5,056.850	Not Full	No	-1.250	15.360
WCR3_H135	5,080.510	0.000	0.000	0.000	5,062.130	Not Full	No	-1.000	18.380
WCR3_H136	5,079.790	0.000	0.000	0.000	5,064.100	Not Full	No	-1.000	15.690
WCR3_H137	5,080.010	0.000	0.000	0.000	5,066.100	Not Full	No	-1.000	13.910
WCR3_H138	5,078.740	0.000	0.000	0.000	5,068.300	Not Full	No	-1.000	10.440
WCR3_H139	5,081.290	0.000	0.000	0.000	5,070.000	Not Full	No	-1.000	11.290
WCR3_H140	5,085.040	0.000	0.000	0.000	5,072.680	Not Full	No	-1.000	12.360
WCR3_H141	5,085.410	0.000	0.000	0.000	5,073.100	Not Full	No	-1.000	12.310
WCR3_H146	5,089.800	0.000	0.000	0.000	5,077.500	Not Full	No	-0.833	12.300
WCR3_H164	5,096.500	0.000	0.000	0.000	5,079.100	Not Full	No	-0.833	17.400
WCR3_H165	5,095.420	0.000	0.000	0.000	5,079.800	Not Full	No	-0.833	15.620
WCR3_H171	5,093.250	0.000	0.000	0.000	5,081.000	Not Full	No	-0.833	12.250
WCR3_H185	5,097.730	0.000	0.000	0.000	5,085.500	Not Full	No	-0.833	12.230
WCR3_H186	5,104.280	0.000	0.000	0.000	5,092.000	Not Full	No	-0.833	12.280
WCR3_H187	5,105.550	0.000	0.000	0.000	5,093.300	Not Full	No	-0.833	12.250
WCR3_H188	5,106.480	0.000	0.000	0.000	5,095.000	Not Full	No	-0.667	11.480
WCR3_H189	5,108.120	0.000	0.000	0.000	5,097.800	Not Full	No	-0.667	10.320
WCR3_H190	5,111.400	0.000	0.000	0.000	5,099.400	Not Full	No	-0.667	12.000
WCR3_H191	5,113.380	0.000	0.000	0.000	5,101.380	Not Full	No	-0.667	12.000
WCR3_H192	5,116.340	0.000	0.000	0.000	5,104.340		No	-0.667	12.000
WCR3_H192A	5,120.060	0.000	0.000	0.000	5,108.060	Not Full	No	-0.667	12.000
WCR3_H193	5,123.260	0.000	0.000	0.000	5,111.260	Not Full	No	-0.667	12.000
WCR3_H194	5,127.280	0.000	0.000	0.000	5,115.290	Not Full	No	-0.667	11.990
WCR3_I1	5,069.640	0.000	0.000	0.000	5,056.110	Not Full	No	-1.250	13.530

	ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
	WCR3_I10	5,049.360	0.000	0.000	0.000	5,036.820	Not Full	No	-1.250	12.540
	WCR3_I11	5,046.150	0.000	0.000	0.000	5,035.020	Not Full	No	-1.250	11.130
	WCR3_I12	5,050.460	0.000	0.000	0.000	5,032.440	Not Full	No	-1.250	18.020
	WCR3_I13	5,046.090	0.000	0.000	0.000	5,031.040	Not Full	No	-1.250	15.050
	WCR3_I13A	5,041.820	0.000	0.000	0.000	5,029.690	Not Full	No	-1.250	12.130
	WCR3_I14	5,040.390	0.000	0.000	0.000	5,028.390	Not Full	No	-1.250	12.000
	WCR3_I15	5,039.430	0.000	0.000	0.000	5,026.580	Not Full	No	-1.250	12.850
	WCR3_I2	5,066.970	0.000	0.000	0.000	5,053.450	Not Full	No	-1.250	13.520
	WCR3_I4	5,065.060	0.000	0.000	0.000	5,051.050	Not Full	No	-1.250	14.010
	WCR3_I5	5,059.210	0.000	0.000	0.000	5,046.410	Not Full	No	-1.250	12.800
	WCR3_I6	5,056.080	0.000	0.000	0.000	5,044.630	Not Full	No	-1.250	11.450
	WCR3_I7	5,053.870	0.000	0.000	0.000	5,042.620	Not Full	No	-1.250	11.250
	WCR3_I8	5,051.680	0.000	0.000	0.000	5,040.420	Not Full	No	-1.250	11.260
	WCR3_I9	5,048.680	0.000	0.000	0.000	5,038.620	Not Full	No	-1.250	10.060
	WCR3-I_3	5,066.070	0.000	0.000	0.000	5,052.450	Not Full	No	-1.250	13.620
	WCR5_1	5,170.000	0.000	0.000	0.000	5,157.000	Not Full	No	-0.833	13.000
	WCR5_10	5,094.000	0.000	0.000	0.000	5,081.000	Not Full	No	-1.000	13.000
	WCR5_11	5,092.990	0.000	0.000	0.000	5,077.890	Not Full	No	-1.000	15.100
	WCR5_12	5,084.000	0.000	0.000	0.000	5,071.000	Not Full	No	-1.000	13.000
	WCR5_13	5,080.000	0.000	0.000	0.000	5,067.000	Not Full	No	-1.000	13.000
	WCR5_14	5,078.000	0.000	0.000	0.000	5,065.000	Not Full	No	-1.000	13.000
	WCR5_15	5,076.000	0.000	0.000	0.000	5,063.000	Not Full	No	-1.000	13.000
П	WCR5_16	5,070.000	0.000	0.000	0.000	5,057.000	Not Full	No	-1.000	13.000
П	WCR5_17	5,066.000	0.000	0.000	0.000	5,053.000	Not Full	No	-1.000	13.000
П	WCR5_18	5,062.000	0.000	0.000	0.000	5,049.000	Not Full	No	-1.000	13.000
П	WCR5_19	5,058.000	0.000	0.000	0.000	5,045.000	Not Full	No	-1.000	13.000
П	WCR5_2	5,162.980	0.000	0.000	0.000	5,148.900	Not Full	No	-0.833	14.080
П	WCR5_20	5,048.000	0.000	0.000	0.000	5,035.000	Not Full	No	-1.000	13.000
П	WCR5_21	5,045.000	0.000	0.000	0.000	5,031.990	Not Full	No	-1.000	13.010
П	WCR5_22	5,029.000	0.000	0.000	0.000	5,016.000	Not Full	No	-1.250	13.000
П	WCR5_23	5,028.000	0.000	0.000	0.000	5,015.000	Not Full	No	-1.250	13.000
П	WCR5_24	5,022.000	0.000	0.000	0.000	5,009.000	Not Full	No	-1.250	13.000
П	WCR5_25	5,017.080	0.000	0.000	0.000	5,003.900	Not Full	No	-1.250	13.180
П	WCR5_26	5,018.000	0.000	0.000	0.000	5,001.770	Not Full	No	-1.250	16.230
同	WCR5_27	5,018.000	0.000	0.000	0.000	4,999.930	Not Full	No	-1.250	18.070
Ħ	WCR5_28	5,016.000	0.000	0.000	0.000	4,998.700	Not Full	No	-1.250	17.300
Ħ	WCR5_3	5,156.000	0.000	0.000	0.000	5,142.870	Not Full	No	-0.833	13.130
Ħ	WCR5_4	5,138.000	0.000	0.000	0.000	5,124.900		No	-1.000	13.100
Ħ	WCR5_5	5,136.000	0.000	0.000	0.000	5,122.900		No	-1.000	13.100
Ħ	WCR5_6	5,138.000	0.000	0.000	0.000	5,120.350		No	-1.000	17.650
Ħ	WCR5_7	5,132.000	0.000	0.000	0.000	5,119.000		No	-1.000	13.000

ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
WCR5_8	5,124.000	0.000	0.000	0.000	5,111.000	Not Full	No	-1.000	13.000
WCR5_9	5,112.000	0.000	0.000	0.000	5,099.000	Not Full	No	-1.000	13.000
WCR7_1	5,154.000	0.000	0.000	0.000	5,141.000	Not Full	No	-0.667	13.000
WCR7_10	5,062.000	0.000	0.000	0.000	5,049.000	Not Full	No	-0.667	13.000
WCR7_11	5,058.000	0.000	0.000	0.000	5,045.000	Not Full	No	-0.667	13.000
WCR7_12	5,055.990	0.000	0.000	0.000	5,043.000	Not Full	No	-0.833	12.990
WCR7_13	5,050.000	0.000	0.000	0.000	5,037.000	Not Full	No	-0.833	13.000
WCR7_14	5,044.000	0.000	0.000	0.000	5,031.000	Not Full	No	-0.833	13.000
WCR7_15	5,042.000	0.000	0.000	0.000	5,029.000	Not Full	No	-0.833	13.000
WCR7_16	5,038.000	0.000	0.000	0.000	5,024.900	Not Full	No	-0.833	13.100
WCR7_17	5,036.000	0.000	0.000	0.000	5,022.940	Not Full	No	-0.833	13.060
WCR7_18	5,034.990	0.000	0.000	0.000	5,021.000	Not Full	No	-0.833	13.990
WCR7_2	5,136.000	0.000	0.000	0.000	5,123.000	Not Full	No	-0.667	13.000
WCR7_3	5,120.000	0.000	0.000	0.000	5,107.000	Not Full	No	-0.667	13.000
WCR7_4	5,108.000	0.000	0.000	0.000	5,095.000	Not Full	No	-0.667	13.000
WCR7_5	5,102.000	0.000	0.000	0.000	5,089.000	Not Full	No	-0.667	13.000
WCR7_6	5,094.000	0.000	0.000	0.000	5,081.000	Not Full	No	-0.667	13.000
WCR7_7	5,090.000	0.000	0.000	0.000	5,077.000	Not Full	No	-0.667	13.000
WCR7_8	5,072.000	0.000	0.000	0.000	5,059.010	Not Full	No	-0.667	12.990
WCR7_9	5,068.000	0.000	0.000	0.000	5,055.000	Not Full	No	-0.667	13.000

	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Peakable Flow (gpd)	Flow Type Velo	ity d/D	q/Q	Water Depth (ft)	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth	Adjusted Velocity
	AIF1 119-ECF21 120	AIF1_119	ECF21_120	12.000	488.407	0.004	456,289.280		Free Surface 2.65	3 0.372	0.295	0.372	0.350	0.891	1,547,662.229	No	0.372	2.653
H	ARF1 12-ARF1 4	ARF1 12	ARF1 4	8.000	154.018	0.004	225,620.011	59,250.218	Free Surface 2.23	9 0.458	0.430	0.305	0.274	0.815	525,053.946	No	0.305	2.239
	ARF1 16-ARF1 12	ARF1 16	ARF1_12	8.000	132.199	0.011	225,620.011	59,250.218	Free Surface 3.34	4 0.339	0.248	0.226	0.274	1.449	909,644.038	No	0.226	3.344
	ARF1 17-ARF1 16	ARF1 17	ARF1_16	8.000	314.508	0.009	225,620.011	59,250.218	Free Surface 3.1	1 0.358	0.274	0.239	0.274	1.308	822,988.236	No	0.239	3.111
	ARF1 28-ARF1 17	ARF1 28	ARF1_17	8.000	284.662	0.020	225,620.011	59,250.218	Free Surface 4.06	4 0.295	0.189	0.196	0.274	1.905	1,193,034.187	No	0.196	4.064
	ARF1 29-ARF1 28	ARF1 29	ARF1 28	8.000	66.881	0.012	225,620.011	59,250.218	Free Surface 3.43	7 0.333	0.239	0.222	0.274	1.507	945,043.898	No	0.222	3.437
H	ARF1 2-FMF9 1	ARF1 2	FMF9 1	10.000	336.918	0.004	225,620.011	59,250.218	Free Surface 2.34	0 0.318	0.219	0.265	0.257	0.941	1,029,721.578	No	0.265	2.340
	ARF1 31-ARF1 29	ARF1 31	ARF1 29	8.000	345.854	0.009	225,620.011	59,250.218	Free Surface 3.03	5 0.364	0.284	0.243	0.274	1.263	795,342.077	No	0.243	3.035
	ARF1 32-ARF1 31	ARF1 32	ARF1 31	8.000	124.179	0.007	225,620.011	59,250.218	Free Surface 2.85	2 0.382	0.309	0.254	0.274	1.156	730,184.738	No	0.254	2.852
	ARF1 33-ARF1 32	ARF1 33	ARF1 32	8.000	224.073	0.010	225,620.011	59,250.218	Free Surface 3.13	8 0.356	0.271	0.237	0.274	1.324	832,905.398	No	0.237	3.138
	ARF1 34-ARF1 33	ARF1_34	ARF1_33	8.000	155.283	0.006	225,620.011	59,250.218	Free Surface 2.59	7 0.409	0.351	0.273	0.274	1.011	642,238.703	No	0.273	2.597
	ARF1 35-ARF1 34	ARF1_35	ARF1_34	8.000	103.489	0.005	225,620.011	59,250.218	Free Surface 2.47	5 0.424	0.375	0.283	0.274	0.943	601,337.528	No	0.283	2.475
	ARF1_36-ARF1_35	ARF1 36	ARF1_35	8.000	271.125	0.009	225,620.011	59,250.218	Free Surface 3.0	0 0.367	0.287	0.244	0.274	1.249	786,423.378	No	0.244	3.010
	ARF1 37-ARF1 36	ARF1 37	ARF1_36	8.000	113.306	0.006	225,620.011	59,250.218	Free Surface 2.7	0 0.396	0.331	0.264	0.274	1.075	680,924.666	No	0.264	2.710
	ARF1 3-ARF1 2	ARF1 3	ARF1 2	8.000	201.740	0.006	225,620.011	59,250.218	Free Surface 2.70	3 0.397	0.333	0.265	0.274	1.071	678,362.734	No	0.265	2.703
	ARF1 4-ARF1 3	ARF1 4	ARF1 3	8.000	122.407	0.015	225,620.011	59,250.218	Free Surface 3.69	7 0.315	0.216	0.210	0.274	1.669	1,045,721.845	No	0.210	3.697
	ARF2_1-TOE_2647	ARF2_1	TOE_2647	8.000	158.000	0.008	225,620.011	59,250.218	Free Surface 2.94	6 0.372	0.295	0.248	0.274	1.211	763,554.513	No	0.248	2.946
	ARF2_2-ARF2_1	ARF2_2	ARF2_1	8.000	151.286	0.006	225,620.011	59,250.218	Free Surface 2.69	5 0.398	0.334	0.265	0.274	1.066	675,771.581	No	0.265	2.695
	BFF1_61-BFF1_62	BFF1_61	BFF1_62	8.000	397.643	0.005	0.000	0.000	Free Surface 0.00	0.000	0.000	0.000	0.000	0.000	601,633.726	No	0.000	0.000
	BFF1 62-BFF1 63	BFF1_62	BFF1_63	8.000	345.405	0.005	0.000	0.000	Free Surface 0.00	0.000	0.000	0.000	0.000	0.000	600,374.865	Yes	0.069	0.000
	BFF1_63-TOE_2733	BFF1_63	TOE_2733	8.000	197.672		67,000.295	16,750.074	Free Surface 1.98	6 0.207	0.094	0.138	0.147	1.126	713,929.656	Yes	0.230	0.969
	CCF3_39E-CMF2_39D	CCF3_39E	CMF2_39D	10.000	161.407	0.004	167,114.552	42,999.824	Free Surface 2.05	7 0.281	0.173	0.234	0.220	0.885	968,552.158	No	0.234	2.057
	CCF3_60A-CCF3_39E	CCF3_60A	CCF3_39E	10.000	310.798	0.004	167,114.552	42,999.824	Free Surface 2.09	1 0.278	0.169	0.232	0.220	0.905	990,944.494	No	0.232	2.091
	CCF3_60-CCF3_60A	CCF3_60	CCF3_60A	10.000	135.757	0.040	0.000	0.000	Free Surface 0.00	0.000	0.000	0.000	0.000	0.000	3,061,985.380	Yes	0.006	0.000
	CCF4_4-1-TOE_2990	CCF4_41	TOE_2990	8.000	204.703	0.012	253,583.000	68,250.214	Free Surface 3.50	0 0.358	0.274	0.238	0.292	1.472	926,183.223	No	0.238	3.500
	CCF4_4-2-CCF4_41	CCF4 42	CCF4 41	8.000	274.850	0.030	125,071.153		Free Surface 3.99		0.085	0.131	0.202	2.324	1,478,629.209	No	0.131	3.990
Ħ	CCF4 4-3-CCF4 42	CCF4_43	CCF4_42	8.000	287.880	0.031	125,071.153	31,499.988	Free Surface 4.00	4 0.196	0.084	0.131	0.202	2.335	1,485,724.658	No	0.131	4.004
Ħ	CCF4_4-4-CCF4_43	CCF4 44	CCF4_43	8.000	307.760	0.018	125,071.153	31,499.988	Free Surface 3.33	7 0.223	0.109	0.149	0.202	1.819	1,148,410.503	No	0.149	3.337
Ħ	CCF4_4-5-CCF4_44	CCF4_45	CCF4 44	8.000	312.018	0.018	125,071.153	31,499.988	Free Surface 3.32	7 0.223	0.109	0.149	0.202	1.812	1,143,577.617	No	0.149	3.327
	CCF6_105-CCF6_106	CCF6_105	CCF6_106	12.000	300.958	0.015	456,289.280	137,000.108	Free Surface 4.38	1 0.259	0.147	0.259	0.350	1.800	3,112,332.973	No	0.259	4.381
	CCF6_106-TOE_2640	CCF6_106	TOE 2640	12.000	304.102	0.015	456,289.280	137,000.108	Free Surface 4.28	7 0.263	0.151	0.263	0.350	1.747	3,018,825.908	No	0.263	4.287
	CCF6 6-10-CCF6 69	CCF6 610	CCF6 69	8.000	294.243	0.018	253,583.000	68,250.214	Free Surface 4.09	7 0.319	0.220	0.212	0.292	1.839	1,152,419.655	No	0.212	4.097
	CCF6_6-11-CCF6_610	CCF6_611	CCF6_610	8.000	108.377	0.016	253,583.000	68,250.214	Free Surface 3.88	1 0.332	0.237	0.221	0.292	1.704	1,068,707.131	No	0.221	3.881
	CCF6_6-12-CCF6_611	CCF6 612	CCF6 611	8.000	139.412	0.017	253,583.000	68,250.214	Free Surface 4.00	8 0.324	0.227	0.216	0.292	1.783	1,117,689.788	No	0.216	4.008
	CCF6_6-13-CCF6_612	CCF6_613	CCF6 612	8.000	116.143	0.012	253,583.000	68,250.214	Free Surface 3.52	3 0.356	0.271	0.237	0.292	1.486	934,707.955	No	0.237	3.523
	CCF6_6-14-CCF6_613	CCF6 614	CCF6 613	8.000	93.593	0.010	253,583.000	68,250.214	Free Surface 3.3	4 0.372	0.295	0.248	0.292	1.363	859,168.773	No	0.248	3.314
	CCF6_6-15-CCF6_105	CCF6_615	CCF6_105	12.000	250.404	0.035	253,583.000	68,250.214	Free Surface 4.93	5 0.158	0.054	0.158	0.259	2.634	4,699,501.517	No	0.158	4.935
	CCF6_6-8-CCF6_615	CCF6_68	CCF6_615	8.000	122.248	0.018	253,583.000	68,250.214	Free Surface 4.04	0 0.322	0.224	0.215	0.292	1.803	1,130,246.077	No	0.215	4.040
	CCF6 6-9-CCF6 68	CCF6_69	CCF6_68	8.000	210.219	0.017	253,583.000	68,250.214	Free Surface 3.98	5 0.325	0.229	0.217	0.292	1.768	1,108,600.417	No	0.217	3.985
	CCF9 4-6-CCF4 45	CCF9_46	CCF4_45	8.000	295.271	0.005	125,071.153	31,499.988	Free Surface 2.14	7 0.305	0.202	0.203	0.202	0.988	618,590.475	No	0.203	2.147
	CFF1_17-TOE_2631	CFF1_17	TOE_2631	15.000	200.085	0.011	750,543.529	247,651.107	Free Surface 4.4	8 0.267	0.156	0.333	0.425	1.597	4,819,738.677	No	0.333	4.418
	CFF1_18-CFF1_17	CFF1_18	CFF1_17	15.000	192.033	0.012	750,543.529	247,651.107	Free Surface 4.47	6 0.264	0.153	0.330	0.425	1.626	4,908,843.591	No	0.330	4.476
	CFF1_19B1-CFF1_19	CFF1_19B1	CFF1_19	12.000	114.139	0.008	347,780.617	99,250.523	Free Surface 3.2	1 0.266	0.155	0.266	0.305	1.300	2,245,553.259	No	0.266	3.211
	CFF1_19B2-CFF1_19B1	CFF1_19B2	CFF1_19B1	12.000	135.089	0.007	347,780.617	99,250.523	Free Surface 2.98	8 0.280	0.171	0.280	0.305	1.176	2,030,162.628	No	0.280	2.988
	CFF1_19-CFF1_18	CFF1_19	CFF1_18	15.000	128.744	0.011	750,543.529	247,651.107	Free Surface 4.33	6 0.270	0.160	0.338	0.425	1.556	4,695,185.852	No	0.338	4.336
	CFF1_20-CFF1_19	CFF1_20	CFF1_19	12.000	259.752	0.011	488,103.967	148,400.584	Free Surface 3.94	9 0.292	0.186	0.292	0.363	1.518	2,619,928.491	No	0.292	3.949
	CFF1_21-CFF1_20	CFF1_21	CFF1_20	12.000	204.761	0.011	488,103.967	148,400.584	Free Surface 3.90	1 0.295	0.190	0.295	0.363	1.492	2,574,854.316	No	0.295	3.901
	CFF1_22A-CFF1_22B	CFF1_22A	CFF1_22B	10.000	369.202	0.014	167,114.552	42,999.824	Free Surface 3.2	4 0.205	0.092	0.171	0.220	1.638	1,814,859.742	No	0.171	3.214
	CFF1_22B-CFF1_22C	CFF1_22B	CFF1_22C	10.000	151.596	0.014	167,114.552	42,999.824	Free Surface 3.20	8 0.205	0.092	0.171	0.220	1.634	1,810,337.033	No	0.171	3.208
	CFF1_22C-CFF1_19B2	CFF1_22C	CFF1_19B2	10.000	289.466	0.013	347,780.617	99,250.523	Free Surface 3.90	3 0.300	0.196	0.250	0.321	1.619	1,771,578.311	No	0.250	3.903
	CFF1_22-CFF1_21	CFF1_22	CFF1_21	12.000	185.308	0.008	393,085.517	114,649.877	Free Surface 3.3	5 0.284	0.176	0.284	0.324	1.295	2,235,268.786	No	0.284	3.315
	CFF1_22D-CFF1_22C	CFF1_22D	CFF1_22C	10.000	133.147	0.014	0.000	0.000	Free Surface 0.00	0.000	0.000	0.000	0.000	0.000	1,832,565.336	No	0.000	0.000
	CFF1_22E-CFF1_22D	CFF1_22E	CFF1_22D	10.000	130.967		0.000	0.000	Free Surface 0.00	0.000	0.000	0.000	0.000	0.000	1,715,954.795	No	0.000	0.000
	CFF1_22F1-CFF1_22E	CFF1_22F1	CFF1_22E	10.000	217.475		0.000	0.000	Free Surface 0.00	0.000	0.000	0.000	0.000	0.000	1,128,189.005	No	0.000	0.000
	CFF1_23-CFF1_22	CFF1_23	CFF1_22	12.000	96.489	0.009	393,085.517	114,649.877	Free Surface 3.5	8 0.272	0.162	0.272	0.324	1.406	2,428,997.525	No	0.272	3.518
	CFF1_24-CFF1_23	CFF1_24	CFF1_23	12.000	100.548		393,085.517		Free Surface 3.55		0.159	0.270	0.324	1.429	2,469,290.350	No	0.270	3.559
	CFF1_25-CFF1_24	CFF1_25	CFF1_24	12.000	122.953		393,085.517		Free Surface 3.46		0.165	0.275	0.324	1.376	2,376,498.473	No	0.275	3.463
	CFF1_26-CFF1_25	CFF1_26	CFF1_25	12.000	251.246		393,085.517	114,649.877	Free Surface 3.53		0.161	0.271	0.324	1.415	2,444,570.671	No	0.271	3.534
	CFF1_27-CFF1_26	CFF1_27	CFF1_26	12.000	308.568		393,085.517		Free Surface 3.62			0.266	0.324	1.465	2,531,128.225	No	0.266	3.623
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	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	/elocity (ft/s)	d/D	q/Q	Water Depth (ft)	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth	Adjusted Velocity
	CFF1_28-CFF1_27	CFF1_28	CFF1_27	12.000	145.140	0.010	393,085.517	114,649.877	Free Surface	3.625	0.266	0.155	0.266	0.324	1.467	2,534,226.581	No	0.266	3.625
	CFF1_29-CFF1_28	CFF1_29	CFF1_28	12.000	150.879	0.024	393,085.517	114,649.877	Free Surface	4.872	0.216	0.102	0.216	0.324	2.205	3,841,988.751	No	0.216	4.872
	CFF1_30-CFF1_29	CFF1_30	CFF1_29	12.000	241.294	0.023	393,085.517	114,649.877	Free Surface	4.859	0.216	0.103	0.216	0.324	2.197	3,827,344.160	No	0.216	4.859
	CFF1_31-CFF1_30	CFF1_31	CFF1_30	12.000	118.736	0.010	393,085.517	114,649.877	Free Surface	3.637	0.266	0.154	0.266	0.324	1.473	2,545,706.000	No	0.266	3.637
	CHF1A_22-CHF1A_23	CHF1A_22	CHF1A_23	18.000	160.160	0.019	518,334.348	159,449.700	Free Surface	4.690	0.153	0.051	0.229	0.333	2.077	10,243,088.805	No	0.229	4.690
	CHF1A_23-CHF1A_24	CHF1A_23	CHF1A_24	18.000	434.970	0.023	518,334.348	159,449.700	Free Surface	5.009	0.146	0.046	0.219	0.333	2.271	11,248,363.236	No	0.219	5.009
	CHF1A_24-CHF1A_25	CHF1A_24	CHF1A_25	18.000	292.440	0.010	518,334.348	159,449.700	Free Surface	3.760	0.178	0.069	0.267	0.333	1.538	7,481,584.554	No	0.267	3.760
	CHF1A_25-CHF1A_A1A	CHF1A_25	CHF1A_A1A	18.000	123.397	0.007	518,334.348	159,449.700	Free Surface	3.317	0.195	0.083	0.292	0.333	1.296	6,262,836.979	Yes	0.292	3.307
	CHF1A_A1A-TOE_2586	CHF1A_A1A	TOE_2586	18.000	158.077	0.007	518,334.348	159,449.700	Free Surface	3.296	0.195	0.084	0.293	0.333	1.284	6,207,300.817	No	0.293	3.296
	CHF1A_C1-CHF1A_22	CHF1A_C1	CHF1A_22	18.000	101.324	0.058	309,352.386	86,199.808	Free Surface	5.904	0.092	0.017	0.138	0.256	3.401	17,749,713.432	Yes	0.159	4.798
	CHF1B_12-CHF1B_20	CHF1B_12	CHF1B_20	18.000	340.960	0.027	309,352.386	86,199.808	Free Surface	4.545	0.110	0.025	0.165	0.256	2.390	12,205,355.972	No	0.165	4.545
	CHF1B_14A-CHF1B_17	CHF1B_14A	CHF1B_17	18.000	122.228	0.017	237,892.408	63,200.136	Free Surface	3.573	0.108	0.025	0.162	0.224	1.893	9,689,124.841	No	0.162	3.573
	CHF1B_15A-CHF1B_14A	CHF1B_15A	CHF1B_14A	18.000	195.015	0.001	237,892.408	63,200.136	Free Surface	1.454	0.201	0.088	0.301	0.224	0.558	2,692,660.183	No	0.301	1.454
	CHF1B_15A-CHF3A_15B	CHF3A_15B	CHF1B_15A	18.000	180.259	0.003	237,892.408	63,200.136	Free Surface	1.855	0.170	0.063	0.254	0.224	0.779	3,805,405.449	No	0.254	1.855
	CHF1B_17-CHF1B_18	CHF1B_17	CHF1B_18	18.000	330.000	0.006	237,892.408	63,200.136	Free Surface	2.532	0.137	0.040	0.205	0.224	1.188	5,924,634.458	No	0.205	2.532
П	CHF1B_18-CHF1B_12	CHF1B_18	CHF1B_12	18.000	400.000	0.033	309,352.386	86,199.808	Free Surface	4.848	0.105	0.023	0.157	0.256	2.607	13,386,173.134	No	0.157	4.848
	CHF1B_20-TOE_2585	CHF1B_20	TOE_2585	18.000	392.558	0.025	309,352.386	86,199.808	Free Surface	4.388	0.112	0.027	0.169	0.256	2.279	11,610,027.069	No	0.169	4.388
	CHF3A_15-CHF3A_15B	CHF3A_15	CHF3A_15B	18.000	180.044	0.003	237,892.408	63,200.136	Free Surface	1.870	0.169	0.062	0.253	0.224	0.787	3,847,134.378	No	0.253	1.870
f	CHF3C_8-CHF3C_9	CHF3C_8	CHF3C_9	18.000	288.213	0.005	134,026.302	33,949.427	Free Surface	1.896	0.113	0.027	0.169	0.167	0.984	5,009,536.836	No	0.169	1.896
Ħ	CHF3C 9-TOE 2580	CHF3C_9	TOE_2580	18.000	339.237	0.004	134,026.302		Free Surface		0.116	0.029	0.175	0.167	0.920	4,669,246.805	No	0.175	1.805
Ħ	CMF2 22G-CFF1 22F1	CMF2_22G	CFF1_22F1	10.000	50.170	0.028	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	2,587,708.428	No	0.000	0.000
Ħ	CMF2 32-CFF1 22A	CMF2_32	CFF1 22A	10.000	151.294	0.009	167,114.552	42,999.824	Free Surface	2.745	0.229	0.115	0.191	0.220	1.319	1,452,948.058	No	0.191	2.745
Ħ	CMF2 33-CMF2 32	CMF2_33	CMF2 32	10.000	127.250	0.004	167,114.552		Free Surface		0.272	0.162	0.227	0.220	0.940	1,029,443.086	No	0.227	2.149
Ħ	CMF2 34-CMF2 33	CMF2_34	CMF2_33	10.000	31.066	0.004	167,114.552		Free Surface		0.277	0.168	0.231	0.220	0.909	995,000.873	No	0.231	2.097
Ħ	CMF2 35-CMF2 34	CMF2_35	CMF2_34	10.000	109.503	0.005	167,114.552	,	Free Surface		0.265	0.153	0.221	0.220	0.995	1,090,089.794	No	0.221	2.238
Ħ	CMF2 36-CMF2 35	CMF2_36	CMF2_35	10.000	215.403	0.013	167,114.552		Free Surface		0.209	0.096	0.174	0.220	1.576	1,744,243.654	No	0.174	3.125
Ħ	CMF2 37-CMF2 36	CMF2_37	CMF2 36	10.000	95.722	0.012	167,114.552	,	Free Surface		0.213	0.099	0.177	0.220	1.525	1,685,918.996	No	0.177	3.050
Ħ	CMF2 38-CMF2 37	CMF2_38	CMF2_37	10.000	36.580	0.010	167,114.552		Free Surface		0.223	0.110	0.186	0.220	1.384	1,525,893.681	No	0.186	2.842
H	CMF2 39A-CMF2 39	CMF2_39A	CMF2_39	10.000	94.496	0.004	167,114.552		Free Surface		0.280	0.171	0.233	0.220	0.891	975,390.304	No	0.233	2.067
H	CMF2 39B-CMF2 39A	CMF2_39B	CMF2 39A	10.000	156.532	0.019	167,114.552		Free Surface		0.191	0.080	0.159	0.220	1.880	2,093,583.694	No	0.159	3.555
H	CMF2 39C-CMF2 39B	CMF2_39C	CMF2_39B	10.000	127.599	0.004	167,114.552	,	Free Surface		0.282	0.174	0.135	0.220	0.880	962,841.442	No	0.235	2.048
H	CMF2_39C-CMF2_39B CMF2_39-CMF2_38	CMF2_39	CMF2_38	10.000	65.228	0.004	167,114.552		Free Surface		0.202	0.174	0.190	0.220	1.328	1,462,862.125	No	0.190	2.759
H				10.000	138.889	0.009	167,114.552		Free Surface		0.220	0.173	0.190	0.220	0.884	967,923.923	No	0.190	2.056
H	CMF2_39D-CMF2_39C	CMF2_39D COMPF1 101	CMF2_39C TOE 2941	12.000	179.590	0.004	148,835.729		Free Surface		0.201	0.173	0.234	0.220	1.004	1,760,761.108	No	0.197	2.111
H				18.000	237.022	0.003	908,234.171		Free Surface		0.197	0.003	0.197	0.197	0.854	4,064,442.599	No	0.197	
H	CSF1_C2A-TOE_2804	CSF1_C2A	TOE_2804																2.867
님	CSF1_C2C-CSF1_C2A	CSF1_C2C	CSF1_C2A	18.000	14.583	0.010	908,234.171	310,725.963			0.239	0.126	0.359	0.444	1.512	7,225,549.849	No	0.359	4.324
H	CSF1_C3A-CSF1_C3B	CSF1_C3A	CSF1_C3B	18.000	198.534	0.004	863,661.534		Free Surface		0.296	0.191	0.444	0.433	0.953	4,532,537.708	No	0.444	3.056
닖	CSF1_C3B-CSF1_C4B	CSF1_C3B	CSF1_C4B	18.000	414.773	0.003	863,661.534		Free Surface		0.314	0.213	0.470	0.433	0.851	4,048,353.344	No	0.470	2.819
닖	CSF1_C4B-CSF1_C5B	CSF1_C4B	CSF1_C5B	18.000	412.389	0.004	863,661.534		Free Surface		0.291	0.185	0.437	0.433	0.981	4,664,630.000	No	0.437	3.120
넴	CSF1_C5B-CSF1_C6C	CSF1_C5B	CSF1_C6C	18.000	180.189	0.005	863,661.534		Free Surface		0.279	0.171	0.419	0.433	1.065	5,064,930.575	No	0.419	3.309
닖	CSF1_C6C-CSF1_C2C	CSF1_C6C	CSF1_C2C	18.000	228.964	0.003	908,234.171	310,725.963			0.326	0.229	0.489	0.444	0.832	3,959,290.219	No	0.489	2.813
뷔	ECF1_100-ECF1_102	ECF1_100	ECF1_102	30.000	179.634	0.003	2,039,785.045				0.254	0.142	0.635	0.582	0.843	14,412,685.329	Yes	0.643	3.161
닖	ECF1_102-ECF1_26	ECF1_102	ECF1_26	30.000	332.132	0.002	2,039,785.045				0.260	0.148	0.650	0.582	0.806	13,774,775.041	No	0.650	3.111
닖	ECF1_108-ECF1_28	ECF1_108	ECF1_28	30.000	298.395		2,264,837.354	922,050.373			0.190	0.079	0.475	0.614	1.652	28,680,223.705	No	0.475	5.394
닖	ECF1_118-ECF1_119	ECF1_118	ECF1_119	12.000	374.069	0.006	671,264.056		Free Surface		0.414	0.358	0.414	0.428	1.069	1,874,045.649	No	0.414	3.386
늬	ECF1_119-TOE_2594	ECF1_119	TOE_2594	12.000	347.709	0.005	671,264.056	216,849.518			0.426	0.378	0.426	0.428	1.009	1,774,422.234	No	0.426	3.253
늬	ECF1_2271-TOE_2655	ECF1_2271	TOE_2655	30.000	283.188		2,267,617.810	,			0.288	0.180	0.719	0.615	0.737	12,574,544.023	Yes	1.130	1.628
늬	ECF1_24-ECF1_44	ECF1_24	ECF1_44	30.000	449.061			814,050.413			0.322	0.224	0.804	0.582	0.534	9,115,619.517	No	0.804	2.316
ᆜ	ECF1_25-ECF1_100	ECF1_25	ECF1_100	30.000	447.757			814,050.413			0.272	0.162	0.680	0.582		12,620,046.817	No	0.680	2.923
ᆜ	ECF1_26-ECF1_27	ECF1_26	ECF1_27	30.000	362.156			814,050.413			0.226	0.112	0.566	0.582		18,157,932.414	No	0.566	3.786
	ECF1_27-ECF1_108	ECF1_27	ECF1_108	30.000	375.444			814,050.413			0.177	0.068	0.442	0.582		29,871,083.103	No	0.442	5.382
Ш	ECF1_28-ECF1_29	ECF1_28	ECF1_29	30.000	303.392			922,050.373			0.189	0.078	0.472	0.614		29,107,942.782	No	0.472	5.450
	ECF1_29-ECF1_2271	ECF1_29	ECF1_2271	30.000	201.480			922,050.373			0.208	0.094	0.519	0.614		24,003,856.458	Yes	0.594	3.924
	ECF1_44-ECF1_97	ECF1_44	ECF1_97	30.000	343.305			814,050.413			0.320	0.222	0.800	0.582	0.539	9,194,468.376	No	0.800	2.330
	ECF1_97-ECF1_25	ECF1_97	ECF1_25	30.000	131.660			814,050.413			0.311	0.210	0.777	0.582	0.570	9,719,681.687	No	0.777	2.425
	ECF1A2_131-ECF1A2_132	ECF1A2_131		12.000	293.266	0.008	521,344.385	160,549.860	Free Surface	3.510	0.334	0.241	0.334	0.376	1.253	2,166,340.368	Yes	0.355	3.233
	E05440 400 E054 400	ECE1A2 132	ECF4_133	12.000	403.700	0.005	521,344.385	160,549.860	Free Surface	2.993	0.375	0.300	0.375	0.376	1.000	1,738,336.479	No	0.375	2.993
	ECF1A2_132-ECF4_133	LOI 1742_132	201 4_100																
	ECF1A2_132-ECF4_133 ECF21_120-ECF21_121		ECF21_121	12.000	208.774	0.005	459,608.767	138,175.148		2.964	0.345	0.255	0.345	0.352	1.040	1,798,953.748	No	0.345	2.964

EXIS	TING PIPE TABLE																		
	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth	Adjusted Velocity
	ECF21_123-ECF21_124	ECF21_123	ECF21_124	12.000	249.288	0.005	459,608.767	138,175.148	Free Surface	2.997	0.342	0.252	0.342	0.352	1.056	1,826,926.891	No	0.342	2.997
	ECF21_124-ECF21_130	ECF21_124	ECF21_130	12.000	256.838	0.005	459,608.767	138,175.148	Free Surface	2.957	0.345	0.256	0.345	0.352	1.036	1,793,096.783	No	0.345	2.957
	ECF21_130-ECF1A2_131	ECF21_130	ECF1A2_131	12.000	316.851	0.004	459,608.767	138,175.148	Free Surface	2.725	0.367	0.287	0.367	0.352	0.923	1,602,102.791	No	0.367	2.725
	ECF21_131-ECF21_132	ECF21_131	ECF21_132	8.000	138.119	0.006	83,998.048	20,999.512	Free Surface	2.044	0.238	0.124	0.159	0.165	1.076	677,140.724	No	0.159	2.044
	ECF21_132-ECF21_133	ECF21_132	ECF21_133	8.000	299.894	0.006	83,998.048	20,999.512	Free Surface	1.960	0.245	0.132	0.163	0.165	1.016	638,711.151	No	0.163	1.960
	ECF21_133-ECF21_24	ECF21_133	ECF21_24	30.000	232.963	0.001	2,002,354.552	796,300.980	Free Surface	2.326	0.316	0.217	0.790	0.577	0.542	9,242,619.204	No	0.790	2.326
	ECF21_22A-ECF21_133	ECF21_22A	ECF21_133	24.000	347.152	0.010	1,957,931.706	775,301.468	Free Surface	5.255	0.239	0.125	0.478	0.608	1.593	15,624,736.073	Yes	0.559	4.215
	ECF21_23-ECF21_9	ECF21_23	ECF21_9	30.000	457.000	0.001	2,002,354.552				0.311	0.210	0.778	0.577	0.558	9,524,883.908	No	0.778	2.377
	ECF21_24-ECF21_23	ECF21_24	ECF21_23	30.000	155.077	0.001	2,002,354.552	,			0.316	0.216	0.790	0.577	0.542	9,249,524.645	No	0.790	2.328
	ECF21_9-ECF1_24	ECF21_9	ECF1_24	30.000	492.000	0.002	2,039,785.045				0.284	0.176	0.709	0.582	0.681	11,611,684.604	No	0.709	2.754
	ECF3_217-ECF3_218	ECF3_217	ECF3_218	18.000	469.731	0.002	1,072,549.722				0.374	0.298	0.561	0.484	0.752	3,600,918.864	No	0.561	2.751
	ECF3_218-TOE_2746	ECF3_218	TOE_2746	18.000	297.552	0.003	1,072,549.722				0.341	0.250	0.511	0.484	0.901	4,296,433.228	No	0.511	3.126
	ECF4_133-ECF4_134	ECF4_133	ECF4_134	12.000	398.994	0.006	521,344.385		Free Surface		0.362	0.281	0.362	0.376	1.071	1,857,266.033	Yes	0.433	2.475
	ECF4_134-ECF4_135	ECF4_134	ECF4_135	12.000	300.951	0.002	521,344.385		Free Surface		0.504	0.506	0.504	0.376	0.570	1,029,635.546	No	0.504	2.035
	ECF4_135-TOE_2662	ECF4_135	TOE_2662	15.000	88.785	0.002	581,294.434		Free Surface		0.365	0.285	0.456	0.372	0.674	2,041,934.441	No	0.456	2.218
	ECF5_204-ECF5_205	ECF5_204	ECF5_205	18.000	92.979	0.010	1,030,105.316				0.253	0.140	0.379	0.474	1.545	7,367,332.673	No	0.379	4.547
	ECF5_205-ECF5_208	ECF5_205	ECF5_208	18.000	243.553		1,030,105.316				0.253	0.140	0.379	0.474	1.545	7,369,088.494	Yes	0.379	4.543
$\blacksquare$	ECF5_208-ECF5_209	ECF5_208	ECF5_209	18.000	59.397	0.010	1,030,105.316				0.253	0.140	0.379	0.474	1.541	7,349,748.512	Yes	0.429	3.815
╠	ECF5_209-ECF5_213	ECF5_209	ECF5_213	18.000	204.830	0.003	1,030,105.316				0.353	0.267	0.529	0.474	0.808	3,855,901.750	No	0.529	2.858
$\parallel$	ECF5_213-ECF5_214	ECF5_213	ECF5_214	18.000 18.000	189.500 373.761	0.003	1,030,105.316 1,072,549.722				0.353	0.267 0.245	0.529 0.505	0.474	0.809 0.920	3,863,009.650 4,382,467.483	No	0.529 0.505	2.862 3.171
$\parallel$	ECF5_214-ECF5_215	ECF5_214 ECF5_215	ECF5_215 ECF5_216	18.000	501.110	0.004	1,072,549.722				0.337	0.245	0.363	0.484	1.752	8,366,466.008	No No	0.363	5.035
╠	ECF5_215-ECF5_216 ECF5_216-ECF3_217	ECF5_216	ECF3_210 ECF3_217	18.000	465.922	0.013	1,072,549.722	,	Free Surface		0.242	0.128	0.362	0.484	1.755	8,382,439.078	Yes	0.303	3.880
H	EHF1 2-EHF4 1	EHF1 2	EHF4 1	8.000	72.518	0.013	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	445,508.194	No	0.000	0.000
H	EHF1 3-EHF1 2	EHF1 3	EHF1 2	8.000	209.536	0.005	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	586,049.477	No	0.000	0.000
H	EHF1 4-EHF1 3	EHF1 4	EHF1 3	8.000	264.573	0.005	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	594,651.505	No	0.000	0.000
	EHF1_5-EHF1_4	EHF1 5	EHF1 4	8.000	72.008	0.021	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	1,224,387.430	No	0.000	0.000
F	EHF1 6-EHF1 5	EHF1 6	EHF1 5	8.000	83.531	0.041	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	1,711,509.151	No	0.000	0.000
	EHF1 7-EHF1 6	EHF1 7	EHF1 6	8.000	219.245	0.035	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	1,579,448.808	No	0.000	0.000
	EHF1 8-EHF1 7	EHF1 8	EHF1 7	8.000	271.700	0.021	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,228,729.304	No	0.000	0.000
	EHF10 11-EHF9 10	EHF10 11	EHF9 10	8.000	256.644	0.014	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	990,677.374	No	0.000	0.000
	EHF10 12-EHF10 11	EHF10_12	EHF10_11	8.000	104.212	0.007	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	685,264.637	No	0.000	0.000
	EHF10 13-EHF10 12	EHF10_13	EHF10_12	8.000	148.178	0.013	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	965,656.503	No	0.000	0.000
	EHF10_14-EHF10_13	EHF10_14	EHF10_13	8.000	185.568	0.005	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	613,334.939	No	0.000	0.000
	EHF10_15-EHF10_14	EHF10_15	EHF10_14	8.000	179.349	0.005	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	607,587.024	No	0.000	0.000
	EHF10_16-EHF10_15	EHF10_16	EHF10_15	8.000	191.512	0.005	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	609,934.416	No	0.000	0.000
	EHF10_17-EHF10_16	EHF10_17	EHF10_16	8.000	99.824	0.004	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	550,262.793	No	0.000	0.000
	EHF10_18-EHF10_17	EHF10_18	EHF10_17	8.000	48.315	0.005	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	585,310.316	No	0.000	0.000
	EHF11_146-EHF11_147	EHF11_146	EHF11_147	8.000	149.540	0.005	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	600,780.117	No	0.000	0.000
	EHF11_147-EHF11_148	EHF11_147	EHF11_148	8.000	258.010	0.007	0.000		Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	710,533.609	No	0.000	0.000
	EHF11_148-EHF9_19	EHF11_148	EHF9_19	8.000	162.000	0.008	0.000		Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	762,854.562	No	0.000	0.000
	EHF3_10-EHF3_9	EHF3_10	EHF3_9	8.000	275.063	0.040	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	1,704,154.670	No	0.000	0.000
	EHF3_11-EHF3_10	EHF3_11	EHF3_10	8.000	280.011	0.036	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	1,603,157.020	No	0.000	0.000
	EHF3_12-EHF3_11	EHF3_12	EHF3_11	8.000	280.647	0.010	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	862,347.690	No	0.000	0.000
	EHF3_42_EHF3_12	EHF3_42	EHF3_12	8.000	143.448	0.005	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	592,605.092	No	0.000	0.000
	EHF3_9-EHF1_8	EHF3_9	EHF1_8	8.000	281.524	0.016	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	1,072,536.676	No	0.000	0.000
	EHF4_1-TOE_2592	EHF4_1	TOE_2592	8.000	38.176		0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	1,338,228.266	No	0.000	0.000
	EHF7_1-EHF3_42	EHF7_1	EHF3_42	8.000	167.606	0.006	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	631,917.381	No	0.000	0.000
	EHF7_6-EHF7_1	EHF7_6	EHF7_1	8.000	274.487	0.005	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	620,813.832	No	0.000	0.000
	EHF9_10-EHF9_9	EHF9_10	EHF9_9	8.000	50.865	0.010	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	849,449.276	No No	0.000	0.000
	EHF9_19-EHF10_18	EHF9_19	EHF10_18	8.000 8.000	262.829	0.006	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	647,250.479	No	0.000 0.667	0.000
	EHF9_1-GVF1_0	EHF9_1 EHF9_2	GVF1_0 EHF9_1	8.000	246.107 361.561	0.042	0.000		Free Surface Free Surface		0.000	0.000	0.000	0.000	0.000	1,728,730.317 1,854,576.605	Yes No	0.000	0.000
	EHF9_2-EHF9_1 EHF9_3-EHF9_2	EHF9_3	EHF9_1	8.000	186.841	0.048	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	1,900,766.814	No	0.000	0.000
	EHF9_3-EHF9_2 EHF9_4-EHF9_3	EHF9_3 EHF9_4	EHF9_2	8.000	155.145		0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	1,873,883.793	No	0.000	0.000
	EHF9_4-EHF9_3 EHF9_5-EHF9_4	EHF9_5	EHF9_4	8.000	242.340	0.049	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	1,884,590.663	No	0.000	0.000
	EHF9 6-EHF9 5	EHF9_6	EHF9_5	8.000	124.073	0.009	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	816,722.607	No	0.000	0.000
	EHF9 7-EHF9 6	EHF9_7	EHF9_6	8.000		0.034	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	1,555,938.102	No	0.000	0.000
	EHF9 8-EHF9 7	EHF9 8	EHF9 7	8.000	131.348		0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	947,924.207	No	0.000	0.000
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XIS	TING PIPE TABLE	ı				T			1 1	-					1	1 1			
	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth	Adjusted Velocity
	EHF9_9-EHF9_8	EHF9_9	EHF9_8	8.000	126.463	0.013	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	951,220.660	No	0.000	0.000
	EP_1-EP_2	EP_1	EP_2	8.000	2,935.010	0.021	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,221,889.131	No	0.000	0.000
	EP_2-EP_3	EP_2	EP_3	8.000	1,331.650	0.014	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,015,980.200	No	0.000	0.000
	EP_3-I25_19	EP_3	I25_19	8.000	574.890	0.017	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,091,092.294	No	0.000	0.000
	EVF1_7-EVF2_6	EVF1_7	EVF2_6	10.000	216.280	0.003	181,744.981	47,001.582	Free Surface	1.842	0.323	0.226	0.269	0.230	0.734	803,361.857	No	0.269	1.842
	EVF1A1_51-LCFA_1	EVF1A1_51	LCFA_1	21.000	93.148	0.002	911,866.884	312,199.082	Free Surface	2.628	0.275	0.165	0.481	0.426	0.790	5,527,552.587	Yes	0.482	2.622
	EVF1A1_52-TOE_2790	EVF1A1_52	TOE_2790	21.000	200.800	0.001	911,866.884	312,199.082	Free Surface	1.826	0.358	0.274	0.626	0.426	0.474	3,330,501.695	No	0.626	1.826
	EVF1A2_1-EVF1A2_50	EVF1A2_1	EVF1A2_50	21.000	186.858	0.001	911,866.884	312,199.082	Free Surface	1.947	0.341	0.251	0.597	0.426	0.519	3,639,275.758	Yes	0.616	1.866
	EVF1A2_50-EVF1A1_51	EVF1A2_50	EVF1A1_51	21.000	494.431	0.001	911,866.884	312,199.082	Free Surface	1.791	0.363	0.281	0.635	0.426	0.461	3,242,109.775	No	0.635	1.791
	EVF2_1A-EVF2_8	EVF2_1A	EVF2_8	12.000	143.991	0.004	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,587,423.739	Yes	0.121	0.000
	EVF2_2-EVF2_8	EVF2_2	EVF2_8	12.000	94.559	0.003	181,744.981	47,001.582	Free Surface	1.956	0.239	0.125	0.239	0.218	0.839	1,455,021.234	No	0.239	1.956
	EVF2_3-EVF2_2	EVF2_3	EVF2_2	12.000	95.123	0.008	181,744.981	47,001.582	Free Surface	2.600	0.195	0.084	0.195	0.218	1.241	2,176,055.790	No	0.195	2.600
	EVF2_4A-KEF1_3	EVF2_4A	KEF1_3	12.000	276.789	0.001	234,943.990	62,251.177	Free Surface	1.538	0.341	0.250	0.341	0.249	0.543	938,867.719	No	0.341	1.538
	EVF2_4-EVF2_3	EVF2_4	EVF2_3	10.000	287.309	0.002	181,744.981	47,001.582	Free Surface	1.750	0.336	0.243	0.280	0.230	0.683	748,295.666	Yes	0.548	0.740
	EVF2_5A-EVF2_4	EVF2_5A	EVF2_4	10.000	177.162	0.003	181,744.981	47,001.582	Free Surface	1.904	0.316	0.216	0.263	0.230	0.769	841,291.145	No	0.263	1.904
	EVF2_5-EVF2_4A	EVF2_5	EVF2_4A	12.000	187.149	0.002	181,744.981	47,001.582	Free Surface	1.704	0.263	0.152	0.263	0.218	0.694	1,198,908.685	No	0.263	1.704
	EVF2_6A-EVF2_5	EVF2_6A	EVF2_5	12.000	46.711	0.004	181,744.981	47,001.582	Free Surface	2.007	0.234	0.120	0.234	0.218	0.869	1,508,900.022	No	0.234	2.007
	EVF2_6-EVF2_5A	EVF2_6	EVF2_5A	10.000	220.000	0.003	181,744.981	47,001.582	Free Surface	1.831	0.325	0.228	0.271	0.230	0.727	796,540.917	No	0.271	1.831
	EVF2_7-EVF2_6A	EVF2_7	EVF2_6A	12.000	46.512	0.002	181,744.981	47,001.582	Free Surface	1.664	0.268	0.157	0.268	0.218	0.671	1,159,743.687	No	0.268	1.664
	EVF2 8-EVF2 7	EVF2_8	EVF2_7	12.000	65.379	0.003	181,744.981	47,001.582	Free Surface	1.817	0.251	0.138	0.251	0.218	0.758	1,312,395.588	No	0.251	1.817
	EVF3 47-EVF3 48	EVF3_47	EVF3_48	21.000	497.618	0.001	911,866.884	312,199.082	Free Surface	1.903	0.347	0.259	0.607	0.426	0.503	3,526,083.241	No	0.607	1.903
	EVF3 48-EVF1A2 1	EVF3_48	EVF1A2_1	21.000	317.062	0.001	911,866.884	312,199.082	Free Surface	1.928	0.344	0.254	0.602	0.426	0.512	3,588,728.736	No	0.602	1.928
	EVF4 46-EVF3 47	EVF4_46	EVF3_47	21.000	505.900	0.001	911,866.884	312,199.082	Free Surface	1.919	0.345	0.256	0.603	0.426	0.509	3,566,357.378	Yes	0.605	1.911
F	FMF4 4 4-TOE 2970	FMF4_4_4	TOE_2970	12.000	395.686	0.004	185,393.375	47,999.502	Free Surface	2.048	0.234	0.120	0.234	0.220	0.887	1,539,983.914	No	0.234	2.048
F	FMF6 1-FMF6 4 6	FMF6 1	FMF6 4 6	8.000	115.487	0.068	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	2,207,498.480	No	0.000	0.000
F	FMF6 2-FMF6 1	FMF6 2	FMF6 1	8.000	150.000	0.012	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	924,118.990	No	0.000	0.000
F	FMF6 4 6-TOE 2973	FMF6 4 6	TOE_2973	12.000	142.272	0.004	185,393.375	47,999.502	Free Surface	2.127	0.228	0.114	0.228	0.220	0.935	1,624,287.031	No	0.228	2.127
F	FMF7 3-FMF6 2	FMF7 3	FMF6 2	8.000	270.000	0.009	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	824,426.197	No	0.000	0.000
	FMF7 4-FMF7 3	FMF7 4	FMF7 3	8.000	430.000	0.009	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	809,976.682	No	0.000	0.000
F		FMF7_5	FMF7 4	8.000	352.996	0.010	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	841,091.527	No	0.000	0.000
	FMF8 10-FMF8 9	FMF8 10	FMF8 9	8.000	91.023	0.005	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	569,349.967	No	0.000	0.000
F	FMF8 11-FMF8 10	FMF8_11	FMF8_10	8.000	71.269	0.004	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	568,446.303	No	0.000	0.000
	FMF8 1-FMF8 6	FMF8 1	FMF8 6	8.000	90.764	0.066	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	2,184,769.012	No	0.000	0.000
H		FMF8_2	FMF8 1	8.000	74.020	0.011	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	876,399.929	No	0.000	0.000
	FMF8 3-FMF8 2	FMF8 3	FMF8 2	8.000	130.706	0.012	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	911,811.000	No	0.000	0.000
F	FMF8 4-FMF8 3	FMF8 4	FMF8 3	8.000	103.656	0.009	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	820,637.465	No	0.000	0.000
	FMF8 6-FMF7 5	FMF8 6	FMF7 5	8.000	160.553	0.017	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,118,294.473	No	0.000	0.000
F	FMF8 8-FMF8 4	FMF8 8	FMF8 4	8.000	206.870	0.017	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,098,701.288	No	0.000	0.000
F	FMF8 9-FMF8 8	FMF8 9	FMF8 8	8.000	200.000	0.005	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	602,849.761	No	0.000	0.000
F	FMF9 10-FMF9 11	FMF9_10	FMF9_11	8.000	279.830	0.012	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	925,419.375	No	0.000	0.000
	FMF9 11-FMF9 12	FMF9_11	FMF9 12	8.000	252.130	0.007	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	726,669.964	No	0.000	0.000
	FMF9_12-FMF9_13	FMF9_12	FMF9_13	8.000	39.140	0.007	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	730,217.431	No	0.000	0.000
H	FMF9_13-FMF9_3	FMF9_13	FMF9_3	8.000	54.240	0.008	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	772,698.419	No	0.000	0.000
	FMF9_15-FMF9_23	FMF9_15	FMF9_23	8.000	49.960	0.007	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	699,828.864	No	0.000	0.000
	FMF9_1-TOE_2710	FMF9_1	TOE_2710	10.000	71.040	0.008	225,620.011	59,250.218	Free Surface	2.846	0.276	0.167	0.230	0.257	1.236	1,353,395.699	Yes	0.245	2.615
H	FMF9 22-FMF9 9	FMF9_22	FMF9_9	8.000	371.380	0.004	0.000		Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	522,713.730	No	0.000	0.000
Ħ	FMF9_23-FMF9_35	FMF9_23	FMF9_35	8.000	44.080	0.007	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	722,799.434	No	0.000	0.000
H	FMF9_35-FMF9_22	FMF9_35	FMF9_22	8.000	118.160	0.006	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	638,801.265	No	0.000	0.000
Ħ	FMF9 3-FMF8 11	FMF9_3	FMF8_11	8.000	240.000	0.005	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	597,353.575	No	0.000	0.000
H	FMF9 9-FMF9 10	FMF9_9	FMF9_10	8.000	281.570		0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	756,648.937	No	0.000	0.000
Ħ		GVF1_0	GVF1_36	8.000	204.942		75,997.411		Free Surface		0.133	0.038	0.089	0.156	3.028	1,992,874.077	No	0.089	4.246
H	GVF1 100-GVF1 101	GVF1_100	GVF1_101	8.000	115.699		342,629.059		Free Surface		0.356	0.272	0.238	0.341	2.003	1,259,413.660	No	0.238	4.750
H	GVF1_101-GVF1_102	GVF1_101	GVF1_102	8.000	335.002	0.013	342,629.059		Free Surface		0.416	0.361	0.277	0.341	1.491	948,739.808	No	0.277	3.865
H	GVF1_102-GVF1_103	GVF1_102	GVF1_103	8.000	55.341	0.012	342,629.059		Free Surface		0.425	0.376	0.283	0.341	1.430	912,285.351	No	0.283	3.755
H	GVF1_103-GVF1_104	GVF1_103	GVF1_104	8.000	52.260	0.008	342,629.059		Free Surface		0.464	0.440	0.310	0.341	1.205	778,406.631	No	0.310	3.340
H	GVF1 104-GVF1 105	GVF1_104	GVF1_105	8.000	145.575		342,629.059		Free Surface		0.342	0.252	0.228	0.341	2.163	1,357,921.256	No	0.228	5.016
H	GVF1_105-GVF1_106	GVF1_105	GVF1_106	8.000	69.468	0.037	342,629.059		Free Surface		0.310	0.209	0.207	0.341	2.615	1,638,025.872	No	0.207	5.741
H	GVF1_106-GVF1_107	GVF1_106	GVF1_107	8.000	40.229	0.030	342,629.059		Free Surface		0.330	0.235	0.220	0.341	2.327	1,459,036.051	No	0.220	5.283
H	GVF1 107-GVF1 108	GVF1 107	GVF1 108	8.000	130.785		342,629.059		Free Surface		0.306	0.203	0.204	0.341	2.691	1,685,040.195	No	0.204	5.859
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Description   Property   Proper	EXIST	ING PIPE TABLE																		
Description   Control		ID	From ID	To ID			Slope			Flow Type	Velocity (ft/s)	d/D	q/Q							
Control   Cont		GVF1_108-GVF1_109	GVF1_108	GVF1_109	8.000	99.765	0.020	342,629.059	97,499.483	Free Surface	4.623	0.364	0.282	0.242	0.341	1.927	1,213,079.383	No	0.242	4.623
CVP_115_CVP_116_CVP_		GVF1_109-GVF1_111	GVF1_109	GVF1_111	8.000	210.244	0.098	342,629.059	97,499.483	Free Surface	8.095	0.243				4.215	2,650,918.354	No	0.162	
CVP_1154CVP_135 CVP_136 CVP_136 CVP_136 CVP_137 CVP_136 CVP_		GVF1_111-GVF1_113	GVF1_111	GVF1_113	8.000	223.339	0.017	342,629.059	97,499.483	Free Surface	4.278	0.385	0.314	0.257	0.341	1.725	1,090,421.306	No	0.257	4.278
OWN_156_OWN_		GVF1_113-GVF1_114	GVF1_113	GVF1_114	8.000	39.937	0.009	342,629.059	97,499.483	Free Surface	3.461	0.452	0.420	0.301	0.341	1.269	816,534.936	No	0.301	3.461
OVER_1166_VPT_107   OVER_116   OVER_116   OVER_117   12.00   40.07   0.03   50.0163   16.0068   Fire Before 2.03   0.16   0.25		GVF1_114-GVF1_115	GVF1_114	GVF1_115	8.000	72.568	0.010	342,629.059	97,499.483	Free Surface	3.568	0.441	0.403	0.294	0.341	1.327	850,846.058	No	0.294	3.568
OFF   34.0FF   170   171   1		GVF1_115-GVF1_116	GVF1_115	GVF1_116	8.000	41.819	0.012	342,629.059	97,499.483	Free Surface	3.857	0.416	0.362	0.277	0.341	1.486	945,977.845	No	0.277	3.857
CVF_1_SCVVF_1_ST		GVF1_116-GVF1_117	GVF1_116	GVF1_117	12.000	40.907	0.003	509,166.344	156,098.821	Free Surface	2.553	0.415	0.361	0.415	0.371	0.804	1,410,003.553	No	0.415	2.553
CVFI_3FX_VVFF_50		GVF1_117-ECF1_118	GVF1_117	ECF1_118	12.000	319.483	0.006	671,264.056	216,849.518	Free Surface	3.517	0.402	0.340	0.402	0.428	1.129	1,974,006.450	No	0.402	3.517
OFF_16_CVFF_151		GVF1_36-GVF1_37	GVF1_36	GVF1_37	8.000	227.819	0.009	75,997.411	18,999.353	Free Surface	2.239	0.208	0.095	0.139	0.156	1.267	802,756.597	No	0.139	2.239
CVF_18_CVF_18_0 CVF_18_1 CVF_18_0 CVF_19_1 CVF		GVF1_37-GVF1_40	GVF1_37	GVF1_40	8.000	112.963	0.007	75,997.411	18,999.353	Free Surface	2.070	0.220	0.106	0.146	0.156	1.137	718,352.275	No	0.146	2.070
CVFT_18C-UPFT_30		GVF1_40-GVF1_41	GVF1_40	GVF1_41	8.000	79.896	0.009	75,997.411	18,999.353	Free Surface	2.211	0.210	0.096	0.140	0.156	1.244	788,361.419	No	0.140	2.211
CVFI_SPC_VFFI_SI		GVF1_41-GVF1_48	GVF1_41	GVF1_48	8.000	248.288	0.014	75,997.411	18,999.353	Free Surface	2.644	0.185	0.075	0.123	0.156	1.590	1,015,806.873	No	0.123	2.644
Ceyrl 54-Ceyrl 52 Ceyrl 53 Ceyrl 53 Ceyrl 53 Ceyrl 53 Ceyrl 53 Ceyrl 54 Cey		GVF1_48-GVF1_50	GVF1_48	GVF1_50	8.000	155.948	0.014	75,997.411	18,999.353	Free Surface	2.633	0.186	0.075	0.124	0.156	1.581	1,009,879.222	No	0.124	2.633
GPT_56_GVFT_56 OVFT_57 OVFT_58		GVF1_50-GVF1_51	GVF1_50	GVF1_51	8.000	261.911	0.017	75,997.411	18,999.353	Free Surface	2.794	0.178	0.069	0.119	0.156	1.714	1,098,295.807	No	0.119	2.794
CVFT_SS_CVFT_SP		GVF1_51-GVF1_52	GVF1_51	GVF1_52	10.000	141.579	0.004	223,597.727	58,599.338	Free Surface	2.260	0.324	0.227	0.270	0.256	0.899	984,481.446	No	0.270	2.260
CVF1_SP-CVF1_50		GVF1_52-GVF1_53	GVF1_52	GVF1_53	10.000	86.625	0.005	223,597.727	58,599.338	Free Surface	2.338	0.316	0.217	0.263	0.256	0.943	1,032,056.782	No	0.263	2.338
CVMT_SPACENT_SPACENT_SPACENT_SPACENT_SPACENTSPACE		GVF1_53-GVF1_56	GVF1_53	GVF1_56	10.000	84.916	0.006	223,597.727	58,599.338	Free Surface	2.628	0.291	0.184	0.242	0.256	1.111	1,215,168.899	No	0.242	2.628
CVFI_SB_CVFI_E0_ CVFI_SB_CVFI_E0_ CVFI_E0_ CVF		GVF1_56-GVF1_57	GVF1_56	GVF1_57	10.000	59.986	0.004	223,597.727	58,599.338	Free Surface	2.207	0.330	0.235	0.275	0.256	0.869	952,430.183	No	0.275	2.207
CVF1_SR-CVF1_SR   GVF1_SR   CVF1_SR   CVF1_S		GVF1_57-GVF1_58	GVF1_57	GVF1_58	10.000	135.171	0.004	223,597.727	58,599.338	Free Surface	2.209	0.329	0.234	0.275	0.256	0.871	954,010.335	No	0.275	2.209
GVFI_9G-VVFI_50   GVFI_60   GVFI_61   GVFI_6		GVF1_58-GVF1_59	GVF1_58	GVF1_59	10.000	137.845	0.006	223,597.727	58,599.338	Free Surface	2.514	0.300	0.196	0.250	0.256	1.044	1,142,103.592	No	0.250	2.514
GVF1_91-GVF1_78   GVF1_61   CVF1_78   CVF1_61   CVF1_78   CVF1_7		GVF1_59-GVF1_60	GVF1_59	GVF1_60	10.000	183.929	0.005	223,597.727	58,599.338	Free Surface	2.399	0.310	0.209	0.259	0.256	0.978	1,069,948.622	No	0.259	2.399
CVF1_78_CVF1_90   CVF1_78   CVF1_80   CVF1_80   12,000   298783   0.002   223.587.727   58.599.38   Free Surface 1.786   0.028   0.780   0.298   0.780   0.298   0.780   0.298   0.780   0.298   0.780   0.298   0.780   0.298   0.780   0.		GVF1_60-GVF1_61	GVF1_60	GVF1_61	12.000	184.669	0.003	223,597.727	58,599.338	Free Surface	1.875	0.285	0.177	0.285	0.243	0.731	1,261,822.207	No	0.285	1.875
CVF1_78_CVF1_90   CVF1_78   CVF1_80   CVF1_80   12,000   298783   0.002   223.587.727   58.599.38   Free Surface 1.786   0.029   0.278   0.298   0.243   0.676   1.756   1.0241   No   0.298   0.781   CVF1_90   CVF1_90   CVF1_91   CVF1		GVF1_61-GVF1_78	GVF1_61	GVF1_78	12.000	63.774	0.005	223,597.727	58,599.338	Free Surface	2.334	0.244	0.130	0.244	0.243	0.990	1,715,481.944	No	0.244	2.334
VPF 19 CVPF		GVF1_78-GVF1_80	GVF1_78	GVF1_80	12.000	209.783	0.002	223,597.727	58,599.338	Free Surface	1.736	0.301	0.197	0.301	0.243	0.656	1,132,388.242	No	0.301	1.736
GVF1_91-GVF1_116   GVF1_91   GVF1_91   GVF1_96   8,000   0.76   0.00   0.00   342,820.99   97,499.483   Free Surface A38   0.375   0.296   0.250   0.341   1.381   1.418.68.837   No. 0.250   4.438   0.250   0.441   0.201		GVF1_80-GVF1_90	GVF1_80	GVF1_90	12.000	224.665	0.002	223,597.727	58,599.338	Free Surface	1.761	0.298	0.193	0.298	0.243	0.670	1,156,110.201	No	0.298	1.761
GVF1_96_GVF1_96 GVF1_96 GVF1_97 8.000 76:10 0.18 342,629.059 97.499.483 Free Surface 4.38 0.375 0.259 0.250 0.341 1.818 1,146,508.437 No 0.250 4.438 0.44			GVF1_90	GVF1_91	12.000	52.638	0.002	223,597.727	58,599.338	Free Surface	1.855	0.287	0.180	0.287	0.243	0.720	1,242,996.882	No	0.287	1.855
GVF1_9F_GVF1_97		GVF1_91-GVF1_116	GVF1_91	GVF1_116	12.000	200.994	0.018	223,597.727	58,599.338	Free Surface	3.730	0.176	0.067	0.176	0.243	1.883	3,328,739.672	No	0.176	3.730
GVF1.9F.CVF1.98   GVF1.97   GVF1.99   8.000		GVF1_95-GVF1_96	GVF1_95	GVF1_96	8.000	76.100	0.018	342,629.059	97,499.483	Free Surface	4.438	0.375	0.299	0.250	0.341	1.818	1,146,508.437	No	0.250	4.438
GVF1_98_GVF1_90   GVF1_98   GVF1_98   GVF1_98   S000   92.578   0.48   342.629.059   77.499.483   Free Surface 6.273   0.291   0.185   0.194   0.341   2.990   18.53.624.894   No.   0.194   6.273   0.291   0.185   0.194   0.341   2.995   1.896.98.233   No.   0.194   6.284   0.292   0.185   0.194   0.341   2.995   0.299.219   0.001   0.000		GVF1_96-GVF1_97	GVF1_96	GVF1_97	8.000	154.304	0.030	342,629.059	97,499.483	Free Surface	5.318	0.328	0.233	0.219	0.341	2.349	1,472,658.535	No	0.219	5.318
		GVF1_97-GVF1_98	GVF1_97	GVF1_98	8.000	114.319	0.033	342,629.059	97,499.483	Free Surface	5.468	0.322	0.224	0.214	0.341	2.442	1,530,300.191	No	0.214	5.468
		GVF1 98-GVF1 99	GVF1_98	GVF1_99	8.000	92.578	0.048	342,629.059	97,499.483	Free Surface	6.273	0.291	0.185	0.194	0.341	2.960	1,853,624.894	No	0.194	6.273
HWYS2_10-HWYS2_11 HWYS2_11 HWYS2_11 24.000   484.399   0.004   0.000   0.000   Free Surface 0.000   0.000			GVF1_99	GVF1_100	8.000	81.192	0.048	342,629.059	97,499.483	Free Surface	6.264	0.292	0.185	0.194	0.341	2.954	1,849,699.823	No	0.194	6.264
HWYS2_11-HWYS2_12   1 HWYS2_12   2 1002   36.000   2.032   10.011   3.09   0.004   0.000   0		HWY52 10-HWY52 11	HWY52_10	HWY52_11	24.000	846.399	0.004	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	9,841,403.736	No	0.000	0.000
HWY52_1-HWY52_3		HWY52_11-HWY52_12	HWY52_11	HWY52_12	24.000	1,011.369	0.004	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	9,862,350.656	No	0.000	0.000
HWY52_2-HWY52_3		HWY52_12-TOE_2904	HWY52_12	TOE_2904	36.000	2,039.210	0.001	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	11,264,072.713	Yes	0.496	0.000
HWY52_2-HWY52_3		HWY52 1-HWY52 2	HWY52_1	HWY52_2	24.000	1,163.227	0.004	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	9,932,906.547	No	0.000	0.000
HWY52_3-HWY52_6			HWY52_2	HWY52_3	24.000	395.061	0.005	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	11,186,622.998	No	0.000	0.000
HWY52_5-HWY52_6			HWY52_3	HWY52_4	24.000	1,124.165	0.005	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	11,407,795.711	No	0.000	0.000
HWY52_5-HWY52_6   HWY52_5   HWY52_6   24.000   31,996   0.030   0.00		HWY52 4-HWY52 5	HWY52 4	HWY52 5	24.000	2,511.550	0.004	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	9,951,084.187	No	0.000	0.000
HWY52_R-HWY52_8		HWY52 5-HWY52 6	HWY52_5	HWY52_6	24.000	331.960	0.030	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	27,357,606.246	No	0.000	0.000
HWY52_8-HWY52_9		HWY52 6-HWY52 7	HWY52_6	HWY52_7	24.000	1,494.240	0.005	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	11,001,508.941	No	0.000	0.000
HWY52_9-HWY52_10		HWY52_7-HWY52_8	HWY52_7	HWY52_8	24.000	982.740	0.005	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	11,006,634.371	No	0.000	0.000
		HWY52_8-HWY52_9	HWY52_8	HWY52_9	24.000	1,745.531	0.012	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	17,307,674.328	No	0.000	0.000
125_11-125_12   125_11   125_12   18.000   964.920   0.001   0.000		HWY52_9-HWY52_10	HWY52_9	HWY52_10	24.000	691.522	0.004	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	9,682,028.669	No	0.000	0.000
			I25_10	I25_11	18.000	688.030	0.001	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	2,561,321.452	No	0.000	0.000
125_12_133							0.001		0.000	Free Surface	0.000	0.000	0.000	0.000		0.000	2,654,227.110	No	0.000	
□ 125_13-125_14		125 12-125 13	I25 12	I25 13	18.000	199.510	0.001	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	2,557,714.201	No	0.000	0.000
□         125_14-125_15         125_14         125_15         18.000         250.010         0.001         0.000		125 13-125 14	125_13	125_14	18.000	265.210	0.001	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	2,521,242.547	No	0.000	0.000
125_15-125_16   125_15   125_16   18.000   1,021.150   0.001   0.000																				
					18.000							0.000	0.000	0.000	0.000	0.000		No	0.000	0.000

D	XISTI	NG PIPE TABLE								1							1 1			
Dec   Program   Program		ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth	Adjusted Velocity
Dec   19		125_24-125_25	125_24	125_25	24.000	898.605	0.001	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	5,480,374.998	No	0.000	0.000
Dec   19		125_25-125_26	125_25	125_26	24.000	876.779	0.001	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	5,496,072.039	No	0.000	0.000
Dec   19		125_26-125_27	125_26	125_27	24.000	1,011.620	0.003	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	8,805,912.290	No	0.000	0.000
DB_9_44F8_166		125_27-125_28	125_27	125_28	24.000	817.040	0.002	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	6,850,195.904	No	0.000	0.000
DB_9_44F8_166		125_28-125_29	125_28	125_29	24.000	690.810	0.001	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	6,042,595.868	No	0.000	0.000
DB_9_44F8_166		125_29-125_30	125_29	125_30	24.000	2,626.620	0.007	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	13,386,284.582	No	0.000	0.000
DB_9_44F8_166		125_2-125_3	125_2	I25_3	8.000	354.910	0.025	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,350,907.908	No	0.000	0.000
DB_9_44F8_166		125_30-125_31	125_30	I25_31	24.000	1,812.250	0.002	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	6,209,171.960	No	0.000	0.000
DB_9_44F8_166		125_31-125_32	I25_31	125_32	24.000	395.150	0.002	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	6,240,031.494	No	0.000	0.000
DB_9_44F8_166		125_32-125_33	125_32	I25_33	24.000	346.170	0.002	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	6,214,355.271	No	0.000	0.000
DB_9_44F8_166		125_33-125_34	125_33	125_34	24.000	1,017.760	0.002	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	6,217,881.876	No	0.000	0.000
12.5 Sig-HAYPQ_1   12.5 M   MAYNP_2   M		125_34-125_35	125_34	125_35	24.000	1,013.810	0.002	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	6,209,983.139	No	0.000	0.000
12.5 Sig-HAYPQ_1   12.5 M   MAYNP_2   M		125_35-125_36	125_35	I25_36	24.000	1,644.530	0.002	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	7,714,323.017	No	0.000	0.000
REF1_SKEF1_9A   REF1_40   REF1_80   1200   111.492   0.002   429.4867.82   127.501.872   Free Surface 2.147   0.000		I25_36-HWY52_1	125_36	HWY52_1	24.000	1,105.630	0.002	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	7,597,281.363	No	0.000	0.000
REF1_SKEF1_9A   REF1_40   REF1_80   1200   111.492   0.002   429.4867.82   127.501.872   Free Surface 2.147   0.000		125_3-125_4	125_3	I25_4	12.000	302.263	0.003	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,364,818.812	No	0.000	0.000
REF1_SKEF1_9A   REF1_40   REF1_80   1200   111.492   0.002   429.4867.82   127.501.872   Free Surface 2.147   0.000		125_4-125_5	I25_4	I25_5	12.000	198.800	0.010	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	2,445,202.202	No	0.000	0.000
REF1_SKEF1_9A   REF1_40   REF1_80   1200   111.492   0.002   429.4867.82   127.501.872   Free Surface 2.147   0.000		125_5-125_6	I25_5	I25_6	12.000	307.689	0.009	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	2,428,226.428	No	0.000	0.000
REF1_SKEF1_9A   REF1_40   REF1_80   1200   111.492   0.002   429.4867.82   127.501.872   Free Surface 2.147   0.000		125_6-125_7	I25_6	I25_7	12.000	370.130	0.009	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	2,329,279.156	No	0.000	0.000
REF1_SKEF1_9A   REF1_40   REF1_80   1200   111.492   0.002   429.4867.82   127.501.872   Free Surface 2.147   0.000		125_7-125_8	125_7	125_8	12.000	300.680	0.009	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	2,321,366.854	No	0.000	0.000
REF1_SKEF1_9A   REF1_40   REF1_80   1200   111.492   0.002   429.4867.82   127.501.872   Free Surface 2.147   0.000		125_8-125_9	125_8	125_9	15.000	958.300	0.002	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	2,056,167.396	No	0.000	0.000
REF1_SKEF1_9A   REF1_40   REF1_80   1200   111.492   0.002   429.4867.82   127.501.872   Free Surface 2.147   0.000			125_9	I25_10	15.000	964.580	0.009	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	4,221,921.089	No	0.000	0.000
REF1_SKEF1_9A   REF1_40   REF1_80   1200   111.492   0.002   429.4867.82   127.501.872   Free Surface 2.147   0.000		KEF1_10-KEF1_1	KEF1_10	KEF1_1	12.000	425.192	0.002	24,001.911	6,000.478	Free Surface	0.833	0.106	0.024	0.106	0.078	0.545	1,014,852.200	Yes	0.261	0.227
REF1_SKEF1_9A   REF1_40   REF1_80   1200   111.492   0.002   429.4867.82   127.501.872   Free Surface 2.147   0.000		KEF1 1A-KEF1 2A	KEF1_1A	KEF1_2A	12.000	304.802	0.002	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,118,928.838	No	0.000	0.000
KEF1_2KEF1_1   KEF1_2   KEF1_4   12000   128,808   0.002   142,505.413   121,501.304   Free Surface 1.953   0.434   0.393   0.000   0.000   0.000   0.000   0.000   1.138,143.873   No.   0.000   0.000   No.   0.000   No.   0.000   1.138,143.873   No.   0.000   0.000   No.   0.000   No.   0.000   No.   0.000   1.138,143.873   No.   0.000   0.000   No.   0.000   No		KEF1 1-KEF1 80	KEF1_1	KEF1_80	12.000	111.462	0.002	429,456.762	127,501.872	Free Surface	2.147	0.416	0.363	0.416	0.340	0.675	1,184,548.524	No	0.416	2.147
KEF1_2KEF1_1   KEF1_2   KEF1_4   12000   128,808   0.002   142,505.413   121,501.304   Free Surface 1.953   0.434   0.393   0.000   0.000   0.000   0.000   0.000   1.138,143.873   No.   0.000   0.000   No.   0.000   No.   0.000   1.138,143.873   No.   0.000   0.000   No.   0.000   No.   0.000   No.   0.000   1.138,143.873   No.   0.000   0.000   No.   0.000   No		KEF1_2A-KEF1_3A	KEF1_2A	KEF1_3A	12.000	190.988	0.002	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,158,870.443	No	0.000	0.000
KEFI_3KEFI_2   KEFI_4   KEFI_5   12,000   39,537   0.003   412,050.43   121,501.39   Free Surface 2.442   0.367   0.238   0.367   0.233   0.826   1,434,221.176   Yes   0.400   2.175		KEF1_2-KEF1_1	KEF1_2	KEF1_1	12.000	128.808	0.002	412,505.413	121,501.394	Free Surface	1.953	0.434	0.390	0.434	0.333	0.600	1,056,910.315	No	0.434	1.953
KEFI_3KEFI_2   KEFI_4   KEFI_5   12,000   39,537   0.003   412,050.43   121,501.39   Free Surface 2.442   0.367   0.238   0.367   0.233   0.826   1,434,221.176   Yes   0.400   2.175		KEF1_3A-KEF1_4	KEF1_3A	KEF1_4	12.000	265.620	0.002	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,138,143.873	No	0.000	0.000
EFF1_81-KEF1_82         KEF1_81         KEF1_82         12.000         259.893         0.002         429.456.762         127.501.872 Free Surface 2.015         0.437         0.340         0.699         1,223,144.117         No         0.409         2.198           KEF1_82-KEF1_83         TOE_2859         12.000         254.456.762         127.501.872 Free Surface 2.015         0.437         0.340         0.146         0.616         1.086.498.818         No         0.347         2.016           KEF1_8.KEF1_9         KEF1_8         XEF1_9         2.000         249.456.762         127.501.872 Free Surface 2.000         0.000		KEF1_3-KEF1_2	KEF1_3	KEF1_2	12.000	39.537	0.003	412,505.413	121,501.394	Free Surface	2.442	0.367	0.288	0.367	0.333	0.826	1,434,221.176	Yes	0.400	2.172
EFF1_81-KEF1_82         KEF1_81         KEF1_82         12.000         259.893         0.002         429.456.762         127.501.872 Free Surface 2.015         0.437         0.340         0.699         1,223,144.117         No         0.409         2.198           KEF1_82-KEF1_83         TOE_2859         12.000         254.456.762         127.501.872 Free Surface 2.015         0.437         0.340         0.146         0.616         1.086.498.818         No         0.347         2.016           KEF1_8.KEF1_9         KEF1_8         XEF1_9         2.000         249.456.762         127.501.872 Free Surface 2.000         0.000		KEF1_4-KEF1_5	KEF1_4	KEF1_5	12.000	97.079	0.002	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,046,665.307	No	0.000	0.000
EFF1_81-KEF1_82         KEF1_81         KEF1_82         12.000         259.893         0.002         429.456.762         127.501.872 Free Surface 2.015         0.437         0.340         0.699         1,223,144.117         No         0.409         2.198           KEF1_82-KEF1_83         TOE_2859         12.000         254.456.762         127.501.872 Free Surface 2.015         0.437         0.340         0.146         0.616         1.086.498.818         No         0.347         2.016           KEF1_8.KEF1_9         KEF1_8         XEF1_9         2.000         249.456.762         127.501.872 Free Surface 2.000         0.000		KEF1_5-KEF1_6	KEF1_5	KEF1_6	12.000	126.404	0.002	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,134,362.985	No	0.000	0.000
EFF1_81-KEF1_82         KEF1_81         KEF1_82         12.000         259.893         0.002         429.456.762         127.501.872 Free Surface 2.015         0.437         0.340         0.699         1,223,144.117         No         0.409         2.198           KEF1_82-KEF1_83         TOE_2859         12.000         254.456.762         127.501.872 Free Surface 2.015         0.437         0.340         0.410         0.616         16.864.818 No         0.437         2.016           KEF1_8.KEF1_9         KEF1_8         XEF1_9         20.00         254.715         0.002         0.000         0.0		KEF1_6-KEF1_7	KEF1_6	KEF1_7	12.000	300.782	0.003	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,281,839.995	No	0.000	0.000
EFF1_81-KEF1_82         KEF1_81         KEF1_82         12.000         259.893         0.002         429.456.762         127.501.872 Free Surface 2.015         0.437         0.340         0.699         1,223,144.117         No         0.409         2.198           KEF1_82-KEF1_83         TOE_2859         12.000         254.456.762         127.501.872 Free Surface 2.015         0.437         0.340         0.410         0.616         16.864.818 No         0.437         2.016           KEF1_8.KEF1_9         KEF1_8         XEF1_9         20.00         254.715         0.002         0.000         0.0		KEF1_7-KEF1_8	KEF1_7	KEF1_8	12.000	129.689	0.001	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	850,629.580	No	0.000	0.000
EFF1_81-KEF1_82         KEF1_81         KEF1_82         12.000         259.893         0.002         429.456.762         127.501.872 Free Surface 2.015         0.437         0.340         0.699         1,223,144.117         No         0.409         2.198           KEF1_82-KEF1_83         TOE_2859         12.000         254.456.762         127.501.872 Free Surface 2.015         0.437         0.340         0.410         0.616         16.864.818 No         0.437         2.016           KEF1_8.KEF1_9         KEF1_8         XEF1_9         20.00         254.715         0.002         0.000         0.0		KEF1_80-KEF1_81	KEF1_80	KEF1_81	12.000	67.889	0.003	429,456.762	127,501.872	Free Surface	2.235	0.404	0.343	0.404	0.340	0.716	1,251,614.374	No	0.404	2.235
Image: Note 2889         KEF1_83 TOE_2889         KEF1_83 TOE_2889         KEF1_80         12000         374.323         0.006         429,456,762         127,501.872         Free Surface 0.000         0.000		KEF1_81-KEF1_82	KEF1_81	KEF1_82	12.000	250.893	0.002	429,456.762	127,501.872	Free Surface	2.198	0.409	0.351	0.409	0.340	0.699	1,223,144.117	No	0.409	2.198
Image: Note 2889         KEF1_83 TOE_2889         KEF1_83 TOE_2889         KEF1_80         12000         374.323         0.006         429,456,762         127,501.872         Free Surface 0.000         0.000		KEF1_82-KEF1_83	KEF1_82	KEF1_83	12.000	254.412	0.002	429,456.762	127,501.872	Free Surface	2.015	0.437	0.395	0.437	0.340	0.616	1,086,419.681	No	0.437	2.015
□         KEF1_9_KEF1_10         KEF1_9_KEF1_10         12.000         123.04         0.003         0.000		KEF1_83-TOE_2859	KEF1_83	TOE_2859	12.000	374.323	0.006	429,456.762	127,501.872	Free Surface	3.151	0.314	0.214	0.314	0.340	1.165	2,011,085.908	No	0.314	3.151
□         KEF1_9_KEF1_10         KEF1_9_KEF1_10         12.000         123.04         0.003         0.000		KEF1_8-KEF1_9	KEF1_8	KEF1_9	12.000	250.713	0.002	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,203,016.022	No	0.000	0.000
□         KFF1_10xFF1_9         KFF1_10         KFF1_10         KFF1_10         KFF1_10         KFF1_10         KFF1_11         KFF1_10         0.000         0.0		KEF1_9-KEF1_10	KEF1_9	KEF1_10	12.000	123.304	0.003	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,388,512.128	Yes	0.023	0.000
KFF1_11-KFF1_10         KFF1_11         KFF1_11         KFF1_11         KFF1_11         12.000         287.986         0.001         0.000		KFF1_10-KFF1_9	KFF1_10	KFF1_9	12.000	223.577	0.002	225,620.011	59,250.218	Free Surface	1.563	0.327	0.231	0.327	0.244	0.565	975,375.446	No	0.327	1.563
KFF1_15-KFF1_14		KFF1_11-KFF1_10	KFF1_11	KFF1_10	12.000	287.986	0.001	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	896,523.512	Yes	0.129	0.000
KFF1_15-KFF1_14		KFF1_14-KFF1_11	KFF1_14	KFF1_11	12.000	334.039	0.001	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	957,955.485	No	0.000	0.000
KFF1_9-KEF1_3		KFF1_15-KFF1_14	KFF1_15	KFF1_14	12.000	345.637	0.002	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,084,657.167	No	0.000	0.000
LCFA_10-LCFA_9         LCFA_10         LCFA_9         8.000         313.750         0.007         0.000         Free Surface         0.000		KFF1_16-KFF1_15	KFF1_16	KFF1_15	12.000	234.800	0.002	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,243,115.538	No	0.000	0.000
LCFA_11-LCFA_10         LCFA_11         LCFA_10         8.000         349.730         0.007         0.000         0.000         Free Surface         0.000 <t< td=""><td></td><td>KFF1_9-KEF1_3</td><td>KFF1_9</td><td>KEF1_3</td><td>12.000</td><td>283.847</td><td>0.002</td><td>225,620.011</td><td>59,250.218</td><td>Free Surface</td><td>1.694</td><td>0.309</td><td>0.207</td><td>0.309</td><td>0.244</td><td>0.632</td><td>1,090,939.541</td><td>No</td><td>0.309</td><td>1.694</td></t<>		KFF1_9-KEF1_3	KFF1_9	KEF1_3	12.000	283.847	0.002	225,620.011	59,250.218	Free Surface	1.694	0.309	0.207	0.309	0.244	0.632	1,090,939.541	No	0.309	1.694
LCFA_11-LCFA_10         LCFA_11         LCFA_10         8.000         349.730         0.007         0.000         0.000         Free Surface         0.000 <t< td=""><td></td><td>LCFA_10-LCFA_9</td><td>LCFA_10</td><td>LCFA_9</td><td>8.000</td><td>313.750</td><td>0.007</td><td>0.000</td><td>0.000</td><td>Free Surface</td><td>0.000</td><td>0.000</td><td>0.000</td><td>0.000</td><td>0.000</td><td>0.000</td><td>732,621.515</td><td>No</td><td>0.000</td><td>0.000</td></t<>		LCFA_10-LCFA_9	LCFA_10	LCFA_9	8.000	313.750	0.007	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	732,621.515	No	0.000	0.000
LCFA_13_LCFA_12         LCFA_13         LCFA_12         8.000         127.450         0.008         0.000         0.000         Free Surface         0.000 <t< td=""><td></td><td>LCFA_11-LCFA_10</td><td>LCFA_11</td><td>LCFA_10</td><td>8.000</td><td>349.730</td><td>0.007</td><td>0.000</td><td>0.000</td><td>Free Surface</td><td>0.000</td><td>0.000</td><td>0.000</td><td>0.000</td><td>0.000</td><td>0.000</td><td>734,256.516</td><td>No</td><td>0.000</td><td>0.000</td></t<>		LCFA_11-LCFA_10	LCFA_11	LCFA_10	8.000	349.730	0.007	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	734,256.516	No	0.000	0.000
□         LCFA_14-LCFA_13         LCFA_14         LCFA_13         8.000         231.150         0.007         0.000 <td></td> <td>LCFA_12-LCFA_11</td> <td>LCFA_12</td> <td>LCFA_11</td> <td>8.000</td> <td>136.970</td> <td>0.006</td> <td>0.000</td> <td>0.000</td> <td>Free Surface</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>644,264.831</td> <td>No</td> <td>0.000</td> <td>0.000</td>		LCFA_12-LCFA_11	LCFA_12	LCFA_11	8.000	136.970	0.006	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	644,264.831	No	0.000	0.000
LCFA_14-LCFA_13         LCFA_14         LCFA_13         8.000         231.150         0.007         0.000         0.000         Free Surface         0.000 <t< td=""><td></td><td>LCFA_13-LCFA_12</td><td>LCFA_13</td><td>LCFA_12</td><td>8.000</td><td>127.450</td><td>0.008</td><td>0.000</td><td>0.000</td><td>Free Surface</td><td>0.000</td><td>0.000</td><td>0.000</td><td>0.000</td><td>0.000</td><td>0.000</td><td>773,653.723</td><td>No</td><td>0.000</td><td>0.000</td></t<>		LCFA_13-LCFA_12	LCFA_13	LCFA_12	8.000	127.450	0.008	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	773,653.723	No	0.000	0.000
LCFA_15_LCFA_14         LCFA_15         LCFA_14         8.000         166.040         0.007         0.000         0.000         Free Surface         0.000 <t< td=""><td></td><td>LCFA_14-LCFA_13</td><td>LCFA_14</td><td></td><td>8.000</td><td>231.150</td><td>0.007</td><td>0.000</td><td>0.000</td><td>Free Surface</td><td>0.000</td><td>0.000</td><td>0.000</td><td>0.000</td><td>0.000</td><td>0.000</td><td>690,180.006</td><td>No</td><td>0.000</td><td>0.000</td></t<>		LCFA_14-LCFA_13	LCFA_14		8.000	231.150	0.007	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	690,180.006	No	0.000	0.000
LCFA_17-LCFA_16         LCFA_16         LCFA_16         8.000         253.950         0.034         0.000         Free Surface         0.000 <t< td=""><td></td><td>LCFA_15-LCFA_14</td><td>LCFA_15</td><td>LCFA_14</td><td>8.000</td><td>166.040</td><td>0.007</td><td>0.000</td><td>0.000</td><td>Free Surface</td><td>0.000</td><td>0.000</td><td>0.000</td><td>0.000</td><td>0.000</td><td>0.000</td><td>699,836.302</td><td>No</td><td>0.000</td><td>0.000</td></t<>		LCFA_15-LCFA_14	LCFA_15	LCFA_14	8.000	166.040	0.007	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	699,836.302	No	0.000	0.000
LCFA_17-LCFA_16         LCFA_16         LCFA_16         8.000         253.950         0.034         0.000         Free Surface         0.000 <t< td=""><td></td><td>LCFA_16-LCFA_15</td><td>LCFA_16</td><td>LCFA_15</td><td>8.000</td><td>153.370</td><td>0.010</td><td>0.000</td><td>0.000</td><td>Free Surface</td><td>0.000</td><td>0.000</td><td>0.000</td><td>0.000</td><td>0.000</td><td>0.000</td><td>838,955.698</td><td>No</td><td>0.000</td><td>0.000</td></t<>		LCFA_16-LCFA_15	LCFA_16	LCFA_15	8.000	153.370	0.010	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	838,955.698	No	0.000	0.000
LCFA_1-EVF1A1_52       LCFA_1       EVF1A1_52       21.000       283.048       0.002       911,866.884       312,199.082       Free Surface       2.616       0.276       0.166       0.482       0.426       0.785       5,492,249.176       Yes       0.554       2.158         LCFA_3-LCFA_1       LCFA_3       LCFA_1       8.000       197.180       0.029       0.000       0.000       Free Surface       0.000		LCFA_17-LCFA_16	LCFA_17	LCFA_16	8.000	253.950	0.034	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,562,036.128	No	0.000	0.000
		LCFA_1-EVF1A1_52	LCFA_1		21.000	283.048	0.002	911,866.884	312,199.082	Free Surface	2.616	0.276	0.166	0.482	0.426	0.785	5,492,249.176	Yes	0.554	2.158
			LCFA_3	LCFA_1	8.000	197.180	0.029	0.000				0.000	0.000	0.000	0.000	0.000	1,433,080.656	Yes	0.241	0.000
			LCFA_4	LCFA_3	8.000	231.800	0.004	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	519,716.515	No	0.000	0.000
		LCFA_5-LCFA_4	LCFA_5	LCFA_4	8.000	301.080	0.004	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	535,566.343	No	0.000	0.000
		LCFA_6-LCFA_5	LCFA_6	LCFA_5	8.000	162.080	0.005	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	603,400.714	No	0.000	0.000
		LCFA_7-LCFA_6	LCFA_7	LCFA_6	8.000	116.630	0.007	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	702,592.425	No	0.000	0.000
		LCFA_8-LCFA_7	LCFA_8		8.000	97.600	0.007	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	692,301.666	No	0.000	0.000

EXIST	ING PIPE TABLE															,			
	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth	Adjusted Velocity
	LCFA_9-LCFA_8	LCFA_9	LCFA_8	8.000	78.140	0.006	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	636,580.370	No	0.000	0.000
	LCFB_1-LCFA_7	LCFB_1	LCFA_7	8.000	119.310	0.004	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	554,638.832	No	0.000	0.000
	LCFB_2-LCFB_1	LCFB_2	LCFB_1	8.000	129.900	0.006	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	674,009.407	No	0.000	0.000
	LCFB_3-LCFB_2	LCFB_3	LCFB_2	8.000	219.450	0.007	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	710,650.679	No	0.000	0.000
	LCFB_4-LCFB_3	LCFB_4	LCFB_3	8.000	93.380	0.008	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	755,183.569	No	0.000	0.000
	NMS_10-NMS_9	NMS_10	NMS_9	10.000	29.440	0.040	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	3,079,396.698	No	0.000	0.000
	NMS_11-NMS_10	NMS_11	NMS_10	10.000	400.000	0.010	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,538,131.757	No	0.000	0.000
	NMS_12-NMS_11	NMS_12	NMS_11	10.000	400.000	0.008	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,375,746.867	No	0.000	0.000
	NMS_13-NMS_12	NMS_13	NMS_12	10.000	400.000	0.008	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,375,746.867	No	0.000	0.000
	NMS_14-NMS_13	NMS_14	NMS_13	10.000	89.260	0.009	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,456,163.333	No	0.000	0.000
	NMS_15-NMS_14	NMS_15	NMS_14	10.000	119.200	0.010	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,543,284.642	No	0.000	0.000
	NMS_16-NMS_15	NMS_16	NMS_15	10.000	374.790	0.007	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,286,027.298	No	0.000	0.000
	NMS_17-NMS_16	NMS_17	NMS_16	10.000	332.270	0.020	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	2,175,999.523	No	0.000	0.000
	NMS_18-NMS_17	NMS_18	NMS_17	10.000	332.270	0.033	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	2,793,529.425	No	0.000	0.000
	NMS_19-NMS_18	NMS_19	NMS_18	10.000	104.120	0.030	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	2,662,586.687	No	0.000	0.000
	NMS_1-FMF9_1	NMS_1	FMF9_1	10.000	114.510	0.060	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	3,767,473.447	No	0.000	0.000
	NMS_20-NMS_19	NMS_20	NMS_19	10.000	98.110	0.010	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,537,269.246	No	0.000	0.000
	NMS_2-NMS-1	NMS_2	NMS_1	10.000	87.230	0.040	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	3,076,616.155	No	0.000	0.000
	NMS_3-NMS_2	NMS_3	NMS_2	10.000	113.730	0.010	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,539,956.471	No	0.000	0.000
	NMS 4-NMS 3	NMS_4	NMS_3	10.000	270.690	0.010	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,536,170.126	No	0.000	0.000
	NMS 5-NMS 4	NMS_5	NMS_4	10.000	55.800	0.030	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	2,668,892.495	No	0.000	0.000
	NMS 6-NMS 5	NMS_6	NMS_5	10.000	56.570	0.030	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	2,666,397.603	No	0.000	0.000
	NMS 7-NMS 6	NMS_7	NMS_6	10.000	55.470	0.030	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	2,660,838.404	No	0.000	0.000
	NMS 8-NMS 7	NMS_8	NMS_7	10.000	400.000	0.010	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,538,131.757	No	0.000	0.000
	NMS 9-NMS 8	NMS_9	NMS_8	10.000	400.000	0.008	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,413,910.415	No	0.000	0.000
	OGF1 17-OGF1 18	OGF1_17	OGF1_18	10.000	85.519	0.016	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,932,538.745	No	0.000	0.000
	OGF1 18-OGF1 25	OGF1_18	OGF1_25	10.000	68.819	0.014	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,816,667.672	No	0.000	0.000
	OGF1 1-OGF1 2	OGF1_1	OGF1 2	10.000	389.725	0.011	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,579,556.344	No	0.000	0.000
	OGF1_25-OGF1_75	OGF1_25	OGF1_75	10.000	202.386	0.005	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,123,609.766	No	0.000	0.000
	OGF1 2-OGF1 3	OGF1_2	OGF1 3	10.000	76.361	0.005	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,099,236.929	No	0.000	0.000
	OGF1 3-OGF1 4	OGF1_3	OGF1 4	10.000	302.094	0.018	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	2,048,825.511	No	0.000	0.000
	OGF1 4-OGF1 5	OGF1_4	OGF1_5	10.000	93.410	0.011	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,583,489.455	No	0.000	0.000
	OGF1 5-OGF1 17	OGF1_5	OGF1_17	10.000	49.146	0.013	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,741,483.745	No	0.000	0.000
	OGF1 69-OGF1 70	OGF1_69	OGF1_70	10.000	90.809	0.005	189,599.821	49,150.061	Free Surface	2.291	0.285	0.177	0.237	0.235	0.979	1,070,666.651	No	0.237	2.291
	OGF1 70-OGF1 71	OGF1_70	OGF1_71	10.000	96.964	0.005	189,599.821	49,150.061	Free Surface	2.256	0.288	0.181	0.240	0.235	0.958	1,047,841.622	No	0.240	2.256
	OGF1 71-OGF1 72	OGF1_71	OGF1_72	10.000	93.080	0.002	189,599.821	49,150.061	Free Surface	1.503	0.387	0.318	0.323	0.235	0.540	596,524.643	No	0.323	1.503
	OGF1_72-OGF1_73	OGF1_72	OGF1_73	10.000	85.671	0.009	189,599.821	49,150.061	Free Surface	2.842	0.244	0.131	0.204	0.235	1.319	1,448,715.520	Yes	0.223	2.497
	OGF1 73-OGF1 74	OGF1_73	OGF1_74	10.000	191.425	0.004	189,599.821	49,150.061	Free Surface	2.220	0.291	0.185	0.243	0.235	0.937	1,024,951.498	No	0.243	2.220
	OGF1 74-OGF1 75	OGF1_74	OGF1_75	10.000	100.813	0.009	189,599.821	49,150.061	Free Surface	2.848	0.244	0.130	0.203	0.235	1.323	1,453,305.584	Yes	0.214	2.641
IFI	OGF1_75-TOE_2622	OGF1_75	TOE_2622	10.000	194.676	0.006	189,599.821	49,150.061	Free Surface	2.459	0.271	0.160	0.226	0.235	1.080	1,182,188.388	No	0.226	2.459
	OGF2_29-OGF2_31	OGF2_29	OGF2_31	8.000	229.146	0.011	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	884,315.641	No	0.000	0.000
IFI	OGF2_31-OGF2_32	OGF2_31	OGF2_32	8.000	236.759	0.022	0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	1,260,843.418	No	0.000	0.000
H	OGF2_32-OGF2_33	OGF2_32	OGF2_33	8.000	236.902	0.020	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,207,535.197	No	0.000	0.000
IFI	OGF2_33-OGF2_34	OGF2_33	OGF2_34	8.000	190.439	0.009	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	803,865.810	No	0.000	0.000
H	OGF2_34-OGF2_46	OGF2_34	OGF2_46	8.000	282.567	0.009	0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	805,885.247	No	0.000	0.000
IH	OGF2 46-OGF2 49	OGF2_46	OGF2_49	8.000	124.327	0.015	0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	1.029.214.197	No	0.000	0.000
IH	OGF2 49-OGF2 50	OGF2 49	OGF2 50	8.000	119.294		0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	871,847.331	No	0.000	0.000
	OGF2 50-OGF2 65	OGF2_50	OGF2_65	8.000	185.079		0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	404,119.324	Yes	0.113	0.000
	OGF2 65-OGF2 68	OGF2_65	OGF2_68	10.000	168.652		189,599.821		Free Surface		0.331	0.236	0.276	0.235	0.733	803,297.351	No	0.276	1.864
	OGF2_68-OGF1_69	OGF2_68	OGF1_69	10.000	289.307		189,599.821		Free Surface		0.238	0.124	0.198	0.235	1.389	1,526,638.745	Yes	0.218	2.584
H	OTF1_101-OTF1_102	OTF1_101	OTF1_102	12.000	360.260		0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	1,263,957.034	No	0.000	0.000
	OTF1_102-OTF1_103	OTF1_102	OTF1_103	12.000	415.146		0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	776,382.060	Yes	0.264	0.000
	OTF1_103-TOE_2798	OTF1_103	TOE_2798	12.000	319.000		487,761.201		Free Surface		0.324	0.227	0.324	0.363	1.243	2,146,766.242	No	0.324	3.423
	OTF1_108-TOE_3005	OTF1_108	TOE_3005	16.000	25.799	0.261	582,537.116		Free Surface			0.021	0.324	0.366	7.157	27,512,267.951	Yes	0.342	3.190
	OTF1_30-OTF1_37	OTF1_30	OTF1_37	8.000	188.540		0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	505,707.818	No	0.000	0.000
	OTF1_37-OTF1_43	OTF1_37	OTF1_43	8.000	385.010		0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	567,011.375	Yes	0.146	0.000
	OTF1_43-OTF1_44	OTF1_43	OTF1_44	8.000	466.022		208,978.954		Free Surface		0.437	0.395	0.291	0.264	0.826	528,688.388	Yes	0.296	2.161
	OTF1_44-OTF1_65	OTF1_44	OTF1_65	8.000	469.331	0.003	208,978.954		Free Surface		0.451	0.418	0.301	0.264	0.777	499,939.787	No	0.301	2.117
	OTF1 46-OTF1 47	OTF1 46	OTF1 47	10.000	453.820		0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	144,404.768	No	0.000	0.000
	511 1_ <del>1</del> 0-011 1_47	O 11 1_70	U 1. 1_7/	10.000	100.020	0.000	0.000	0.000	cc Suriace	3.000	0.000	0.000	0.000	0.000	0.000	1-1,-10-1.700	140	0.000	0.000

ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Peakable Flow (gpd)	Flow Type V	elocity (ft/s)	d/D	q/Q	Water Depth (ft)	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth	Adjusted Velocity
OTF1_47-OTF1_48	OTF1_47	OTF1_48	10.000	474.640	0.004	0.000	0.000	Free Surface (	0.000	0.000	0.000	0.000	0.000	0.000	978,277.047	No	0.000	0.000
OTF1_48-OTF1_62	OTF1_48	OTF1_62	10.000	436.432	0.003	0.000	0.000	Free Surface 0	0.000	0.000	0.000	0.000	0.000	0.000	842,696.068	Yes	0.106	0.000
OTF1_60A-OTF1_61A	OTF1_60A	OTF1_61A	24.000	31.746	0.004	936,336.347	322,198.439	Free Surface 3	3.038	0.209	0.096	0.418	0.416	0.989	9,764,428.122	No	0.418	3.038
OTF1_61A-TOE_2825	OTF1_61A	TOE_2825	24.000	191.263	0.005	936,336.347	322,198.439	Free Surface 3	3.243	0.200	0.087	0.400	0.416	1.081	10,711,431.840	No	0.400	3.243
OTF1_62-OTF1_64	OTF1_62	OTF1_64	10.000	483.405	0.003	109,998.679	27,499.670	Free Surface 1	1.558	0.254	0.142	0.212	0.178	0.707	775,872.865	No	0.212	1.558
OTF1_64-OTF1_82	OTF1_64	OTF1_82	10.000	469.703	0.003	109,998.679	27,499.670	Free Surface 1	1.614	0.248	0.135	0.207	0.178	0.743	815,396.316	Yes	0.208	1.597
OTF1_65-OTF1_80	OTF1_65	OTF1_80	8.000	484.534	0.004	208,978.954	54,450.699	Free Surface 2	2.268	0.428	0.381	0.285	0.264	0.860	549,097.814	Yes	0.286	2.258
OTF1_80-OTF1_96	OTF1_80	OTF1_96	8.000	428.652	0.004	208,978.954	54,450.699	Free Surface 2	2.247	0.431	0.386	0.287	0.264	0.848	542,038.596	No	0.287	2.247
OTF1_82-OTF1_87	OTF1_82	OTF1_87	10.000	444.471	0.003	109,998.679	27,499.670	Free Surface 1	1.581	0.252	0.139	0.210	0.178	0.722	792,524.443	Yes	0.238	1.323
OTF1_87-OTF1_96	OTF1_87	OTF1_96	10.000	387.699	0.003	185,761.900	48,100.302	Free Surface 1	1.910	0.320	0.222	0.267	0.232	0.765	837,713.068	No	0.267	1.910
OTF1_88-OTF1_89	OTF1_88	OTF1_89	8.000	321.471	0.015	66,798.695	16,699.674	Free Surface 2	2.602	0.171	0.064	0.114	0.146	1.631	1,048,414.908	Yes	0.667	0.296
OTF1_89-OTF1_90	OTF1_89	OTF1_90	8.000	329.236	-0.007	66,798.695	16,699.674	Pressurized (	0.296	1.000		0.667	0.000	0.064		No	0.667	0.296
OTF1_90-OTF1_92	OTF1_90	OTF1_92	8.000	164.601	0.004	66,798.695	16,699.674	Free Surface 1	1.657	0.235	0.121	0.156	0.146	0.878	553,217.651	No	0.156	1.657
OTF1_92-OTF1_93	OTF1_92	OTF1_93	8.000	20.322	0.005	66,798.695	16,699.674	Free Surface 1	1.745	0.226	0.112	0.151	0.146	0.943	595,084.768	No	0.151	1.745
OTF1_93-OTF1_94	OTF1_93	OTF1_94	8.000	373.404	0.008	66,798.695	16,699.674	Free Surface 2	2.058	0.201	0.089	0.134	0.146	1.183	751,463.852	No	0.134	2.058
OTF1_94-OTF1_95	OTF1_94	OTF1_95	8.000	179.276	0.023	66,798.695	16,699.674	Free Surface 2	2.991	0.155	0.052	0.104	0.146	1.971	1,278,202.011	Yes	0.184	1.321
OTF1_95-OTF1_96	OTF1_95	OTF1_96	8.000	386.157	0.004	177,075.247	45,724.303	Free Surface 2	2.131	0.396	0.331	0.264	0.242	0.846	535,724.847	No	0.264	2.131
OTF1_96-OTF1_97	OTF1_96	OTF1_97	12.000	9.000	0.033	487,761.201	148,275.304	Free Surface 5	5.864	0.221	0.107	0.221	0.363	2.623	4,566,521.855	No	0.221	5.864
OTF1_97-OTF1_98	OTF1_97	OTF1_98	12.000	180.000	0.006	487,761.201	148,275.304	Free Surface 3	3.114	0.347	0.259	0.347	0.363	1.088	1,882,825.195	No	0.347	3.114
OTF1_98-OTF1_103	OTF1_98	OTF1_103	12.000	300.000	0.007	487,761.201	148,275.304	Free Surface 3	3.423	0.324	0.227	0.324	0.363	1.243	2,146,751.017	No	0.324	3.423
RMF1_114-RMF1_118	RMF1_114	RMF1_118	12.000	321.098	0.027	456,289.280	137,000.108	Free Surface 5	5.348	0.225	0.111	0.225	0.350	2.370	4,121,788.264	No	0.225	5.348
RMF1_118-AIF1_119	RMF1_118	AIF1_119	12.000	371.334	0.005	456,289.280	137,000.108	Free Surface 2	2.968	0.342	0.252	0.342	0.350	1.045	1,807,858.922	No	0.342	2.968
SCC_01	SCC_21	TOE_2948	15.000	100.000	0.002	0.000	0.000	Free Surface (	0.000	0.000	0.000	0.000	0.000	0.000	2,028,108.090	Yes	0.065	0.000
SCC_10	SCC_12	SCC_13	15.000	375.000	0.002	0.000	0.000	Free Surface (	0.000	0.000	0.000	0.000	0.000	0.000	2,028,108.090	No	0.000	0.000
SCC_11	SCC_11A	SCC_12	15.000	145.690	0.002	0.000	0.000	Free Surface (	0.000	0.000	0.000	0.000	0.000	0.000	2,023,299.745	No	0.000	0.000
SCC_12	SCC_11	SCC_11A	12.000	356.110	0.023	0.000	0.000	Free Surface 0	0.000	0.000	0.000	0.000	0.000	0.000	3,765,224.279	No	0.000	0.000
SCC_13	SCC_10	SCC_11	12.000	490.000	0.004	0.000	0.000	Free Surface (	0.000	0.000	0.000	0.000	0.000	0.000	1,541,006.959	No	0.000	0.000
SCC_14	SCC_09	SCC_10	12.000	100.000	0.009	0.000	0.000	Free Surface 0	0.000	0.000	0.000	0.000	0.000	0.000	2,372,834.360	No	0.000	0.000
SCC_15	SCC_08	SCC_09	12.000	413.000	0.010	0.000	0.000	Free Surface (	0.000	0.000	0.000	0.000	0.000	0.000	2,537,263.705	No	0.000	0.000
SCC_16	SCC_07	SCC_08	12.000	412.000	0.008	0.000	0.000	Free Surface 0	0.000	0.000	0.000	0.000	0.000	0.000	2,166,091.507	No	0.000	0.000
SCC_17	SCC_06	SCC_07	10.000	375.000	0.007	0.000	0.000	Free Surface (	0.000	0.000	0.000	0.000	0.000	0.000	1,307,562.782	No	0.000	0.000
SCC_18	SCC_05	SCC_06	10.000	150.000	0.007	0.000	0.000	Free Surface 0	0.000	0.000	0.000	0.000	0.000	0.000	1,274,578.305	No	0.000	0.000
SCC_19	SCC_04	SCC_05	10.000	200.000	0.007	0.000	0.000	Free Surface (	0.000	0.000	0.000	0.000	0.000	0.000	1,286,893.357	No	0.000	0.000
SCC_2	SCC_20	SCC_21	15.000	225.000	0.002	0.000	0.000	Free Surface 0	0.000	0.000	0.000	0.000	0.000	0.000	2,028,108.090	No	0.000	0.000
SCC_20	SCC_03	SCC_04	10.000	220.000	0.007	0.000	0.000	Free Surface (	0.000	0.000	0.000	0.000	0.000	0.000	1,307,617.610	No	0.000	0.000
SCC_21	SCC_02	SCC_03	10.000	577.000	0.007	0.000	0.000	Free Surface 0	0.000	0.000	0.000	0.000	0.000	0.000	1,329,365.083	No	0.000	0.000
SCC_22	SCC_01	SCC_02	8.000	443.000	0.011	0.000	0.000	Free Surface (	0.000	0.000	0.000	0.000	0.000	0.000	901,253.048	No	0.000	0.000
SCC_3	SCC_19	SCC_20	15.000	415.000	0.002	0.000	0.000	Free Surface 0	0.000	0.000	0.000	0.000	0.000	0.000	2,028,108.090	No	0.000	0.000
SCC_4	SCC_18	SCC_19	15.000	485.000	0.002	0.000	0.000	Free Surface (	0.000	0.000	0.000	0.000	0.000	0.000	2,017,626.841	No	0.000	0.000
SCC_5	SCC_17	SCC_18	15.000	275.000	0.002	0.000	0.000	Free Surface 0	0.000	0.000	0.000	0.000	0.000	0.000	2,028,108.090	No	0.000	0.000
SCC_6	SCC_16	SCC_17	15.000	513.000	0.002	0.000	0.000	Free Surface (	0.000	0.000	0.000	0.000	0.000	0.000	2,032,057.671	No	0.000	0.000
SCC_7	SCC_15	SCC_16	15.000	512.000	0.002	0.000	0.000	Free Surface (	0.000	0.000	0.000	0.000	0.000	0.000	2,024,143.065	No	0.000	0.000
SCC_8	SCC_14	SCC_15	15.000	500.000	0.002	0.000	0.000	Free Surface (	0.000	0.000	0.000	0.000	0.000	0.000	2,028,108.090	No	0.000	0.000
SCC_9	SCC_13	SCC_14	15.000	500.000	0.002	0.000	0.000	Free Surface (	0.000	0.000	0.000	0.000	0.000	0.000	2,017,942.070	No	0.000	0.000
SUN_10-SUN_11	SUN_10	SUN_11	8.000	402.750	0.024	0.000	0.000	Free Surface (	0.000	0.000	0.000	0.000	0.000	0.000	1,321,950.703	No	0.000	0.000
SUN_11-SUN_12	SUN_11	SUN_12	8.000	319.400	0.053	0.000	0.000	Free Surface (	0.000	0.000	0.000	0.000	0.000	0.000	1,951,946.703	No	0.000	0.000
SUN_12-SUN_13	SUN_12	SUN_13	8.000	400.080	0.004	0.000	0.000	Free Surface (	0.000	0.000	0.000	0.000	0.000	0.000	561,059.875	No	0.000	0.000
SUN_13-SUN_14	SUN_13	SUN_14	8.000	338.740	0.010	0.000	0.000	Free Surface (	0.000	0.000	0.000	0.000	0.000	0.000	848,653.125	No	0.000	0.000
SUN_14-SUN_15	SUN_14	SUN_15	8.000		0.023	0.000	0.000	Free Surface (		0.000	0.000	0.000	0.000	0.000	1,294,902.337	No	0.000	0.000
SUN_15-ECF1_44	SUN_15	ECF1_44	8.000	698.510		0.000	0.000	Free Surface (		0.000	0.000	0.000	0.000	0.000	512,563.154	Yes	0.300	0.000
SUN_1-SUN_2	SUN_1	SUN_2	8.000	388.620		0.000	0.000	Free Surface (		0.000	0.000	0.000	0.000	0.000	1,112,216.324	No	0.000	0.000
SUN_2-SUN_3	SUN_2	SUN_3	8.000	390.550		0.000	0.000	Free Surface (		0.000	0.000	0.000	0.000	0.000	1,035,587.450	No	0.000	0.000
SUN_3-SUN_4	SUN_3	SUN_4	8.000	397.140	0.008	0.000	0.000	Free Surface (		0.000	0.000	0.000	0.000	0.000	755,521.919	No	0.000	0.000
SUN_4-SUN_5	SUN_4	SUN_5	8.000	184.760		0.000	0.000	Free Surface (		0.000	0.000	0.000	0.000	0.000	666,364.813	No	0.000	0.000
SUN_5-SUN_6	SUN_5	SUN_6	8.000		0.005	0.000	0.000	Free Surface (		0.000	0.000	0.000	0.000	0.000	577,144.885	No	0.000	0.000
SUN_6-SUN_7	SUN_6	SUN_7	8.000	247.010		0.000	0.000	Free Surface (		0.000	0.000	0.000	0.000	0.000	578,835.635	No	0.000	0.000
SUN_7-SUN_8	SUN_7	SUN_8	8.000	269.850	0.005	0.000	0.000	Free Surface (		0.000	0.000	0.000	0.000	0.000	577,374.239	No	0.000	0.000
SUN_8-SUN_9	SUN_8	SUN_9	8.000	274.930		0.000	0.000	Free Surface (		0.000	0.000	0.000	0.000	0.000	1,255,309.417	No	0.000	0.000
SUN_9-SUN_10	SUN 9	SUN_10	8.000	373.700		0.000	0.000	Free Surface (		0.000	0.000	0.000	0.000	0.000	1,203,402.692	No	0.000	0.000
5511_5 5511_16	000	20.13	0.000	2. 0 00	3.023	0.000	0.000		000	000	3.000	0.000	3.000	0.000	.,_00,.02.002		0.000	0.000

EXIST	ING PIPE TABLE																		
	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth	Adjusted Velocity
	TOE_2576-TOE_2577	TOE_2576	TOE_2577	18.000	282.794	0.005	134,026.302	33,949.427	Free Surface	1.990	0.109	0.025	0.163	0.167	1.051	5,370,802.322	No	0.163	1.990
	TOE_2577-TOE_2578	TOE_2577	TOE_2578	18.000	270.433	0.015	134,026.302	33,949.427	Free Surface	2.845	0.085	0.015	0.128	0.167	1.700	8,957,466.948	No	0.128	2.845
	TOE_2578-TOE_2579	TOE_2578	TOE_2579	18.000	293.969	0.015	134,026.302	33,949.427	Free Surface	2.841	0.085	0.015	0.128	0.167	1.697	8,939,632.045	No	0.128	2.841
	TOE_2579-TOE_2981	TOE_2579	TOE_2981	18.000	91.682	0.009	134,026.302	33,949.427	Free Surface	2.395	0.096	0.019	0.144	0.167	1.348	6,999,656.252	No	0.144	2.395
	TOE_2580-TOE_2978	TOE_2580	TOE_2978	18.000	103.702	0.005	134,026.302	33,949.427	Free Surface	1.884	0.113	0.027	0.170	0.167	0.975	4,964,591.669	Yes	0.190	1.599
	TOE_2581-TOE_2979	TOE_2581	TOE_2979	18.000	84.929	0.004	237,892.408	63,200.136	Free Surface	2.227	0.149	0.048	0.224	0.224	0.998	4,932,785.490	No	0.224	2.227
	TOE_2582-TOE_2980	TOE_2582	TOE_2980	18.000	25.848	0.005	237,892.408	63,200.136	Free Surface	2.256	0.148	0.047	0.222	0.224	1.016	5,024,681.737	Yes	0.225	2.217
	TOE_2583-TOE_2584	TOE_2583	TOE_2584	18.000	397.733	0.004	237,892.408	63,200.136	Free Surface	2.097	0.156	0.053	0.234	0.224	0.920	4,528,752.063	No	0.234	2.097
	TOE_2584-CHF3A_15	TOE_2584	CHF3A_15	18.000	394.000	0.004	237,892.408	63,200.136	Free Surface	2.143	0.153	0.051	0.230	0.224	0.947	4,669,916.990	No	0.230	2.143
	TOE_2585-CHF1A_C1	TOE_2585	CHF1A_C1	18.000	230.196	0.010	309,352.386	86,199.808	Free Surface	3.240	0.138	0.041	0.207	0.256	1.512	7,529,828.380	No	0.207	3.240
	TOE_2586-TOE_2587	TOE_2586	TOE_2587	18.000	230.190	0.008	518,334.348	159,449.700	Free Surface	3.446	0.189	0.078	0.284	0.333	1.365	6,611,064.070	No	0.284	3.446
	TOE_2587-TOE_2588	TOE_2587	TOE_2588	18.000	93.140	0.020	518,334.348	159,449.700	Free Surface	4.774	0.151	0.049	0.227	0.333	2.128	10,504,890.108	No	0.227	4.774
	TOE_2588-TOE_2589	TOE_2588	TOE_2589	18.000	492.495	0.024	518,334.348	159,449.700	Free Surface	5.097	0.144	0.045	0.217	0.333	2.325	11,530,311.680	No	0.217	5.097
	TOE_2589-TOE_2590	TOE_2589	TOE_2590	18.000	115.180	0.023	623,844.789	198,699.765	Free Surface	5.273	0.160	0.056	0.241	0.366	2.278	11,185,690.250	No	0.241	5.273
	TOE_2590-TOE_2591	TOE_2590	TOE_2591	18.000	23.959	0.061	623,844.789	198,699.765	Free Surface	7.438	0.127	0.034	0.190	0.366	3.634	18,266,219.977	Yes	0.432	2.291
	TOE_2591-TOE_2743	TOE_2591	TOE_2743	30.000	231.417	0.003	4,228,768.253	1,939,025.510	Free Surface	3.997	0.368	0.288	0.919	0.847	0.855	14,662,594.587	No	0.919	3.997
	TOE_2592-TOE_2593	TOE_2592	TOE_2593	8.000	52.704	0.006	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	650,612.893	No	0.000	0.000
	TOE_2593-GVF1_95	TOE_2593	GVF1_95	8.000	189.327	0.015	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,044,475.552	Yes	0.025	0.000
	TOE_2594-TOE_2595	TOE_2594	TOE_2595	15.000	178.668	0.003	671,264.056	216,849.518	Free Surface	2.703	0.351	0.264	0.439	0.401	0.839	2,538,906.603	No	0.439	2.703
	TOE 2595-TOE 2596	TOE_2595	TOE_2596	15.000	210.662	0.002	671,264.056	216,849.518	Free Surface	2.293	0.396	0.332	0.496	0.401	0.664	2,024,920.664	No	0.496	2.293
	TOE_2596-TOE_2597	TOE_2596	TOE_2597	30.000	111.976	0.003	671,264.056	216,849.518	Free Surface	2.317	0.147	0.047	0.367	0.331	0.811	14,399,580.685	No	0.367	2.317
	TOE 2597-TOE 2598	TOE_2597	TOE_2598	30.000	103.462	0.001	671,264.056	216,849.518	Free Surface	1.913	0.168	0.061	0.419	0.331	0.625	10,964,496.126	No	0.419	1.913
	TOE_2598-TOE_2591	TOE_2598	TOE_2591	15.000	231.956	0.022	671,264.056	216,849.518	Free Surface	5.418	0.213	0.100	0.267	0.401	2.207	6,724,468.009	No	0.267	5.418
	TOE 2609-TOE 2747	TOE_2609	TOE_2747	18.000	443.041	0.002	908,234.171	310,725.963	Free Surface	2.469	0.358	0.275	0.537	0.444	0.692	3,305,231.616	No	0.537	2.469
	TOE_2610-TOE_2609	TOE_2610	TOE_2609	18.000	80.972	0.012	908,234.171	310,725.963	Free Surface	4.728	0.225	0.111	0.337	0.444	1.710	8,195,229.564	Yes	0.362	4.270
	TOE 2612-TOE 2610	TOE_2612	TOE_2610	18.000	148.443	0.013	908,234.171	310,725.963			0.221	0.107	0.332	0.444	1.767	8,473,788.030	No	0.332	4.841
	TOE_2615-TOE_2619	TOE 2615	TOE_2619	30.000	285.463	0.002	4.318.819.601				0.414	0.358	1.034	0.857	0.696	12,051,538.778	No	1.034	3.484
	TOE 2619-TOE 2994	TOE_2619	TOE_2994	30.000	191.828	0.002	4.318.819.601	1.988.274.931	Free Surface	3.892	0.381	0.308	0.952	0.857	0.816	14,024,341.801	No	0.952	3.892
	TOE_2620-TOE_2989	TOE 2620	TOE_2989	12.000	238.521	0.004	189,599.821	49,150.061	Free Surface	2.166	0.229	0.115	0.229	0.223	0.951	1,651,578.715	Yes	0.230	2.152
	TOE 2621-TOE 2620	TOE_2621	TOE_2620	12.000	178.316	0.015	189,599.821		Free Surface		0.170	0.063	0.170	0.223	1.701	3,014,402.982	Yes	0.199	2.635
H	TOE_2622-TOE_2621	TOE_2622	TOE_2621	12.000	277.449	0.005	189,599.821	49,150.061	Free Surface		0.216	0.103	0.216	0.223	1.059	1,845,198.621	No	0.216	2.343
H	TOE 2623-TOE 2622	TOE_2623	TOE_2622	10.000	399.765	0.025	0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	2,444,846.898	No	0.000	0.000
H	TOE_2624-TOE_2623	TOE_2624	TOE_2623	10.000	400.696	0.026	0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	2,458,872.660	No	0.000	0.000
	TOE 2625-TOE 2624	TOE_2625	TOE_2624	10.000	334.859	0.016	0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	1,951,446.396	No	0.000	0.000
	TOE 2626-OGF2 29	TOE_2626	OGF2 29	8.000	159.127	0.030	0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	1,465,679.145	No	0.000	0.000
	TOE 2628-CSF1 C3A	TOE_2628	CSF1_C3A	18.000	133.826	0.004	863,661.534		Free Surface		0.298	0.194	0.447	0.433	0.938	4,462,273.317	No	0.447	3.022
	TOE_2629-TOE_2628	TOE_2629	TOE_2628	15.000	253.572	0.006	863,661.534		Free Surface		0.337	0.244	0.421	0.457	1.170	3,534,157.522	No	0.421	3.681
	TOE 2630-TOE 2984	TOE_2630	TOE_2984	15.000	284.795	0.002	863,661.534		Free Surface		0.433	0.390	0.542	0.457	0.720	2,215,971.138	No	0.542	2.620
	TOE_2631-TOE_2630	TOE_2631	TOE_2630	15.000	274.927	0.006	863,661.534	292,651.090			0.339	0.248	0.424	0.457	1.152	3,481,166.216	Yes	0.433	3.540
	TOE 2635-TOE 2636	TOE_2635	TOE_2636	10.000	403.088	0.002	0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	718,678.955	No	0.000	0.000
	TOE_2636-TOE_2639	TOE 2636	TOE_2639	10.000	391.446	0.001	0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	532,974.852	Yes	0.101	0.000
H	TOE 2637-TOE 2638	TOE_2637	TOE_2638	12.000	41.365	0.025	456.289.280		Free Surface		0.228	0.115	0.228	0.350	2.293	3,984,985.969	No	0.101	5.222
	TOE_2638-TOE_2639	TOE_2638	TOE_2639	12.000	49.033	0.023	456,289,280		Free Surface		0.228	0.113	0.264	0.350	1.729	2,988,489.806	No	0.264	4.256
	TOE_2639-RMF1 114	TOE_2639	RMF1_114	12.000	110.713	0.014	456,289,280		Free Surface		0.204	0.163	0.204	0.350	1.623	2,802,550.445	No	0.204	4.250
	TOE_2639-RMF1_114 TOE 2640-TOE 2637	TOE_2639	TOE_2637	12.000	271.203	0.013	456,289,280		Free Surface		0.273	0.103	0.273	0.350	1.922	3,327,509.254	Yes	0.273	2.296
	TOE_2646-ARF1 37	TOE_2646	ARF1_37	8.000	44.839	0.018	225,620.011		Free Surface		0.230	0.137	0.230	0.330	0.485	335.186.855	No	0.414	1.594
		TOE_2646	TOE 2646	8.000	316.906	0.002	225,620.011		Free Surface		0.601	0.673	0.400	0.274	0.465	595,196.711	No	0.400	2.456
	TOE_2647-TOE_2646																		2.705
	TOE_2648-TOE_2650	TOE_2648	TOE_2650	15.000	410.019	0.004	581,294.434	182,724.411			0.316	0.216	0.395	0.372	0.891	2,687,541.477	No	0.395 0.392	2.705
	TOE_2649-TOE_2648	TOE_2649	TOE_2648	15.000	133.522	0.004	581,294.434		Free Surface Free Surface		0.314	0.214	0.392		0.902	2,719,066.029	No		
	TOE_2650-TOE_2656	TOE_2650	TOE_2656	15.000	392.350	0.018	613,255.143				0.214	0.100	0.267	0.382	2.006	6,109,130.732	No	0.267	4.931
	TOE_2651-TOE_2652	TOE_2651	TOE_2652	15.000	16.899	0.004	613,255.143 613,255.143		Free Surface		0.311	0.210	0.389	0.382	0.968	2,918,726.550	Yes	0.396	2.839
	TOE_2652-TOE_2653	TOE_2652	TOE_2653	15.000	381.367	0.004			Free Surface		0.323	0.226	0.404	0.382	0.901	2,718,097.714	No	0.404	2.768
	TOE_2653-TOE_2654	TOE_2653	TOE_2654	15.000		0.004	613,255.143	194,723.927			0.324	0.227	0.404	0.382	0.897	2,707,267.370	No	0.404	2.760
	TOE_2654-TOE_2655	TOE_2654	TOE_2655	15.000	378.306	0.010	682,977.552	221,349.517			0.259	0.147	0.324	0.404	1.538	4,645,683.290	No	0.324	4.188
	TOE_2655-TOE_2745	TOE_2655	TOE_2745	30.000	21.210		2,716,180.502				0.317	0.217	0.791	0.674	0.733	12,505,252.071	Yes	1.410	1.472
	TOE_2656-TOE_2651	TOE_2656	TOE_2651	15.000	399.309	0.026	613,255.143	194,723.927			0.196	0.084	0.245	0.382	2.384	7,301,159.433	No	0.245	5.593
	TOE_2657-TOE_2659	TOE_2657	TOE_2659	8.000	194.240		0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	994,603.317	No	0.000	0.000
	TOE_2659-TOE_2660	TOE_2659	TOE_2660	8.000	352.520	0.013	0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	971,164.311	No	0.000	0.000
	TOE_2660-TOE_2661	TOE_2660	TOE_2661	8.000	302.430	0.010	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	865,777.808	No	0.000	0.000

EXIST	ING PIPE TABLE															,			
	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth	Adjusted Velocity
	TOE_2661-TOE_2663	TOE_2661	TOE_2663	8.000	87.840	0.010	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	861,076.924	No	0.000	0.000
	TOE_2662-TOE_2664	TOE_2662	TOE_2664	15.000	222.675	0.012	581,294.434	182,724.411	Free Surface	4.186	0.231	0.117	0.289	0.372	1.634	4,956,574.417	Yes	0.339	3.344
	TOE_2663-ECF4_135	TOE_2663	ECF4_135	8.000	379.848	0.013	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	983,940.543	Yes	0.128	0.000
	TOE_2664-TOE_2649	TOE_2664	TOE_2649	15.000	258.002	0.004	581,294.434	182,724.411	Free Surface	2.761	0.311	0.210	0.389	0.372	0.917	2,766,306.867	Yes	0.391	2.744
	TOE_2673-VRF1D_702	TOE_2673	VRF1D_702	10.000	248.890	0.016	499,387.665	152,524.743	Free Surface	4.570	0.348	0.261	0.290	0.388	1.745	1,915,504.132	No	0.290	4.570
	TOE_2710-TOE_2712	TOE_2710	TOE_2712	10.000	172.785	0.004	574,705.150	180,250.492	Free Surface	2.888	0.551	0.587	0.459	0.418	0.835	979,015.931	No	0.459	2.888
	TOE_2711-TOE_2715	TOE_2711	TOE_2715	10.000	182.798	0.005	574,705.150	180,250.492	Free Surface	3.211	0.506	0.510	0.422	0.418	0.982	1,126,213.727	Yes	0.432	3.118
	TOE_2712-TOE_2713	TOE_2712	TOE_2713	10.000	121.612	0.004	574,705.150	180,250.492	Free Surface	2.813	0.563	0.608	0.469	0.418	0.802	945,986.116	No	0.469	2.813
	TOE_2713-TOE_2714	TOE_2713	TOE_2714	10.000	90.763	0.004	574,705.150	180,250.492	Free Surface	2.865	0.554	0.593	0.462	0.418	0.825	968,703.910	No	0.462	2.865
	TOE_2714-TOE_2711	TOE_2714	TOE_2711	10.000	315.857	0.004	574,705.150	180,250.492	Free Surface	2.862	0.555	0.594	0.462	0.418	0.824	967,616.016	No	0.462	2.862
	TOE_2715-TOE_2716	TOE_2715	TOE_2716	10.000	176.202	0.003	574,705.150	180,250.492	Free Surface	2.476	0.626	0.716	0.522	0.418	0.654	802,803.628	No	0.522	2.476
	TOE_2716-TOE_2717	TOE_2716	TOE_2717	10.000	105.642	0.004	574,705.150	180,250.492	Free Surface	2.787	0.567	0.615	0.472	0.418	0.790	934,562.798	No	0.472	2.787
	TOE_2717-TOE_2718	TOE_2717	TOE_2718	10.000	389.846	0.017	574,705.150	180,250.492	Free Surface	4.901	0.367	0.287	0.306	0.418	1.817	1,999,814.376	Yes	0.321	4.598
	TOE_2718-TOE_2719	TOE_2718	TOE_2719	10.000	404.424	0.004	574,705.150	180,250.492	Free Surface	2.916	0.547	0.580	0.455	0.418	0.848	991,356.795	No	0.455	2.916
	TOE_2719-TOE_2720	TOE_2719	TOE_2720	10.000	399.685	0.009	574,705.150	180,250.492	Free Surface	3.878	0.437	0.396	0.364	0.418	1.298	1,451,641.644	No	0.364	3.878
	TOE_2720-TOE_2721	TOE_2720	TOE_2721	10.000	400.184	0.004	574,705.150	180,250.492	Free Surface	2.907	0.548	0.582	0.456	0.418	0.844	987,655.294	No	0.456	2.907
	TOE_2721-TOE_2722	TOE_2721	TOE_2722	10.000	267.435	0.026	574,705.150	180,250.492	Free Surface	5.692	0.329	0.234	0.274	0.418	2.246	2,459,871.545	No	0.274	5.692
	TOE_2722-TOE_2723	TOE_2722	TOE_2723	10.000	130.770	0.025	574,705.150	180,250.492	Free Surface	5.652	0.331	0.236	0.275	0.418	2.224	2,435,995.502	No	0.275	5.652
	TOE_2723-TOE_2724	TOE_2723	TOE_2724	10.000	402.800	0.029	574,705.150	180,250.492	Free Surface	5.925	0.319	0.221	0.266	0.418	2.376	2,601,206.353	No	0.266	5.925
	TOE_2724-TOE_2725	TOE_2724	TOE_2725	10.000	396.385	0.007	574,705.150	180,250.492	Free Surface	3.467	0.477	0.460	0.397	0.418	1.101	1,248,116.180	No	0.397	3.467
	TOE_2725-TOE_2726	TOE_2725	TOE_2726	10.000	403.987	0.007	574,705.150	180,250.492	Free Surface	3.581	0.465	0.441	0.387	0.418	1.155	1,303,194.099	No	0.387	3.581
	TOE_2726-TOE_2727	TOE_2726	TOE_2727	10.000	395.385	0.025	574,705.150	180,250.492	Free Surface	5.663	0.330	0.235	0.275	0.418	2.230	2,442,479.847	No	0.275	5.663
	TOE_2727-TOE_2728	TOE_2727	TOE_2728	10.000	165.621	0.048	574,705.150	180,250.492	Free Surface	7.137	0.279	0.170	0.233	0.418	3.081	3,372,033.353	No	0.233	7.137
	TOE_2728-TOE_2729	TOE_2728	TOE_2729	10.000	61.077	0.044	574,705.150	180,250.492	Free Surface	6.890	0.286	0.179	0.239	0.418	2.934	3,209,925.693	No	0.239	6.890
	TOE_2729-TOE_2730	TOE_2729	TOE_2730	10.000	275.532	0.024	574,705.150	180,250.492	Free Surface	5.541	0.335	0.243	0.279	0.418	2.162	2,369,718.404	No	0.279	5.541
	TOE_2730-TOE_2992	TOE_2730	TOE_2992	10.000	316.366	0.009	574,705.150	180,250.492	Free Surface	3.969	0.430	0.384	0.358	0.418	1.342	1,497,819.128	No	0.358	3.969
	TOE_2731-TOE_2960	TOE_2731	TOE_2960	8.000	328.578	0.016	302,359.402	83,949.088	Free Surface	4.051	0.366	0.285	0.244	0.320	1.683	1,059,992.645	No	0.244	4.051
	TOE 2732-TOE 2731	TOE_2732	TOE_2731	8.000	341.462	0.005	302,359.402	83,949.088	Free Surface	2.701	0.497	0.495	0.331	0.320	0.934	610,771.602	No	0.331	2.701
	TOE_2733-TOE_2732	TOE_2733	TOE_2732	8.000	191.801	0.006	302,359.402	83,949.088	Free Surface	2.795	0.484	0.473	0.323	0.320	0.983	639,516.219	No	0.323	2.795
	TOE_2734-TOE_2615	TOE_2734	TOE_2615	30.000	429.624	0.007	4,228,768.253	1,939,025.510	Free Surface	5.639	0.286	0.179	0.716	0.847	1.387	23,658,516.928	No	0.716	5.639
	TOE 2735-TOE 2734	TOE_2735	TOE_2734	30.000	244.751	0.002	4,228,768.253	1,939,025.510	Free Surface	3.916	0.373	0.297	0.933	0.847	0.830	14,257,598.474	No	0.933	3.916
	TOE 2736-TOE 2735	TOE_2736	TOE_2735	30.000	359.070	0.002	4,228,768.253	1,939,025.510	Free Surface	3.782	0.383	0.311	0.957	0.847	0.790	13,592,145.780	No	0.957	3.782
	TOE_2737-TOE_2905	TOE_2737	TOE_2905	30.000	464.000	0.002	4,228,768.253	1,939,025.510	Free Surface	3.868	0.377	0.302	0.942	0.847	0.816	14,020,712.700	No	0.942	3.868
	TOE 2738-TOE 2737	TOE_2738	TOE_2737	30.000	403.282	0.002	4,228,768.253	1,939,025.510	Free Surface	3.453	0.410	0.352	1.025	0.847	0.693	11,997,131.701	No	1.025	3.453
	TOE 2739-TOE 2738	TOE_2739	TOE_2738	30.000	499.467	0.002	4,228,768.253	1,939,025.510	Free Surface	3.766	0.384	0.313	0.961	0.847	0.785	13,513,742.914	Yes	0.993	3.603
	TOE 2740-TOE 2739	TOE_2740	TOE_2739	30.000	498.367	0.002	4,228,768.253	1,939,025.510	Free Surface	3.641	0.394	0.328	0.985	0.847	0.748	12,899,064.525	No	0.985	3.641
	TOE 2741-TOE 2740	TOE_2741	TOE_2740	30.000	506.092	0.002	4,228,768.253	1,939,025.510	Free Surface	3.484	0.407	0.348	1.018	0.847	0.702	12,143,367.452	No	1.018	3.484
	TOE 2742-TOE 2741	TOE_2742	TOE_2741	30.000	129.779	0.002	4,228,768.253	1,939,025.510	Free Surface	3.833	0.379	0.305	0.948	0.847	0.805	13,844,924.620	No	0.948	3.833
	TOE 2743-TOE 2742	TOE_2743	TOE 2742	30.000	172.744	0.003	4,228,768.253	1,939,025.510	Free Surface	4.442	0.340	0.249	0.850	0.847	0.993	16,970,973.773	No	0.850	4.442
	TOE 2744-TOE 2591	TOE_2744	TOE_2591	30.000	436.895	0.000	3,453,233.619	1,523,476.226	Pressurized	1.088	1.000	3.792	2.500	0.386	0.121	910,610.783	No	2.500	1.088
	TOE 2745-TOE 2744	TOE_2745	TOE_2744	27.000	198.412	0.004	2,716,180.502	1,144,750.609	Free Surface	4.175	0.301	0.197	0.677	0.695	1.053	13,806,136.114	Yes	2.079	1.095
	TOE 2746-TOE 2744	TOE_2746	TOE_2744	18.000	293.260	0.006	1,072,549.722	378,725.617	Free Surface	3.943	0.288	0.181	0.432	0.484	1.248	5,935,798.422	No	0.432	3.943
	TOE 2747-ECF5 204	TOE_2747	ECF5_204	18.000	398.943	0.006	1,030,105.316	360,976.184	Free Surface	3.851	0.284	0.176	0.426	0.474	1.227	5,837,720.637	No	0.426	3.851
	TOE 2748-TOE 2749	TOE_2748	TOE_2749	12.000	290.977	0.011	911,866.884	312,199.082	Free Surface	4.674	0.409	0.350	0.409	0.503	1.487	2,602,387.765	No	0.409	4.674
	TOE_2749-TOE_2750	TOE_2749	TOE_2750	12.000	393.950	0.009	911,866.884	312,199.082	Free Surface	4.414	0.427	0.379	0.427	0.503	1.369	2,407,531.959	No	0.427	4.414
H	TOE 2750-TOE 2751	TOE_2750	TOE_2751	12.000	263.499	0.020	911,866.884	312,199.082			0.345	0.257	0.345	0.503	2.053	3,553,960.140	No	0.345	5.862
H	TOE 2751-TOE 2752	TOE_2751	TOE_2752	15.000	391.732	0.015	911,866.884	312,199.082			0.275	0.166	0.344	0.470	1.823	5,499,118.473	No	0.344	5.132
H	TOE_2752-TOE_2753	TOE_2752	TOE_2753	15.000	398.557	0.010	911,866.884	312,199.082	Free Surface	4.469	0.304	0.201	0.380	0.470	1.503	4,531,817.796	No	0.380	4.469
	TOE_2753-TOE_2754	TOE_2753	TOE_2754	15.000	349.938	0.011	911,866.884	312,199.082			0.295	0.189	0.368	0.470	1.598	4,818,135.047	No	0.368	4.669
H	TOE_2754-TOE_2755	TOE_2754	TOE_2755	15.000	130.982	0.008	911,866.884	312,199.082			0.325	0.228	0.406	0.470	1.326	4,001,938.556	No	0.406	4.087
H	TOE_2755-TOE_2759	TOE_2755	TOE_2759	15.000	312.151	0.010	911,866.884	312,199.082			0.307	0.205	0.384	0.470	1.474	4,445,843.679	No	0.384	4.407
	TOE_2756-TOE_2757	TOE_2756	TOE_2757	15.000	72.934	0.010	911,866.884	312,199.082			0.302	0.198	0.377	0.470	1.525	4,598,754.788	No	0.377	4.516
	TOE_2757-TOE_2760	TOE_2757	TOE_2760	15.000	417.818	0.015	911,866.884	312,199.082			0.274	0.165	0.343	0.470	1.837	5,542,104.941	No	0.343	5.161
H	TOE_2758-TOE_2761	TOE_2758	TOE_2761	18.000	414.191	0.002	911,866.884	312,199.082			0.373	0.297	0.560	0.445	0.642	3,074,643.302	No	0.560	2.346
H	TOE_2759-TOE_2756	TOE_2759	TOE_2756	15.000	315.756	0.011	911,866.884	312,199.082			0.299	0.194	0.373	0.470	1.559	4,698,940.442	No	0.373	4.586
H	TOE_2760-TOE_2817	TOE_2760	TOE_2817	15.000	413.357	0.019	911,866.884	312,199.082			0.257	0.144	0.321	0.470	2.093	6,324,722.609	No	0.321	5.670
H	TOE 2761-TOE 2762	TOE_2761	TOE_2762	18.000	69.865	0.004	911,866.884	312,199.082			0.309	0.207	0.463	0.445	0.928	4,411,329.400	Yes	0.509	2.672
H	TOE_2762-TOE_2764	TOE_2762	TOE_2764	18.000	489.494	0.002	911,866.884	312,199.082			0.370	0.292	0.555	0.445	0.653	3,126,773.703	No	0.555	2.375
H	TOE 2763-TOE 2765	TOE 2763	TOE 2765	18.000			911,866.884	312,199.082			0.355	0.270	0.532	0.445	0.707	3,378,307.134	Yes	0.563	2.328
							,	,								, ,			

D	EXIST	ING PIPE TABLE																		
Total Control Contro		ID	From ID	To ID			Slope			Flow Type	Velocity (ft/s)	d/D	q/Q							
Total Control   Total Contro		TOE_2764-TOE_2763	TOE_2764	TOE_2763	18.000	478.193	0.002	911,866.884	312,199.082	Free Surface	2.605	0.346	0.257	0.518	0.445	0.745	3,552,946.925	Yes	0.525	2.557
TOP_CYPRITION_FORM   TOP_CYP		TOE_2765-TOE_2766	TOE_2765	TOE_2766	18.000		0.001	911,866.884	312,199.082	Free Surface	2.168	0.396		0.594		0.574	2,759,106.316	No	0.594	2.168
TOC_278910C_2781																		No		
Total Cardinal Card		TOE_2767-TOE_2768	TOE_2767	TOE_2768	18.000	352.648	0.005		312,199.082	Free Surface	3.484	0.280	0.171		0.445	1.120	5,326,808.805	No	0.420	3.484
To C227716 C2771 TO		TOE_2768-TOE_2914																		
Control   Cont		TOE_2769-TOE_2770		TOE_2770	18.000	498.501	0.002	911,866.884	312,199.082	Free Surface	2.557	0.350			0.445	0.726	3,464,114.064	Yes		
Total part		TOE_2770-TOE_2771														0.717		No		
Total Control Print		TOE_2771-TOE_2772																Yes		
Total Cartes   Tota																				
TOE_2778-TOE_2778   TOE_2777   TOE_2778		TOE_2773-TOE_2774											0.199			0.962	4,574,583.703	Yes		
Total participant   Tota																				
Total part																				
To E2778-TDC 2779   TO E, 277																				
To E2778-TCE 27780   TO E2779   TO E2779   TO E2779   TO E27780   TO E2778   TO E27781																				
TOE_2786.TOE_2789																				
TOE_2781-TOE_2781																				
TO E2788-TOE_2788   TOE_2782   TOE_2782   21000   918.08.088   314.99.082   Fine Surface 287   0.098   0.098   0.098   0.098   3.578.7182   No.   0.098   1.901																				
TOE_2789-TOE_2788   TOE_2788   TOE_2788   Z1000   2888   30   0019   19186884   31199092   Free Surface   1.969   0.479   0.518   0.426   0.694   3.327,8790   Ves   0.667   1.969   TOE_2789-TOE_2788   TOE_2785   TOE_2788   Z1000   2288   0.0019   19186884   31199092   Free Surface   1.969   0.476   0.675   0.614   0.675																				
TO E2788-FTDE_2788   TOE_2786																				
TOE_2789-FDC_2789   TOE_2788   TOE_2788   21.000   278.200   278																				
Top: 2788-TOC: 2784   Top: 2786   Top: 2784   Top: 2786   Col. 2784   2100   505,220   A000   911,868,884   312,199.062 Free Springe 2,905   A054																				
TOE_278F-WF4_4 B   TOE_2788   TOE_2788   TOE_2787   21,000   6986   00.00   91866.884   312.199.082 Free Surface 0.987   0.285   0.285   0.286   0.285   1.414.44.282   No																				
ToE_2786TOE_2787   ToE_2788_TOE_2787   ToE_2787   24.000   60.0000   60.000   60.000   60.0000   60.000   60.000   60.000   60.																				
□ TOE_2786-TOE_2789 TOE_2789 TOE_2789 2 1000 488-880 0.001 988-383-647 322/198-439 Free Surface 1.824 0.300 0.198 0.801 0.416 0.489 4,769.872.434 \( \frac{4}{198} \) 0.005 0.511 1.938 \( \frac{1}{198} \) 0.005 0.279 TOE_2789-7 TOE_2789 2 1000 177.562 0.001 988-383-647 322/198-439 Free Surface 1.782 0.306 0.230 0.611 0.416 0.473 4.816,077.651 No 0.611 1.782 \( \frac{7}{198} \) TOE_2789-7 TOE_2789-7 TOE_2789 2 4000 1.77.562 0.001 988-383-647 322/198-439 Free Surface 1.782 0.306 0.230 0.611 0.416 0.473 4.816,077.651 No 0.611 1.782 \( \frac{7}{198} \) TOE_2789-7 TOE_2789 4 TOE_2789 2 4000 381-016 0.002 988-383-647 322/198-439 Free Surface 1.782 0.306 0.230 0.611 0.416 0.473 4.816,077.651 No 0.611 1.782 \( \frac{7}{198} \) TOE_2789-7 TOE_2789 4 TOE_2789 4 4000 381-016 0.002 988-388-447 322/198-439 Free Surface 1.516 0.333 0.230 0.006 0.008 0.686 0.616 0.680 6.8669.0268-803 Ves 0.539 2.128 \( \frac{7}{198} \) TOE_2789-607-102.7794 1 TOE_2789 5 4000 214-510 0.001 988-383-447 322/198-439 Free Surface 1.591 0.333 0.239 0.666 0.416 0.400 3.890,765.156 No 0.686 1.581 0.002 0.002 0.002 0.002 0.002 0.002 0.002 0.002 0.000																				
ToE_2796-ToE_2788																				
ToE_2791-TOE_2792   TOE_2792   TOE_2792   TOE_2793   24,000   177.562   0.010   986,336.347   322.198.439   Free Surface 2.097   0.272   0.162   0.544   0.416   0.473   4.616,077.651   No.   0.614   2.097																				
□ TOE_2793-TOE_2793 TOE_2793 TOE_2793 24 000 420 700 001 99.338.347 322 98.49 Free Surface 2.07 0.27 0.12 0.14 0.50 0.50 0.44 0.89 0.6599.269 91 92 0.00 0.44 0.45 0.50 0.44 0.89 0.6599.269 91 92 0.00 0.45 0.45 0.00 0.44 0.45 0.50 0.45 0.45																				
Tote_2794_TOte_2794																				
TOE_2796_TOFE_2795   TOE_2795   TOE_2796   TOE_2796   TOE_2795   COE. 2795   TOE_2795   COE. 2795   COE. 2795   COE. 2795   TOE_2795   COE. 2795   TOE_2795   TOE_2																				
Tote_2798-OTF_108																				
TOE_2798-TOE_2799 TOE_2799 TOE																				
□ TOE_2799_OTF_1 108																				
TOE_2800-TOE_2825   TOE_2800   TOE_2825   36,000   57,809   0.021   4,850,673.278   2,171,465,902   Free Surface 8,464   0,178   0,069   0,533   0,844   2,450   67,464,614,133   Yes   0,576   7,583   TOE_2801   TOE_2802   TOE_2803   TOE_2803   TOE_2802   TOE_2803   TOE_2803   TOE_2802   TOE_2803   TOE_2803   TOE_2802   TOE_2803   TOE_2802   TOE_2803   TOE_2802   TOE_2803   TOE_2805   TOE_2806   TOE_2805   TOE_2806   TOE_2805   TOE_2806   TOE_2806   TOE_2805   TOE_2806   TOE_2806   TOE_2805   TOE_2806   TOE_2806   TOE_2805   TOE_2806   TOE_28																				
□ TOE_2801-TOE_2801 □ TOE_2802-TOE_2801 □ TOE_2802-TOE_2802 □ TOE_2802-TOE_2802 □ TOE_2803 □ TOE_2803-TOE_2802 □ TOE_2803-TOE_2803 □ TOE_2803-TOE_2803 □ TOE_2804-TOE_2803 □ TOE_2804-TOE_2805 □ TOE_2805-TOE_2805 □ TOE_2806-TOE_2805 □ TOE_2806-TOE_2805 □ TOE_2806-TOE_2805 □ TOE_2806-TOE_2805 □ TOE_2806-TOE_2805 □ TOE_2806-TOE_2806 □ TOE_2806-TOE																				
□ TOE_2802.TOE_2801 TOE_2802 TOE_2803 TOE_2803 18.000 29.0 18.000 194.718 0.004 908.234.171 310.725.963 Free Surface 3.208 0.296 0.191 0.444 0.444 0.444 0.903 4.784.776.317 No 0.444 3.208 1.002 20.0 TOE_2803. TOE_2803 TOE_2803 18.000 194.718 0.004 908.234.171 310.725.963 Free Surface 2.987 0.312 0.211 0.468 0.444 0.905 4.303.159.363 No 0.468 2.987 1005 2.804. TOE_2805.PDF1.718 TOE_2805.PDF1.718 18.000 251.376 0.010 1.285.887.343 470.025.903 Free Surface 4.786 0.285 0.178 0.428 0.532 1.522 7.240,963.795 No 0.428 4.786 1.002 1.002 1.002 1.285.887.343 470.025.903 Free Surface 5.012 0.276 0.166 0.414 0.532 1.522 7.240,963.795 No 0.428 4.786 1.002 1.002 1.002 1.285.887.343 470.025.903 Free Surface 5.012 0.276 0.166 0.414 0.532 1.522 7.240,963.795 No 0.428 4.786 1.002 1.002 1.002 1.002 1.285.887.343 470.025.903 Free Surface 5.012 0.276 0.166 0.414 0.532 1.522 7.240,963.795 No 0.428 4.786 1.002 1.002 1.002 1.002 1.285.887.343 470.025.903 Free Surface 3.617 0.349 0.262 0.524 0.532 1.028 4.903,668.343 No 0.524 3.617 1005 2.003 1.002 1.002 1.002 1.285.887.343 470.025.903 Free Surface 4.952 0.278 0.166 0.414 0.532 1.597 7.596,070.300 No 0.418 4.952 1.002 1																				
□ TOE_2803-TOE_2803 TOE_2804																				
TOE_2804-TOE_2803																				
TOE_2805-VPF1_718																				
TOE_2806-TOE_2805																				
TOE_2807-TOE_2806   TOE_2807   TOE_2806   18.000   443.273   0.004   1,285,887.343   470,025.903   Free Surface   3.617   0.349   0.262   0.524   0.532   1.028   4,903,668.343   No   0.524   3.617     TOE_2808-TOE_2808   TOE_2809   VRGC2_526   10.000   560.47   0.036   554,817.825   172,674.655   Free Surface   6.310   0.278   0.190   0.410   2.669   2.920,079.797   No   0.246   0.410   2.669   2.920,079.797   No   0.242   0.470   0.445   0.900   2.926   0.246   0.410   2.669   2.920,079.797   No   0.242   0.470   0.445   0.900   2.926   0.245   0.2																				
TOE_2808-TOE_2819 TOE_2809 VRGC2_526 TOE_2809 VRGC2_526 10.000 56.047 0.036 554,517.825 172,674.655 Free Surface 6.373 0.295 0.190 0.246 0.410 2.669 2.920,079.797 No 0.246 6.373																				
TOE_2809-VRGC2_526 TOE_2818 10.000 56.047 0.036 554,517.825 172,674.655 Free Surface 6.373 0.295 0.190 0.246 0.410 2.669 2.920,079.797 No 0.246 6.373   □ TOE_2817-TOE_2818 TOE_2818 15.000 417.201 0.026 911,866.884 312,199.082 Free Surface 6.310 0.238 0.124 0.297 0.470 2.426 7,350,359.292 Yes 0.384 4.414   □ TOE_2818-TOE_2818 TOE_2818 TOE_2818 18.000 341.416 0.003 911,866.884 312,199.082 Free Surface 2.979 0.313 0.213 0.470 0.445 0.900 4,279,919.147 Yes 0.515 2.628   □ TOE_2819-TOE_2826 TOE_2819 TOE_2819 TOE_2807 18.000 434.564 0.006 1,285,887.343 470,025.903 Free Surface 2.979 0.313 0.213 0.470 0.445 0.900 4,279,919.147 Yes 0.515 2.628   □ TOE_2825-TOE_2826 TOE_2825 TOE_2826 36.000 165.860 0.005 5,223,818.526 2,493,664.341 Free Surface 5.175 0.273 0.163 0.818 0.896 1.193 32,111,628.908 No 0.818 5.175   □ TOE_2826-TOE_2827 TOE_2828 TOE_2827 36.000 118.558 0.002 5,223,818.526 2,493,664.341 Free Surface 4.472 0.303 0.200 0.909 0.896 0.693 18,745,463.271 No 1.083 3.515   □ TOE_2828-TOE_2828 TOE_2828 TOE_2828 36.000 294.232 0.003 5,223,818.526 2,493,664.341 Free Surface 4.472 0.303 0.200 0.909 0.896 0.973 26,183,894.176 No 0.909 4.472   □ TOE_2829-TOE_2830 TOE_2828 TOE_2831 36.000 166.924 0.001 5,223,818.526 2,493,664.341 Free Surface 4.415 0.306 0.283 0.288 1.103 0.996 0.670 18,121,603.712 No 1.103 3.430   □ TOE_2829-TOE_2830 TOE_2831 TOE_2830 TOE_2831 36.000 96.097 0.003 5,223,818.526 2,493,664.341 Free Surface 3.430 0.366 0.283 1.103 0.996 0.572 19,223,088.990 No 1.069 3.580   □ TOE_2833-TOE_2831 TOE_2832 TOE_2833 36.000 59.748 0.002 5,223,818.526 2,493,664.341 Free Surface 3.430 0.366 0.272 1.069 0.896 0.672 18,173,766.148 No 1.101 3.437   □ TOE_2833-TOE_2833 TOE_2833 TOE_2833 36.000 113.979 0.002 5,223,818.526 2,493,664.341 Free Surface 3.430 0.366 0.287 1.101 0.896 0.672 18,173,766.148 No 1.101 3.437   □ TOE_2833-TOE_2833 TOE_2833 TOE_2833 36.000 399.855 0.002 5,223,818.526 2,493,664.341 Free Surface 3.540 0.359 0.266 0.968 0.862 23,208,726.628 No 0.998 No 1.077 3.542   □ TOE_2833-TOE_2835 TOE_2835 TOE_2835 T																				
TOE_2817-TOE_2818 TOE_2818 TOE_2818 TOE_2818 15.000 417.201 0.026 911,866.884 312,199.082 Free Surface 6.310 0.238 0.124 0.297 0.470 2.426 7,350,359.292 Yes 0.384 4.414 TOE_2818-TOE_2828 TOE_2828 100.285 18.000 341.416 0.003 911,866.884 312,199.082 Free Surface 2.979 0.313 0.213 0.470 0.445 0.900 4.279,919.147 Yes 0.515 2.628 TOE_2819-TOE_2819 TOE_2807 18.000 434.564 0.006 1.285,887.343 470,025.903 Free Surface 4.094 0.319 0.221 0.479 0.532 1.224 5,823,539.025 No 0.479 4.094 1.006 1.285,887.343 470,025.903 Free Surface 5.175 0.273 0.163 0.818 0.896 1.193 32,111,628.908 No 0.818 5.175 100.2826-TOE_2828 TOE_2828 36.000 18.586 0.005 5,223,818.526 2,493,664.341 Free Surface 5.175 0.273 0.163 0.818 0.896 0.693 18,745,463.271 No 1.083 3.515 100.2827-TOE_2828 TOE_2828 36.000 294.232 0.003 5,223,818.526 2,493,664.341 Free Surface 4.472 0.303 0.200 0.909 0.886 0.973 26,183,894.176 No 0.909 4.472 100.2828-TOE_2828 TOE_2828 TOE_2828 36.000 166.924 0.001 5,223,818.526 2,493,664.341 Free Surface 3.430 0.368 0.288 1.103 0.896 0.670 18,121,603.712 No 1.103 3.430 100.2829 TOE_2830 TOE_2831 TOE_2831 TOE_2831 36.000 278.883 0.002 5,223,818.526 2,493,664.341 Free Surface 4.415 0.306 0.203 0.917 0.896 0.956 25,723,528.899 No 1.069 3.580 100.2831-TOE_2831 TOE_2832 TOE_2833 36.000 59.748 0.002 5,223,818.526 2,493,664.341 Free Surface 3.580 0.356 0.272 1.069 0.896 0.712 19,223,088.990 No 1.069 3.580 100.2831-TOE_2832 TOE_2833 TOE_2833 36.000 59.748 0.002 5,223,818.526 2,493,664.341 Free Surface 3.580 0.366 0.272 1.069 0.896 0.712 19,223,088.990 No 1.069 3.580 100.2831-TOE_2833 TOE_2833 TOE_2833 36.000 396.915 0.002 5,223,818.526 2,493,664.341 Free Surface 4.100 0.323 0.225 0.968 0.896 0.862 23,208,726.628 No 0.998 4.100 1.002 2833-TOE_2834 TOE_2835 TOE_2835 TOE_2835 36.000 39.9855 0.002 5,223,818.526 2,493,664.341 Free Surface 3.974 0.330 0.235 0.206 0.772 20,807,629.358 No 1.025 3.791 100.2835-TOE_2835 TOE_2835 TOE_2836 36.000 39.9855 0.002 5,223,818.526 2,493,664.341 Free Surface 3.974 0.330 0.235 0.206 0.772 20,807,629.358 No 1.0																				
TOE_2818-TOE_2818 TOE_2818 TOE_2818 TOE_2828 18.000 341.416 0.003 911,866.884 312,199.082 Free Surface 2.979 0.313 0.213 0.470 0.445 0.900 4,279,919.147 Yes 0.515 2.628 TOE_2826 TOE_2827 TOE_2819 TOE_2825 TOE_2826 36.000 165.860 0.005 5,223,818.526 2,493,664.341 Free Surface 5.175 0.273 0.163 0.818 0.896 1.193 32,111,628.908 No 0.818 5.175 TOE_2825-TOE_2826 TOE_2827 TOE_2827 TOE_2828 36.000 1818.558 0.002 5,223,818.526 2,493,664.341 Free Surface 3.515 0.361 0.279 0.808 0.896 0.693 18,745,463.271 No 1.083 3.515 TOE_2828-TOE_2828 TOE_2828 36.000 18.528 2.238,818.526 2,493,664.341 Free Surface 4.472 0.303 0.200 0.999 0.896 0.973 18,614,632.71 No 1.083 3.515 TOE_2828-TOE_2828 TOE_2828 TOE_2828 36.000 166.924 0.001 5,223,818.526 2,493,664.341 Free Surface 4.472 0.303 0.200 0.999 0.896 0.670 18,121,603.712 No 1.103 3.430 TOE_2829-TOE_2830 TOE_2830 TOE_2831 36.000 166.924 0.001 5,223,818.526 2,493,664.341 Free Surface 3.430 0.368 0.288 1.103 0.896 0.670 18,121,603.712 No 1.103 3.430 TOE_2829-TOE_2830 TOE_2831 TOE_2831 36.000 278.883 0.002 5,223,818.526 2,493,664.341 Free Surface 3.430 0.366 0.203 0.917 0.896 0.956 25,723,528.003 Yes 0.943 4.249 TOE_2831-TOE_2832 TOE_2831 TOE_2831 36.000 51.48 0.002 5,223,818.526 2,493,664.341 Free Surface 3.430 0.366 0.203 0.917 0.896 0.956 25,723,528.003 Yes 0.943 4.249 TOE_2831-TOE_2832 TOE_2831 TOE_2831 TOE_2832 36.000 51.13.979 0.002 5,223,818.526 2,493,664.341 Free Surface 3.430 0.366 0.272 1.069 0.896 0.712 19,223,088.990 No 1.069 3.580 TOE_2831-TOE_2832 TOE_2833 TOE_2833 TOE_2834 36.000 396.915 0.002 5,223,818.526 2,493,664.341 Free Surface 3.410 0.0323 0.225 0.968 0.896 0.806 0.808																				
TOE_2819-TOE_2826 TOE_2826 TOE_2826 36.000 165.860 0.005 5,223,818.526 2,493,664.341 Free Surface 4.094 0.319 0.221 0.479 0.532 1.224 5,823,534.025 No 0.479 4.094 1.005 1.00																				
TOE_2825-TOE_2826 TOE_2826 36.000 165.860 0.005 5,223,818.526 2,493,664.341 Free Surface 5.175 0.273 0.163 0.818 0.896 1.193 32,111,628.908 No 0.818 5.175  TOE_2826-TOE_2827 TOE_2828 TOE_2827 TOE_2828 36.000 118.558 0.002 5,223,818.526 2,493,664.341 Free Surface 3.515 0.361 0.279 1.083 0.896 0.693 18,745,463.271 No 1.083 3.515  TOE_2827-TOE_2828 TOE_2828 TOE_2827 TOE_2828 36.000 294.232 0.003 5,223,818.526 2,493,664.341 Free Surface 4.472 0.303 0.200 0.909 0.896 0.973 26,183,894.176 No 0.909 4.472  TOE_2828-TOE_2828 TOE_2829 TOE_2828 TOE_2821 36.000 166.924 0.001 5,223,818.526 2,493,664.341 Free Surface 3.430 0.368 0.288 1.103 0.896 0.670 18,121,603.712 No 1.103 3.430  TOE_2829-TOE_2830 TOE_2830 TOE_2830 36.000 96.097 0.003 5,223,818.526 2,493,664.341 Free Surface 4.415 0.306 0.203 0.917 0.896 0.956 25,723,528.003 Yes 0.943 4.249  TOE_2830-TOE_2831 TOE_2831 TOE_2831 36.000 278.881 0.002 5,223,818.526 2,493,664.341 Free Surface 3.437 0.367 0.287 1.101 0.896 0.712 19,223,088.990 No 1.009 3.580  TOE_2831-TOE_2832 TOE_2833 TOE_2833 36.000 113.979 0.002 5,223,818.526 2,493,664.341 Free Surface 3.437 0.367 0.287 1.101 0.896 0.672 18,173,766.148 No 1.101 3.437 TOE_2832-TOE_2833 TOE_2833 TOE_2833 TOE_2833 TOE_2834 36.000 396.915 0.002 5,223,818.526 2,493,664.341 Free Surface 3.542 0.359 0.276 1.077 0.896 0.701 18,949,299.698 No 1.077 3.542 TOE_2834-TOE_2835 TOE_2835 TOE_2836 36.000 399.855 0.002 5,223,818.526 2,493,664.341 Free Surface 3.791 0.342 0.251 1.025 0.896 0.772 20,807,629.358 No 1.025 3.791																				
TOE_2826-TOE_2827         TOE_2826         TOE_2826         TOE_2827         36.000         118.558         0.002         5,223,818.526         2,493,664.341 Free Surface         3.515         0.361         0.279         1.083         0.896         0.693         18,745,463.271         No         1.083         3.515           TOE_2827-TOE_2828         TOE_2827         TOE_2828         36.000         294.232         0.003         5,223,818.526         2,493,664.341 Free Surface         4.472         0.303         0.200         0.909         0.896         0.973         26,183,894.176         No         0.909         4.472           TOE_2828-TOE_2921         TOE_2828         TOE_2921         36.000         166.924         0.001         5,223,818.526         2,493,664.341 Free Surface         3.430         0.368         0.288         1.103         0.896         0.670         18,121,603.712         No         1.103         3.430           TOE_2829-TOE_2830         TOE_2829         TOE_2830         36.000         96.097         0.003         5,223,818.526         2,493,664.341 Free Surface         3.580         0.356         0.272         1.069         0.896         0.712         19,223,528.003         Yes         0.943         4.249           TOE_2831-TOE_2831         TOE_2				_				,,	.,								.,,.			
TOE_2827-TOE_2828         TOE_2828         TOE_2828         36.000         294.232         0.003         5,223,818.526         2,493,664.341 Free Surface         4.472         0.303         0.200         0.909         0.896         0.973         26,183,894.176         No         0.909         4.472           TOE_2828-TOE_2921         TOE_2828         TOE_2921         36.000         166.924         0.001         5,223,818.526         2,493,664.341 Free Surface         3.430         0.368         0.288         1.103         0.896         0.670         18,121,603.712         No         1.103         3.430           TOE_2829-TOE_2830         TOE_2829         TOE_2830         36.000         96.097         0.003         5,223,818.526         2,493,664.341 Free Surface         3.430         0.917         0.896         0.956         25,723,528.003         Yes         0.943         4.249           TOE_2830-TOE_2831         TOE_2830         TOE_2831         36.000         278.883         0.002         5,223,818.526         2,493,664.341 Free Surface         3.430         0.367         0.272         1.069         0.896         0.712         19,223,088.990         No         1.069         3.580           TOE_2831-TOE_2832         TOE_2831         TOE_2833         36.000         5																				
TOE_2828-TOE_2921         TOE_2828         TOE_2828         TOE_2921         36.000         166.924         0.001         5,223,818.526         2,493,664.341 Free Surface         3.430         0.368         0.288         1.103         0.896         0.670         18,121,603.712         No         1.103         3.430           TOE_2829-TOE_2830         TOE_2829         TOE_2830         36.000         96.097         0.003         5,223,818.526         2,493,664.341 Free Surface         4.415         0.306         0.203         0.917         0.896         0.956         25,723,528.003         Yes         0.943         4.249           TOE_2830-TOE_2831         TOE_2830         TOE_2831         36.000         278.883         0.002         5,223,818.526         2,493,664.341 Free Surface         3.580         0.356         0.272         1.069         0.896         0.712         19,223,088.990         No         1.069         3.580           TOE_2831-TOE_2832         TOE_2831         TOE_2832         36.000         59.748         0.002         5,223,818.526         2,493,664.341 Free Surface         3.437         0.367         0.287         1.101         0.896         0.672         18,173,766.148         No         1.101         3.437           TOE_2832-TOE_2833         TOE_28																				
TOE_2829-TOE_2830 TOE_2830 TOE_2830 TOE_2830 TOE_2830 TOE_2830 TOE_2830 TOE_2830 TOE_2831 TOE_2831 TOE_2831 TOE_2831 TOE_2832 TOE_2831 TOE_2832 TOE_2832 TOE_2832 TOE_2833 TOE_2834 TOE_2833 TOE_2834 TOE_2835 TOE_2835 TOE_2836 TOE	H																			
TOE_2830_TOE_2831         TOE_2830_TOE_2831         TOE_2830_TOE_2831         TOE_2831_36.00         278.883         0.002_523,818.526_2,493,664.341 Free Surface_3.437_0.367_0.287_1.101         0.896_0.712_19,223,088.990_No_1.069_0.712_19,223,088.990_No_1.069_3.580_0.788_0.78																				
TOE_2831_TOE_2832       TOE_2831       TOE_2832       36.000       59.748       0.002       5,223,818.526       2,493,664.341 Free Surface       3.437       0.367       0.287       1.101       0.896       0.672       18,173,766.148       No       1.101       3.437         TOE_2832_TOE_2833       TOE_2832       TOE_2833       36.000       113.979       0.002       5,223,818.526       2,493,664.341 Free Surface       4.100       0.323       0.225       0.968       0.896       0.896       0.862       23,208,726.628       No       0.968       4.100         TOE_2833_TOE_2834       TOE_2833       TOE_2834       36.000       396.915       0.002       5,223,818.526       2,493,664.341 Free Surface       3.542       0.359       0.276       1.077       0.896       0.701       18,949,299.698       No       1.077       3.542         TOE_2834_TOE_2835       TOE_2834       TOE_2835       36.000       399.855       0.002       5,223,818.526       2,493,664.341 Free Surface       3.974       0.330       0.235       0.990       0.896       0.825       22,215,470.195       No       0.990       3.974         TOE_2835_TOE_2836       TOE_2836       36.000       405.150       0.002       5,223,818.526       2,493,664.341 Free Surface <td></td>																				
TOE_2832_TOE_2833 TOE_2833 TOE_2833 36.000 113.979 0.002 5,223,818.526 2,493,664.341 Free Surface 4.100 0.323 0.225 0.968 0.896 0.896 0.896 23,208,726.628 No 0.968 4.100 0.968 4.100 0.968 0.968 0.968 0.968 0.896 0.89																				
TOE_2833 TOE_2834 TOE_2834 36.000 396.915 0.002 5,223,818.526 2,493,664.341 Free Surface 3.542 0.359 0.276 1.077 0.896 0.701 18,949,299.698 No 1.077 3.542  TOE_2834 TOE_2835 TOE_2836 TOE_2835 TOE_2836 36.000 405.150 0.002 5,223,818.526 2,493,664.341 Free Surface 3.791 0.342 0.251 1.025 0.896 0.772 20,807,629.358 No 1.025 3.791																				
TOE_2834_TOE_2835 TOE_2836 TOE_2836 TOE_2836 36.000 399.855 0.002 5,223,818.526 2,493,664.341 Free Surface 3.974 0.330 0.235 0.990 0.896 0.825 22,215,470.195 No 0.990 3.974 TOE_2835_TOE_2836 TOE_2836 36.000 405.150 0.002 5,223,818.526 2,493,664.341 Free Surface 3.791 0.342 0.251 1.025 0.896 0.772 20,807,629.358 No 1.025 3.791																				
TOE_2835-TOE_2836 TOE_2836 36.000 405.150 0.002 5,223,818.526 2,493,664.341 Free Surface 3.791 0.342 0.251 1.025 0.896 0.772 20,807,629.358 No 1.025 3.791																				
						394.145	0.002	5,223,818.526	2,493,664.341	Free Surface	3.610	0.354	0.269	1.062	0.896	0.720		Yes	1.108	3.408

EXIST	NG PIPE TABLE						1		1										
	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth	Adjusted Velocity
	TOE_2837-TOE_2839	TOE_2837	TOE_2839	36.000	242.437	0.001	5,223,818.526	2,493,664.341	Free Surface	2.857	0.421	0.370	1.264	0.896	0.515	14,105,792.535	No	1.264	2.857
	TOE_2838-TOE_2840	TOE_2838	TOE_2840	36.000	279.046	0.002	5,223,818.526	2,493,664.341	Free Surface	3.436	0.367	0.288	1.101	0.896	0.671	18,166,539.006	No	1.101	3.436
	TOE_2839-TOE_2838	TOE_2839	TOE_2838	36.000	223.808	0.002	5,223,818.526	2,493,664.341	Free Surface	3.484	0.363	0.282	1.090	0.896	0.685	18,517,468.952	No	1.090	3.484
	TOE_2840-TOE_2841	TOE_2840	TOE_2841	36.000	262.834	0.002	5,223,818.526	2,493,664.341	Free Surface	3.870	0.336	0.244	1.009	0.896	0.795	21,420,316.629	No	1.009	3.870
	TOE_2841-TOE_2843	TOE_2841	TOE_2843	36.000	36.626	0.004	5,223,818.526	2,493,664.341	Free Surface	4.679	0.293	0.187	0.879	0.896	1.037	27,897,440.007	No	0.879	4.679
	TOE_2842-TOE_2844	TOE_2842	TOE_2844	36.000	444.636	0.003	5,223,818.526	2,493,664.341	Free Surface	4.353	0.309	0.207	0.927	0.896	0.937	25,221,921.417	No	0.927	4.353
	TOE_2843-TOE_2842	TOE_2843	TOE_2842	36.000	93.563	0.006	5,223,818.526	2,493,664.341	Free Surface	5.639	0.257	0.144	0.770	0.896	1.344	36,226,643.146	No	0.770	5.639
	TOE_2844-TOE_2845	TOE_2844	TOE_2845	36.000	17.372	0.020	5,223,818.526	2,493,664.341	Free Surface	8.580	0.191	0.080	0.573	0.896	2.392	65,508,663.780	Yes	0.883	4.656
	TOE_2845-TOE_2846	TOE_2845	TOE_2846	36.000	184.327	0.002	5,223,818.526	2,493,664.341	Free Surface	3.659	0.350	0.264	1.051	0.896	0.734	19,812,880.516	No	1.051	3.659
	TOE_2846-TOE_2847	TOE_2846	TOE_2847	36.000	229.186	0.002	5,223,818.526	2,493,664.341	Free Surface	3.872	0.336	0.244	1.009	0.896	0.795	21,429,504.184	No	1.009	3.872
	TOE_2847-TOE_2848	TOE_2847	TOE_2848	36.000	80.877	0.004	5,223,818.526	2,493,664.341	Free Surface	5.074	0.277	0.167	0.830	0.896	1.161	31,240,984.972	No	0.830	5.074
	TOE_2848-TOE_2849	TOE_2848	TOE_2849	36.000	459.682	0.005	5,223,818.526	2,493,664.341	Free Surface	5.224	0.271	0.161	0.813	0.896	1.208	32,541,157.345	No	0.813	5.224
	TOE_2849-TOE_2920	TOE_2849	TOE_2920	36.000	343.100	0.010	5,223,818.526	2,493,664.341	Free Surface	6.731	0.226	0.112	0.679	0.896	1.715	46,476,512.118	No	0.679	6.731
	TOE 2850-TOE 2851	TOE_2850	TOE_2851	36.000	249.280	0.009	5,223,818.526	2,493,664.341	Free Surface	6.515	0.232	0.118	0.695	0.896	1.640	44,388,011.310	No	0.695	6.515
	TOE 2851-TOE 2853	TOE_2851	TOE_2853	36.000	20.430	0.004	5,223,818.526	2,493,664.341	Free Surface	5.055	0.277	0.168	0.832	0.896	1.155	31,079,112.582	No	0.832	5.055
	TOE 2852-TOE 2860	TOE_2852	TOE_2860	36.000	359.537	0.002	5,447,280.129	2,621,166.213	Free Surface	3.630	0.364	0.282	1.091	0.916	0.713	19,287,627.371	No	1.091	3.630
IFI	TOE_2853-TOE_2852	TOE_2853	TOE_2852	36.000	60.002	0.004	5,447,280.129	2,621,166.213	Free Surface	4.942	0.290	0.184	0.871	0.916	1.101	29,614,860.035	Yes	0.931	4.508
IFI	TOE 2854-TOE 2853	TOE_2854	TOE_2853	12.000	398.579	0.004	429,456.762	127,501.872	Free Surface	2.623	0.359	0.275	0.359	0.340	0.900	1,559,749.936	No	0.359	2.623
	TOE 2855-TOE 2854	TOE_2855	TOE_2854	12.000	386.083	0.002	429,456.762	127,501.872			0.432	0.387	0.432	0.340	0.630	1,109,717.588	No	0.432	2.047
	TOE 2856-TOE 2855	TOE_2856	TOE_2855	12.000	226.541	0.003	429,456.762	127,501.872			0.391	0.323	0.391	0.340	0.763	1,329,421.551	No	0.391	2.336
H	TOE_2857-TOE_2856	TOE_2857	TOE_2856	12.000	76.848	0.003	429,456.762	127,501.872			0.385	0.314	0.385	0.340	0.786	1,368,340.727	No	0.385	2.385
H	TOE 2858-TOE 2857	TOE_2858	TOE_2857	12.000	348.353	0.011	429,456.762	127,501.872			0.277	0.168	0.277	0.340	1.485	2,563,756.376	No	0.277	3.749
	TOE 2859-TOE 2858	TOE_2859	TOE_2858	12.000	396.442	0.004	429,456.762	127,501.872			0.346	0.257	0.346	0.340	0.966	1,671,256.976	No	0.346	2.758
	TOE 2860-TOE 2861	TOE_2860	TOE_2861	36.000	403.356	0.002		2.621.166.213			0.375	0.299	1.125	0.916	0.672	18,209,827.948	No	1.125	3.481
	TOE_2861-TOE_2862	TOE_2861	TOE_2862	36.000	62.240	0.006	5,447,280.129	1- 1			0.259	0.147	0.777	0.916	1.375	37,066,579.448	Yes	0.958	4.336
	TOE 2862-TOE 2863	TOE_2862	TOE_2863	36.000	159.775	0.001	5,447,280.129				0.406	0.347	1.219	0.916	0.576	15,716,935.916	No	1.219	3.127
	TOE 2863-TOE 2864	TOE_2863	TOE_2864	36.000	205.062	0.001	5,447,280.129				0.336	0.243	1.007	0.916	0.832	22,417,712.211	No	1.007	4.047
	TOE 2864-TOE 2865	TOE_2864	TOE_2865	36.000	114.615	0.002	5,447,280.129				0.309	0.208	0.928	0.916	0.975	26,243,125.882	Yes	0.953	4.366
		TOE_2865	TOE_2866	36.000	284.715		5,447,280.129				0.373	0.296	1.118	0.916	0.680	18,407,998.604	No	1.118	3.509
	TOE_2865-TOE_2866		TOE_2867	36.000	270.608		5,447,280.129				0.373	0.295	1.117	0.916	0.681	18,447,596.010	No	1.117	3.514
	TOE_2866-TOE_2867	TOE_2866		36.000	370.460	0.002	5,447,280.129				0.372	0.293	0.926	0.916	0.081	26,315,252.924	Yes	0.927	4.535
	TOE_2867-TOE_2868	TOE_2867	TOE_2868	36.000	408.607		5,447,280.129				0.356	0.207		0.916					3.735
	TOE_2868-TOE_2869	TOE_2868	TOE_2869									0.272	1.068		0.743	20,061,486.848	No	1.068	
	TOE_2869-TOE_2870	TOE_2869	TOE_2870	36.000	396.171		5,447,280.129				0.367		1.101	0.916	0.701	18,967,088.030	No	1.101	3.586
	TOE_2870-TOE_2871	TOE_2870	TOE_2871	36.000	396.576						0.363	0.281	1.088	0.916	0.717	19,389,949.386	No	1.088	3.644
	TOE_2871-TOE_2872	TOE_2871	TOE_2872	36.000	400.375	0.002	5,447,280.129				0.374	0.298	1.123	0.916	0.675	18,277,493.798	No	1.123	3.491
	TOE_2872-TOE_2873	TOE_2872	TOE_2873	36.000	381.197						0.350	0.262	1.049	0.916	0.770	20,770,239.554	Yes	1.073	3.713
	TOE_2873-TOE_2874	TOE_2873	TOE_2874	36.000	56.391		5,447,280.129				0.396	0.330	1.187	0.916	0.606	16,497,998.692	No	1.187	3.240
	TOE_2874-TOE_2875	TOE_2874	TOE_2875	36.000	68.032		5,447,280.129				0.352	0.266	1.057	0.916	0.758	20,469,178.536	No	1.057	3.790
	TOE_2875-TOE_2876	TOE_2875	TOE_2876	36.000	48.547		5,447,280.129				0.337	0.244	1.010	0.916	0.827	22,289,471.205	No	1.010	4.030
	TOE_2876-TOE_2877	TOE_2876	TOE_2877	36.000	329.140		5,447,280.129				0.349	0.262	1.048	0.916	0.771	20,809,040.903	No	1.048	3.835
	TOE_2877-TOE_2878	TOE_2877	TOE_2878	36.000	307.671		5,447,280.129				0.374	0.298	1.122	0.916	0.676	18,301,672.579	No	1.122	3.494
	TOE_2878-TOE_2879	TOE_2878	TOE_2879	36.000	361.008		5,447,280.129				0.364	0.283	1.092	0.916	0.712	19,248,269.871	No	1.092	3.624
	TOE_2879-TOE_2880	TOE_2879	TOE_2880	36.000	33.270						0.376	0.300	1.127	0.916	0.670	18,152,727.646	No	1.127	3.473
	TOE_2880-TOE_2881	TOE_2880	TOE_2881	36.000	195.334	0.003	5,447,280.129				0.314	0.213	0.941	0.916	0.948	25,515,851.106	Yes	0.986	4.165
	TOE_2881-TOE_2882	TOE_2881	TOE_2882	36.000	209.365	0.001	5,447,280.129				0.377	0.302	1.131	0.916	0.665	18,018,305.840	No	1.131	3.455
	TOE_2882-TOE_2883	TOE_2882	TOE_2883	36.000	151.038		5,447,280.129	1- 1			0.366	0.286	1.098	0.916	0.704	19,050,775.400	No	1.098	3.597
	TOE_2883-TOE_2884	TOE_2883	TOE_2884	36.000	399.934	0.002	5,447,280.129	2,621,166.213	Free Surface	3.708	0.358	0.274	1.074	0.916	0.735	19,868,163.099	No	1.074	3.708
	TOE_2884-TOE_2885	TOE_2884	TOE_2885	36.000	386.814	0.002	5,447,280.129	2,621,166.213	Free Surface	3.657	0.362	0.280	1.085	0.916	0.721	19,488,193.635	No	1.085	3.657
	TOE_2885-TOE_2886	TOE_2885	TOE_2886	36.000	336.538	0.002	5,447,280.129	2,621,166.213	Free Surface	4.044	0.336	0.243	1.008	0.916	0.831	22,398,228.728	No	1.008	4.044
	TOE_2886-TOE_2887	TOE_2886	TOE_2887	36.000	202.207	0.002	5,447,280.129	2,621,166.213	Free Surface	3.939	0.342	0.252	1.027	0.916	0.801	21,593,423.325	No	1.027	3.939
	TOE_2887-TOE_2888	TOE_2887	TOE_2888	36.000	396.382	0.003	5,447,280.129	2,621,166.213	Free Surface	4.307	0.321	0.223	0.962	0.916	0.908	24,442,188.395	Yes	1.017	3.992
	TOE_2888-TOE_2889	TOE_2888	TOE_2889	36.000	530.806	0.001	5,447,280.129	2,621,166.213	Free Surface	3.150	0.404	0.343	1.212	0.916	0.582	15,873,859.216	No	1.212	3.150
	TOE_2889-TOE_2890	TOE_2889	TOE_2890	36.000	97.753	0.003	5,447,280.129	2,621,166.213	Free Surface	4.548	0.308	0.207	0.925	0.916	0.980	26,369,429.043	No	0.925	4.548
	TOE_2890-TOE_2891	TOE_2890	TOE_2891	36.000	271.116	0.003	5,447,280.129	2,621,166.213	Free Surface	4.392	0.316	0.217	0.949	0.916	0.933	25,116,262.417	No	0.949	4.392
	TOE_2891-TOE_2892	TOE_2891	TOE_2892	36.000	54.302	0.005	5,447,280.129	2,621,166.213	Free Surface	5.412	0.272	0.162	0.817	0.916	1.249	33,624,471.351	Yes	0.847	5.144
	TOE_2892-TOE_2893	TOE_2892	TOE_2893	36.000	399.514	0.002	5,447,280.129	2,621,166.213	Free Surface	3.473	0.376	0.300	1.127	0.916	0.670	18,146,591.314	No	1.127	3.473
	TOE_2893-TOE_2894	TOE_2893	TOE_2894	36.000	388.679	0.002	5,447,280.129	2,621,166.213	Free Surface	4.062	0.335	0.242	1.004	0.916	0.836	22,532,603.400	No	1.004	4.062
	TOE_2894-TOE_2895	TOE_2894	TOE_2895	36.000	401.164	0.002	5,447,280.129	2,621,166.213	Free Surface	3.813	0.351	0.264	1.052	0.916	0.765	20,647,696.857	No	1.052	3.813
	TOE_2895-TOE_2896	TOE_2895	TOE_2896	36.000		0.002	5,447,280.129	2,621,166.213	Free Surface	3.875	0.347	0.258	1.040	0.916	0.782	21,109,294.782	Yes	1.042	3.862
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EXIST	NG PIPE TABLE																		
	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth	Adjusted Velocity
	TOE_2896-TOE_2897	TOE_2896	TOE_2897	36.000	403.174	0.002	5,447,280.129	2,621,166.213	Free Surface	3.482	0.375	0.299	1.125	0.916	0.672	18,213,943.362	No	1.125	3.482
	TOE_2897-TOE_2898	TOE_2897	TOE_2898	36.000	409.240	0.005	5,447,280.129	2,621,166.213	Free Surface	5.375	0.274	0.164	0.821	0.916	1.237	33,302,844.467	Yes	0.911	4.649
	TOE_2898-TOE_2899	TOE_2898	TOE_2899	36.000	347.870	0.002	5,447,280.129	2,621,166.213	Free Surface	3.629	0.364	0.282	1.091	0.916	0.713	19,284,262.044	No	1.091	3.629
	TOE_2899-TOE_2900	TOE_2899	TOE_2900	36.000	334.864	0.002	5,447,280.129	2,621,166.213	Free Surface	4.051	0.335	0.243	1.006	0.916	0.833	22,454,145.401	No	1.006	4.051
	TOE_2900-TOE_2901	TOE_2900	TOE_2901	36.000	38.258	0.003	5,447,280.129	2,621,166.213	Free Surface	4.530	0.309	0.208	0.928	0.916	0.975	26,224,849.365	No	0.928	4.530
	TOE_2901-TOE_2902	TOE_2901	TOE_2902	36.000	295.270	0.002	5,447,280.129	2,621,166.213	Free Surface	4.075	0.334	0.241	1.002	0.916	0.840	22,636,020.216	No	1.002	4.075
	TOE_2902-TOE_2903	TOE_2902	TOE_2903	36.000	388.341	0.002	5,447,280.129	2,621,166.213	Free Surface	3.876	0.346	0.258	1.039	0.916	0.783	21,119,930.531	No	1.039	3.876
	TOE_2903-TOE_2904	TOE_2903	TOE_2904	36.000	413.543	0.002	5,447,280.129	2,621,166.213	Free Surface	3.664	0.361	0.279	1.083	0.916	0.723	19,538,514.789	No	1.083	3.664
	TOE_2904-TOE_2951	TOE_2904	TOE_2951	36.000	71.017	0.002	5,447,280.129	2,621,166.213	Free Surface	3.624	0.364	0.283	1.092	0.916	0.712	19,248,349.176	Yes	1.111	3.541
	TOE_2905-TOE_2906	TOE_2905	TOE_2906	30.000	394.000	0.001	4,228,768.253	1,939,025.510	Free Surface	3.077	0.447	0.412	1.118	0.847	0.586	10,258,167.458	No	1.118	3.077
	TOE_2906-TOE_2736	TOE_2906	TOE_2736	30.000	373.680	0.002	4,228,768.253	1,939,025.510	Free Surface	3.728	0.387	0.317	0.968	0.847	0.774	13,323,799.684	No	0.968	3.728
	TOE_2914-TOE_2769	TOE_2914	TOE_2769	18.000	286.272	0.002	911,866.884	312,199.082	Free Surface	2.540	0.352	0.266	0.528	0.445	0.719	3,431,902.076	No	0.528	2.540
	TOE_2915-TOE_2977	TOE_2915	TOE_2977	8.000	33.639	0.014	207,146.860	53,949.580	Free Surface	3.475	0.310	0.209	0.207	0.262	1.584	992,018.765	No	0.207	3.475
	TOE_2916-TOE_2915	TOE_2916	TOE_2915	8.000	94.519	0.030	207,146.860	53,949.580	Free Surface	4.581	0.254	0.142	0.170	0.262	2.326	1,460,098.057	No	0.170	4.581
	TOE_2917-TOE_2916	TOE_2917	TOE_2916	8.000	398.787	0.034	207,146.860	53,949.580	Free Surface	4.791	0.247	0.133	0.164	0.262	2.474	1,555,054.568	No	0.164	4.791
	TOE_2920-TOE_2850	TOE_2920	TOE_2850	36.000	73.831	0.009	5,223,818.526	2,493,664.341	Free Surface	6.572	0.230	0.116	0.691	0.896	1.660	44,938,739.234	Yes	0.693	6.543
	TOE_2921-TOE_2829	TOE_2921	TOE_2829	36.000	174.848	0.003	5,223,818.526	2,493,664.341	Free Surface	4.650	0.294	0.189	0.883	0.896	1.028	27,657,927.613	No	0.883	4.650
	TOE_2941-TOE_2942	TOE_2941	TOE_2942	12.000	359.851	0.010	148,835.729	38,000.146	Free Surface	2.697	0.166	0.060	0.166	0.197	1.402	2,491,257.696	No	0.166	2.697
	TOE_2942-TOE_2943	TOE_2942	TOE_2943	12.000	401.258	0.023	148,835.729	38,000.146	Free Surface	3.626	0.135	0.039	0.135	0.197	2.097	3,797,565.592	No	0.135	3.626
	TOE_2943-TOE_2944	TOE_2943	TOE_2944	12.000	199.566	0.022	148,835.729	38,000.146	Free Surface	3.546	0.137	0.040	0.137	0.197	2.035	3,679,975.286	No	0.137	3.546
	TOE 2944-TOE 2945	TOE_2944	TOE_2945	15.000	219.323	0.003	148,835.729	38,000.146	Free Surface	1.637	0.172	0.064	0.215	0.185	0.747	2,311,912.994	Yes	0.217	1.614
	TOE 2945-TOE 2946	TOE_2945	TOE_2946	15.000	379.787	0.001	148,835.729	38,000.146	Free Surface	1.324	0.199	0.087	0.249	0.185	0.559	1,710,026.283	No	0.249	1.324
	TOE_2946-TOE_2947	TOE 2946	TOE_2947	15.000	248.186	0.002	148,835.729	38,000.146	Free Surface	1.453	0.187	0.076	0.233	0.185	0.635	1,952,390.266	No	0.233	1.453
	TOE 2947-TOE 2948	TOE_2947	TOE_2948	15.000	228.183	0.002	148,835.729	38,000.146	Free Surface	1.400	0.192	0.080	0.240	0.185	0.603	1,850,658.630	No	0.240	1.400
	TOE_2948-TOE_2949	TOE_2948	TOE_2949	18.000	340.001	0.001	148,835.729	38,000.146	Free Surface	1.190	0.167	0.060	0.250	0.177	0.504	2,465,361.598	No	0.250	1.190
	TOE 2949-VPF1 1	TOE_2949	VPF1 1	18.000	305.002	0.001	148,835.729	38,000.146	Free Surface	1.301	0.157	0.053	0.235	0.177	0.569	2,800,940.995	No	0.235	1.301
	TOE 2950-WWTP1	TOE_2950	WWTP1	36.000	82.011	0.002	5,447,280.129	2,621,166.213	Free Surface	3.542	0.370	0.292	1.111	0.916	0.689	18,643,236.672	No	1.111	3.542
	TOE 2951-TOE 2950	TOE_2951	TOE_2950	36.000	215.000	0.001	5,447,280.129	2,621,166.213	Free Surface	3.461	0.377	0.302	1.130	0.916	0.666	18,065,131.090	No	1.130	3.461
	TOE 2960-TOE 2748	TOE_2960	TOE_2748	12.000	375.067	0.016	911,866.884	312,199.082	Free Surface	5.424	0.366	0.286	0.366	0.503	1.839	3,192,365.157	No	0.366	5.424
	TOE 2962-TOE 2960	TOE_2962	TOE_2960	12.000	141.655	0.002	574,705.150	180,250.492	Free Surface	2.016	0.548	0.583	0.548	0.395	0.534	985,693.500	No	0.548	2.016
	TOE 2964-TOE 2960	TOE_2964	TOE_2960	12.000	14.142	0.021	185,393.375		Free Surface		0.153	0.051	0.153	0.220	2.036	3,642,905.269	Yes	0.290	1.520
	TOE_2965-TOE_2964	TOE_2965	TOE_2964	12.000	260.000	0.004	185,393.375	47.999.502	Free Surface	2.129	0.228	0.114	0.228	0.220	0.936	1,626,880.922	No	0.228	2.129
	TOE_2966-TOE_2965	TOE_2966	TOE_2965	12.000	274.110	0.026	185,393.375	47.999.502	Free Surface	4.052	0.146	0.046	0.146	0.220	2.255	4,053,687.141	No	0.146	4.052
	TOE 2967-TOE 2966	TOE_2967	TOE_2966	12.000	400.000	0.005	185,393.375		Free Surface		0.224	0.110	0.224	0.220	0.965	1,677,847.751	No	0.224	2.176
	TOE_2968-TOE_2969	TOE_2968	TOE_2969	12.000	29.106	0.017	185,393.375		Free Surface		0.161	0.057	0.161	0.220	1.841	3,278,251.079	No	0.161	3.491
	TOE 2969-TOE 2967	TOE_2969	TOE_2967	12.000	121.875	0.007	185,393.375		Free Surface		0.204	0.091	0.204	0.220	1.159	2,026,442.109	No	0.204	2.487
	TOE_2970-TOE_2971	TOE_2970	TOE_2971	12.000	280.000	0.004	185,393.375		Free Surface		0.238	0.124	0.238	0.220	0.862	1,494,744.776	No	0.238	2.005
	TOE 2971-TOE 2972	TOE_2971	TOE_2972	12.000	245.041	0.004	185,393.375		Free Surface		0.225	0.111	0.225	0.220	0.964	1,675,804.058	No	0.225	2.174
	TOE_2972-TOE_2968	TOE_2972	TOE_2968	12.000	140.000	0.006	185,393.375		Free Surface		0.212	0.098	0.212	0.220	1.084	1,890,719.351	No	0.212	2.368
	TOE 2973-FMF4 4 4	TOE_2973	FMF4 4 4	12.000	88.704	0.003	185,393.375		Free Surface		0.241	0.127	0.241	0.220	0.839	1,454,573.210	No	0.241	1.966
	TOE 2977-TOE 2733	TOE_2977	TOE_2733	8.000	117.630	0.033	250,316.923		Free Surface		0.273	0.163	0.182	0.290	2.446	1,532,743.993	Yes	0.252	3.198
	TOE 2978-TOE 2581	TOE_2978	TOE_2581	18.000	246.826	0.006	237,892.408		Free Surface		0.140	0.042	0.210	0.224	1.136	5,652,198.509	No	0.210	2.450
	TOE_2979-TOE_2582	TOE_2979	TOE_2582	18.000	266.276	0.005	237,892.408		Free Surface		0.149	0.048	0.223	0.224	1.006	4.971.130.152	No	0.223	2.239
	TOE 2980-TOE 2583	TOE_2980	TOE_2583	18.000	370.537	0.004	237,892.408		Free Surface		0.152	0.050	0.227	0.224	0.970	4,784,926.938	No	0.227	2.180
	TOE 2981-CHF3C 8	TOE_2981	CHF3C_8	18.000	183.500	0.009	134,026.302	33,949.427	Free Surface		0.096	0.019	0.144	0.167	1.349	7,001,296.122	No	0.144	2.395
	TOE 2982-TOE 2983	TOE 2982	TOE_2983	18.000	41.744	0.020	0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	10,460,971.448	No	0.000	0.000
	TOE 2983-TOE 2576	TOE 2983	TOE 2576	18.000	147.819	0.020	134,026.302		Free Surface		0.072	0.010	0.108	0.167	2.388	12.866.766.566	No	0.108	3.662
	TOE_2984-TOE_2629	TOE_2984	TOE_2629	15.000	239.270	0.010	863,661.534	292,651.090			0.293	0.187	0.367	0.457	1.528	4,607,657.122	No	0.367	4.453
	TOE_2984-TOE_2029 TOE 2985-CFF1 31	TOE_2985	CFF1_31	12.000	328.016	0.010	393,085.517	114,649.877			0.293	0.189	0.307	0.437	1.206	2,080,710.568	No	0.307	3.149
	TOE_2986-TOE_2985	TOE_2986	TOE_2985	12.000	26.296	0.007	393,085.517	114,649.877			0.294	0.165	0.294	0.324	1.384	2,389,490.090	No	0.294	3.477
	TOE_2986-TOE_2985 TOE_2987-TOE_2991	TOE_2987	TOE_2983	12.000	403.065		281,232.804		Free Surface		0.274	0.103	0.274	0.324	0.955	1,648,076.623	No	0.274	2.423
		TOE_2988	TOE_2991	12.000		0.004	281,232.804		Free Surface		0.272	0.171	0.272	0.273	1.003	1,732,883.867	No	0.272	2.423
	TOE_2988-TOE_2987	TOE_2989	TOE_2988	12.000			281,232.804		Free Surface		0.272	0.162	0.272	0.273	1.005	1,753,840.209	No	0.272	2.533
	TOE_2989-TOE_2988 TOE_2990-CCF6_614	TOE_2969 TOE_2990	CCF6_614	8.000	138.317		253,583.000		Free Surface		0.271	0.160	0.271	0.273	1.500	943,244.669	No	0.271	3.546
														0.292					
	TOE_2991-TOE_2986	TOE_2991	TOE_2986	12.000	401.146		281,232.804		Free Surface		0.259	0.147	0.259		1.105	1,910,305.541	No	0.259	2.692
	TOE_2992-TOE_2962	TOE_2992	TOE_2962	10.000	403.999	0.010	574,705.150	180,250.492			0.418	0.365	0.348	0.418	1.415	1,573,887.284	Yes	0.348	4.115
	TOE_2994-TOE_3005	TOE_2994	TOE_3005	30.000	7.270		4,318,819.601				0.184	0.074	0.460	0.857	3.360	58,496,005.541	Yes	0.504	9.443
	TOE_2997-VPFE_717	TOE_2997	VPFE_717	10.000	165.628	0.009	606,067.531	192,025.368			0.443	0.405	0.369	0.429	1.337	1,497,533.844	No	0.369	4.024
	TOE_3003-OGF1_1	TOE_3003	OGF1_1	10.000	177.139	0.023	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	2,342,920.940	No	0.000	0.000

EXIST	TING PIPE TABLE																		
	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth	Adjusted Velocity
	TOE_3005-TOE_2800	TOE_3005	TOE_2800	36.000	9.211	0.018	4,650,673.278	2,171,465.902	Free Surface	8.121	0.183	0.073	0.549	0.844	2.316	63,615,880.152	No	0.549	8.121
	VPF1_103-VPF1_15A	VPF1_103	VPF1_15A	21.000	270.656	0.005	1,871,077.188	734,550.923	Free Surface	4.199	0.329	0.234	0.576	0.617	1.143	8,000,391.679	No	0.576	4.199
	VPF1_11-VPF1_12	VPF1_11	VPF1_12	21.000	383.454	0.009	1,749,417.890	678,051.105	Free Surface	4.998	0.276	0.167	0.484	0.596	1.497	10,474,621.665	No	0.484	4.998
	VPF1_126-VPF1_127	VPF1_126	VPF1_127	8.000	217.056	0.021	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,220,115.230	No	0.000	0.000
	VPF1_127-VPF1_128	VPF1_127	VPF1_128	8.000	198.724	0.022	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,256,557.008	No	0.000	0.000
	VPF1_128-VPF1_129	VPF1_128	VPF1_129	8.000	186.503	0.004	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	565,925.610	No	0.000	0.000
	VPF1_129-VPF1_130	VPF1_129	VPF1_130	8.000	116.246	0.011	83,998.048	20,999.512	Free Surface	2.481	0.208	0.094	0.138	0.165	1.404	890,184.725	No	0.138	2.481
	VPF1_12-VPF1_13	VPF1_12	VPF1_13	21.000	277.540	0.005	1,749,417.890	678,051.105	Free Surface	4.186	0.314	0.214	0.550	0.596	1.169	8,177,844.604	No	0.550	4.186
	VPF1_130-ECF21_131	VPF1_130	ECF21_131	8.000	243.303	0.043	83,998.048	20,999.512	Free Surface	4.000	0.149	0.048	0.099	0.165	2.694	1,753,907.078	No	0.099	4.000
	VPF1_13-VPF1_14	VPF1_13	VPF1_14	21.000	378.543	0.011	1,749,417.890	678,051.105	Free Surface	5.368	0.263	0.151	0.460	0.596	1.653	11,576,833.934	Yes	0.555	4.128
	VPF1 14-VPF1 15	VPF1_14	VPF1_15	21.000	183.524	0.001	1,749,417.890	678,051.105	Free Surface	2.334	0.486	0.476	0.851	0.596	0.505	3,672,178.088	No	0.851	2.334
	VPF1 15A-VPF1 16	VPF1_15A	VPF1_16	21.000	277.576	0.004	1,957,931.706	775,301.468	Free Surface	3.986	0.353	0.268	0.618	0.632	1.042	7,314,011.896	No	0.618	3.986
	VPF1 15-VPF1 58	VPF1 15	VPF1 58	21.000	302.374	0.001	1,749,417.890	678,051.105	Free Surface	2.508	0.460	0.432	0.804	0.596	0.562	4,045,882.904	No	0.804	2.508
H	VPF1 16-VPF1 17	VPF1_16	VPF1_17	24.000	519.762	0.022	1,957,931.706	775,301.468	Free Surface	7.052	0.194	0.083	0.389	0.608	2.386	23,675,095.698	Yes	0.469	5.399
H	VPF1 17-VPF1 18A	VPF1 17	VPF1 18A	24.000	516.132	0.002	1,957,931.706	775.301.468	Free Surface	2.820	0.375	0.299	0.749	0.608	0.667	6,557,887.935	No	0.749	2.820
	VPF1 18A-VPF1 19A	VPF1_18A	VPF1_19A	24.000	342.998		1,957,931.706				0.348	0.260	0.696	0.608	0.768	7,524,934.513	No	0.696	3.115
H	VPF1 19A-VPF1 20A	VPF1_19A	VPF1 20A	24.000	471.360	0.002	1,957,931.706				0.350	0.262	0.699	0.608	0.762	7,460,076.687	No	0.699	3.095
H	VPF1 1-VPF1 58	VPF1_1	VPF1_58	18.000	426.455	0.002	148,835.729	38,000.146			0.146	0.046	0.219	0.177	0.653	3,233,695.771	Yes	0.557	0.386
H	VPF1 20A-VPF1 21A	VPF1_20A	VPF1 21A	24.000	393.842	0.002	1,957,931.706				0.356	0.272	0.713	0.608	0.735	7,202,514.822	No	0.713	3.018
H	VPF1 21A-ECF21 22A	VPF1_21A	ECF21 22A	24.000	92.771		1.957.931.706				0.286	0.179	0.573	0.608	1.120	10,937,602.961	No	0.573	4.076
H	VPF1 32A-VPF1 11	VPF1_32A	VPF1 11	21.000	126.479		1,749,417.890	.,			0.239	0.175	0.418	0.596	1.991	13,988,184.722	No	0.418	6.141
H	VPF1_52A-VPF1 103	VPF1_58	VPF1_103	21.000	477.078		1.871.077.188				0.419	0.367	0.734	0.617	0.716	5,092,850.578	No	0.734	3.025
H	VPF1_36-VPF1_103 VPF1_718-VPF1_7	VPF1 718	VPF1 7	18.000	341.600		1,714,724.848	, , , , , , , ,			0.413	0.225	0.734	0.618	1.604	7,633,266.557	No	0.734	5.392
H	VPF1_716-VPF1_7	VPF1_7	VPF1 8	18.000	284.327		1,714,724.848				0.322	0.216	0.403	0.618	1.670	7,944,680.409	No	0.403	5.549
H			VPFE 10A	18.000	430.730		1,714,724.848	662,051.271			0.405	0.210	0.473	0.618	1.070		No	0.473	3.954
H	VPF1_8-VPFE_10A	VPF1_8		18.000	393.415		1,714,724.848	662,051.271			0.405	0.343	0.533	0.618	1.326	4,974,554.461		0.533	4.712
H	VPFE_10A-VPF1_32A	VPFE_10A	VPF1_32A													6,331,436.904	No		
H	VPFE_717-VPF1_718	VPF4D 700	VPF1_718	10.000	222.961	0.026	606,067.531	192,025.368			0.337	0.245	0.281	0.429	2.255	2,472,239.579	No	0.281	5.798
	VRF1D_702-VRF1D_703	VRF1D_702	VRF1D_703	10.000	264.156	0.036	499,387.665	152,524.743			0.280	0.172	0.234	0.388	2.658	2,909,236.636	No	0.234	6.169
		VRF1D_703	VRF1D_704	10.000	273.597	0.022	499,387.665	152,524.743			0.316	0.217	0.263	0.388	2.105	2,304,210.739	No	0.263	5.221
	VRF1D_704-VRF1D_705		VRF1D_705	10.000	119.786	0.022	499,387.665	152,524.743			0.318	0.220	0.265	0.388	2.078	2,274,792.718	No	0.265	5.172
Ш	VRF1D_705-VRF1D_707		VRF1D_707	10.000	128.235	0.023	499,387.665	152,524.743			0.315	0.215	0.262	0.388	2.124	2,325,003.942	No	0.262	5.254
Ш	VRF1D_707-VRF1D_708		VRF1D_708	10.000	101.257	0.019	499,387.665	152,524.743			0.331	0.237	0.276	0.388	1.923	2,106,963.549	No	0.276	4.895
Ш	VRF1D_708-VRF1D_709		VRF1D_709	10.000	114.157	0.009	499,387.665	152,524.743			0.401	0.339	0.334	0.388	1.332	1,475,150.080	No	0.334	3.780
Ш	VRF1D_709-VRF1D_710		VRF1D_710	10.000	81.755	0.005	499,387.665	152,524.743			0.479	0.464	0.399	0.388	0.948	1,075,888.658	No	0.399	2.995
Ш	VRF1D_710-VRF1D_711		VRF1D_711	10.000	135.900	0.005	499,387.665	152,524.743			0.478	0.462	0.398	0.388	0.952	1,079,993.881	No	0.398	3.004
Ш	VRF1D_711-VRF1D_712			10.000	117.552	0.005	499,387.665	152,524.743			0.466	0.443	0.389	0.388	0.997	1,126,029.256	No	0.389	3.098
Ш	VRF1D_712-VRF1D_713		VRF1D_713	10.000	119.736	0.005	499,387.665	152,524.743			0.488	0.479	0.406	0.388	0.916	1,042,469.353	No	0.406	2.926
Ш	VRF1D_713-VRF1D_714	VRF1D_713	VRF1D_714	10.000	146.622	0.005	499,387.665	152,524.743	Free Surface	2.936	0.486	0.477	0.405	0.388	0.921	1,047,485.961	No	0.405	2.936
	VRF1D_714-VRF1D_715	VRF1D_714	VRF1D_715	10.000	144.757	0.007	499,387.665	152,524.743	Free Surface	3.501	0.425	0.376	0.354	0.388	1.192	1,328,573.212	No	0.354	3.501
	VRF1D_715-VRF1D_716	VRF1D_715	VRF1D_716	10.000	186.765	0.020	499,387.665	152,524.743			0.327	0.231	0.273	0.388	1.971	2,159,085.065	No	0.273	4.982
	VRF1D_716-TOE_2997	VRF1D_716	TOE_2997	10.000	174.246	0.011	606,067.531	192,025.368	Free Surface	4.237	0.426	0.377	0.355	0.429	1.441	1,606,160.052	Yes	0.362	4.128
	VRF1G_186-VRF1G_188	VRF1G_186	VRF1G_188	10.000	386.298	0.019	507,803.160	155,600.581	Free Surface	4.930	0.334	0.240	0.278	0.391	1.929	2,114,433.309	No	0.278	4.930
	VRF1G_188-VRF1G_204	VRF1G_188	VRF1G_204	10.000	200.334	0.007	507,803.160	155,600.581	Free Surface	3.487	0.432	0.387	0.360	0.391	1.176	1,313,083.968	No	0.360	3.487
	VRF1G_204-VRF1G_205	VRF1G_204	VRF1G_205	12.000	221.868	0.005	507,803.160	155,600.581	Free Surface	2.929	0.374	0.298	0.374	0.370	0.981	1,704,187.884	No	0.374	2.929
	VRF1G_205-VRGC2_206		VRGC2_206	12.000	209.684	0.004	507,803.160	155,600.581			0.379	0.305	0.379	0.370	0.958	1,665,730.837	No	0.379	2.881
	VRGC1_698-VRGC1_699	VRGC1_698	VRGC1_699	10.000	204.736	0.012	499,387.665	152,524.743	Free Surface	4.185	0.372	0.294	0.310	0.388	1.540	1,696,275.750	No	0.310	4.185
	VRGC1_699-TOE_2673	VRGC1_699	TOE_2673	10.000	399.007	0.019	499,387.665	152,524.743	Free Surface	4.882	0.332	0.238	0.277	0.388	1.916	2,098,929.430	No	0.277	4.882
	VRGC2_206-VRGC2_544	VRGC2_206	VRGC2_544	12.000	381.521	0.019	507,803.160	155,600.581	Free Surface	4.874	0.259	0.147	0.259	0.370	2.002	3,462,149.029	No	0.259	4.874
	VRGC2_526-VRGC2_527	VRGC2_526	VRGC2_527	12.000	333.897	0.013	554,517.825	172,674.655	Free Surface	4.380	0.298	0.193	0.298	0.388	1.667	2,877,737.546	No	0.298	4.380
	VRGC2_527-VRGC2_543			12.000	365.877	0.022	744,864.392	245,424.868	Free Surface	5.730	0.303	0.200	0.303	0.452	2.159	3,726,120.442	No	0.303	5.730
	VRGC2_543-VRGC2_544			12.000	414.462		744,864.392	245,424.868	Free Surface	3.036	0.487	0.478	0.487	0.452	0.868	1,558,894.535	No	0.487	3.036
	VRGC2_544-VRGC2_545			12.000			1,125,378.023				0.445	0.408	0.445	0.561	1.560	2,758,815.575	No	0.445	5.159
	VRGC2 545-VRGC2 580			15.000	295.290		1,125,378.023				0.424	0.374	0.530	0.524	0.980	3,009,008.765	No	0.530	3.519
	VRGC2_580-VRGC2_581			15.000			1,125,378.023				0.399	0.336	0.499	0.524	1.098	3,349,445.450	No	0.499	3.807
	VRGC2_581-VRGC2_582			15.000			1,125,378.023				0.370	0.291	0.462	0.524	1.274	3,863,889.723	No	0.462	4.224
	VRGC2_582-VRGC2_583			15.000			1,285,887.343				0.365	0.284	0.456	0.562	1.495	4,530,794.078	No	0.456	4.918
	VRGC2 583-TOE 2808			18.000	360.975		1,285,887.343				0.221	0.107	0.332	0.532	2.502	12,001,043.659	No	0.332	6.856
	VRGC4_365-VRGC4_366			10.000		0.005	495,900.908	151,250.343			0.488	0.480	0.407	0.387	0.907	1,032,620.091	No	0.407	2.900
	VRGC4 366-VRGC4 389			10.000	168.981		495,900.908	151,250.343				0.379	0.356	0.387	1.172	1,306,936.124	Yes	0.360	3.407
	V11004_000-V11004_009			10.000	.00.001	3.001	.50,000.000	.51,200.040	Jo Gariaco	5.402	J12.1	5.010	0.000	5.001	1.172	.,500,000.124	100	0.000	0.407

	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Peakable Flow (gpd)	Flow Type V	elocity (ft/s)	d/D	q/Q	Water Depth (ft)	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth	Adjusted Velocity
	VRGC4_389-VRGC4_415	VRGC4_389	VRGC4_415	10.000	189.101	0.007	495,900.908	151,250.343	Free Surface	3.362	0.436	0.393	0.363	0.387	1.127	1,260,514.724	No	0.363	3.362
	VRGC4_415-VRGC4_416	VRGC4_415	VRGC4_416	10.000	398.517	0.004	495,900.908	151,250.343	Free Surface	2.796	0.502	0.504	0.419	0.387	0.859	983,702.686	No	0.419	2.796
	VRGC4_416-VRGC4_417	VRGC4_416	VRGC4_417	10.000	383.546	0.006	495,900.908	151,250.343	Free Surface	3.250	0.447	0.412	0.373	0.387	1.073	1,203,978.104	No	0.373	3.250
	VRGC4_417-VRGC4_418	VRGC4_417	VRGC4_418	10.000	400.664	0.060	495,900.908	151,250.343	Free Surface	7.384	0.245	0.132	0.205	0.387	3.419	3,754,304.275	No	0.205	7.384
	VRGC4_418-VRGC4_419	VRGC4_418	VRGC4_419	10.000	405.006	0.008	554,517.825	172,674.655	Free Surface	3.722	0.439	0.399	0.366	0.410	1.242	1,390,518.069	No	0.366	3.722
	VRGC4_419-VRGC4_420	VRGC4_419	VRGC4_420	10.000	192.748	0.017	554,517.825	172,674.655	Free Surface	4.848	0.360	0.278	0.300	0.410	1.817	1,997,285.306	No	0.300	4.848
	VRGC4_420-TOE_2809	VRGC4_420	TOE_2809	10.000	333.343	0.017	554,517.825	172,674.655	Free Surface	4.904	0.357	0.273	0.298	0.410	1.846	2,028,905.449	No	0.298	4.904
	VRGC6_183-VRGC6_184	VRGC6_183	VRGC6_184	10.000	185.714	0.006	507,803.160	155,600.581	Free Surface	3.240	0.456	0.427	0.380	0.391	1.057	1,189,139.609	No	0.380	3.240
	VRGC6_184-VRGC6_185	VRGC6_184	VRGC6_185	10.000	320.324	0.014	507,803.160	155,600.581	Free Surface	4.451	0.360	0.277	0.300	0.391	1.670	1,835,191.860	No	0.300	4.451
	VRGC6_185-VRF1G_186	VRGC6_185	VRF1G_186	10.000	172.691	0.023	507,803.160	155,600.581	Free Surface	5.329	0.315	0.216	0.263	0.391	2.152	2,355,518.068	No	0.263	5.329
	WCR10_1-I25_23	WCR10	125_23	8.000	2,558.000	0.016	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,076,226.721	No	0.000	0.000
	WCR3_1	WCR3_80	TOE_2886	15.000	19.110	0.029	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	7,693,555.671	No	0.000	0.000
	WCR3_10	WCR3_86A	WCR3_86B	15.000	312.840	0.009	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	4,336,086.901	No	0.000	0.000
	WCR3_11	WCR3_87	WCR3_86A	15.000	256.720	0.009	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	4,311,121.273	No	0.000	0.000
	WCR3_12	WCR3_88	WCR3_87	15.000	216.760	0.009	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	4,290,297.352	No	0.000	0.000
	WCR3_13	WCR3_89	WCR3_88	15.000	287.980	0.009	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	4,300,756.138	No	0.000	0.000
Ō	WCR3_14	WCR3_90	WCR3_89	15.000	252.970	0.016	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	5,652,464.771	No	0.000	0.000
f	WCR3_15	WCR3_91	WCR3_90	15.000	235.590	0.006	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	3,654,629.780	No	0.000	0.000
f	WCR3_16	WCR3_92	WCR3_91	15.000	257.920	0.007	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	3,660,060.214	No	0.000	0.000
	WCR3_17	WCR3_93	WCR3_92	15.000	197.900	0.007	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	3,689,681.258	No	0.000	0.000
f	WCR3_18	WCR3_94	WCR3_93	15.000	235.700	0.021	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	6,598,520.663	No	0.000	0.000
Ħ	WCR3_19	WCR3 94A	WCR3 94	15.000	300.050	0.006	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	3,560,944.034	No	0.000	0.000
Ħ	WCR3 2	WCR3 81	WCR3 80	15.000	41.840	0.045	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	9,613,005.398	No	0.000	0.000
Ħ	WCR3 20	WCR3 95	WCR3 94A	15.000	130.720	0.007	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	3,866,044.802	No	0.000	0.000
Ħ	WCR3 21	WCR3_96	WCR3 95	15.000	399.710	0.007	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	3,657,549.957	No	0.000	0.000
Ħ	WCR3_22	WCR3 97	WCR3 96	15.000	343.810	0.007	0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	3,660,503.753	No	0.000	0.000
Ħ	WCR3 23	WCR3_98	WCR3 97	15.000	374.890	0.011	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	4,719,404.348	No	0.000	0.000
Ħ	WCR3 24	WCR3 99	WCR3 98	15.000	241.920	0.006	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	3,653,339.553	No	0.000	0.000
Ħ	WCR3 25	WCR3 100	WCR3 99	15.000	236.560	0.023	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	6,858,104.151	No	0.000	0.000
H	WCR3_26	WCR3_100A	WCR3 100	15.000	235.090	0.007	0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	3,670,450.588	No	0.000	0.000
H	WCR3_20 WCR3_27		WCR3 100A	15.000	244.690	0.006	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	3,655,666.350	No	0.000	0.000
H	WCR3_27 WCR3_28	WCR3 101	WCR3_100A	15.000	243.950	0.007	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	3,661,206.717	No	0.000	0.000
H	_		WCR3_100B	15.000	138.520	0.007	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	3,755,620.152	No	0.000	0.000
H	WCR3_29	WCR3_102 WCR3 82	_	15.000	68.170	0.007	0.000	0.000			0.000	0.000	0.000	0.000	0.000	3,643,391.080	No	0.000	0.000
H	WCR3_3		WCR3_81	15.000		0.000			Free Surface			0.000							
H	WCR3_30	WCR3_103	WCR3_102		184.390		0.000		Free Surface		0.000		0.000	0.000	0.000	5,009,549.547	No	0.000	0.000
뭐	WCR3_31	WCR3_I15	WCR3_103	15.000	335.280	0.007	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	3,656,794.225	No	0.000	0.000
닖	WCR3_32	WCR3_I14	WCR3_I15	15.000	141.390	0.011	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	4,839,268.180	No	0.000	0.000
닖	WCR3_33	WCR3_I13A	WCR3_I14	15.000	103.030	0.011	0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	4,685,873.845	No	0.000	0.000
늬	WCR3_34	WCR3_I13	WCR3_I13A	15.000	287.860	0.004	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	2,866,383.922	No	0.000	0.000
닖	WCR3_35	WCR3_I12	WCR3_I13	15.000	300.000	0.004	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	2,868,177.966	No	0.000	0.000
닖	WCR3_36	WCR3_I11	WCR3_I12	15.000	166.950	0.014	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	5,414,662.181	No	0.000	0.000
늬	WCR3_37	WCR3_I10	WCR3_I11	15.000	400.000	0.004	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	2,868,177.966	No	0.000	0.000
닖	WCR3_38	WCR3_I9	WCR3_I10	15.000	400.000	0.004	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	2,868,177.966	No	0.000	0.000
늬	WCR3_39	WCR3_I8	WCR3_I9	15.000	400.000	0.004	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	2,868,177.966	No	0.000	0.000
Ц	WCR3_4	WCR3_83	WCR3_82	15.000	417.560	0.006	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	3,653,434.289	No	0.000	0.000
닏	WCR3_40	WCR3_I7	WCR3_I8	15.000	400.000	0.005	0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	3,206,720.452	No	0.000	0.000
Ш	WCR3_41	WCR3_I6	WCR3_I7	15.000	361.260	0.005	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	3,210,003.073	No	0.000	0.000
	WCR3_42	WCR3_I5	WCR3_I6	15.000	314.500	0.005	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	3,214,358.542	No	0.000	0.000
	WCR3_43	WCR3_I4	WCR3_I5	15.000	314.500	0.014	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	5,388,368.141	No	0.000	0.000
	WCR3_44	WCR3-I_3	WCR3_I4	15.000	275.980	0.005	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	3,206,836.644	No	0.000	0.000
	WCR3_45	WCR3_I2	WCR3-I_3	15.000	160.140	0.005	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	3,205,318.432	No	0.000	0.000
	WCR3_46	WCR3_11A	WCR3_I2	15.000	432.890	0.004	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	2,883,409.647	No	0.000	0.000
	WCR3_47	WCR3_I1	WCR3_11A	15.000	92.930	0.005	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	3,359,566.322	No	0.000	0.000
	WCR3_48	WCR3_H134	WCR3_I1	15.000	91.980	0.006	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	3,474,771.708	No	0.000	0.000
	WCR3_49	WCR3_H135	WCR3_H134	12.000	399.920	0.012	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	2,791,092.806	No	0.000	0.000
	WCR3_5	WCR3_84	WCR3_83	15.000	224.580	0.007	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	3,656,511.879	No	0.000	0.000
	WCR3_50	WCR3_H136	WCR3_H135	12.000	283.570	0.006	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,976,071.522	No	0.000	0.000
$\mathbf{-}$							0.000	0.000	- 0 (	0.000	0.000	0.000	0.000	0.000	0.000	1 077 011 462	NI-	0.000	0.000
	WCR3_51	WCR3_H137	WCR3_H136	12.000	287.840	0.006	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,977,911.463	No	0.000	0.000

	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	/elocity (ft/s)	d/D	q/Q	Water Depth (ft)	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth	Adjusted Velocity
	WCR3_53	WCR3_H139	WCR3_H138	12.000	246.720	0.006	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,950,247.003	No	0.000	0.000
	WCR3_54	WCR3_H140	WCR3_H139	12.000	227.850	0.011	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	2,609,441.060	No	0.000	0.000
	WCR3_55	WCR3_H141	WCR3_H140	12.000	53.120	0.004	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,609,638.959	No	0.000	0.000
	WCR3_56	WCR3_H146	WCR3_H141	10.000	257.260	0.016	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,965,314.469	No	0.000	0.000
	WCR3_57	WCR3_H164	WCR3_H146	10.000	335.000	0.004	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	994,340.556	No	0.000	0.000
	WCR3_58	WCR3_H165	WCR3_H164	10.000	120.000	0.004	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	992,859.780	No	0.000	0.000
	WCR3_59	WCR3_H171	WCR3_H165	10.000	285.000	0.004	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	911,110.620	No	0.000	0.000
	WCR3 6	WCR3_85	WCR3_84	15.000	467.190	0.008	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	4,089,979.476	No	0.000	0.000
	WCR3 60	WCR3_184	WCR3_H171	10.000	159.830	0.008	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,387,190.371	No	0.000	0.000
	WCR3 61	WCR3_H185	WCR3 184	10.000	293.160	0.010	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,503,211.876	No	0.000	0.000
	WCR3 62		WCR3_H185	10.000	293.160	0.021	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	2,254,817.814	No	0.000	0.000
=	WCR3 63		WCR3_H186	10.000	51.940	0.021	0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	2,238,406.245	No	0.000	0.000
=	WCR3 64		WCR3_H187	8.000	231.710	0.006	0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	682,553.736	No	0.000	0.000
=	WCR3_65		WCR3_H188	8.000	363.310	0.007	0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	717,648.209	No	0.000	0.000
=	WCR3 66		WCR3_H189	8.000	195.020	0.007	0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	718,766.867	No	0.000	0.000
=	WCR3 67		WCR3_H190	8.000	278.060	0.006	0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	678,741.415	No	0.000	0.000
HI	_		WCR3_H191	8.000	256.990	0.011	0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	879,144.040	No	0.000	0.000
=	WCR3_68 WCR3_69	WCR3_H192A		8.000	280.180	0.011	0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	950,859.552	No	0.000	0.000
=	_			15.000	387.790	0.013	0.000	0.000			0.000	0.000	0.000	0.000	0.000	3,677,459.401	No	0.000	0.000
=	WCR3_7	WCR3_86	WCR3_85						Free Surface				0.000						
=	WCR3_70		WCR3_H192A	8.000	121.000	0.025	0.000	0.000	Free Surface		0.000	0.000		0.000	0.000	1,335,769.582	No	0.000	0.000
+	WCR3_71		WCR3_H193	8.000	327.200	0.012	0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	917,817.527	No	0.000	0.000
	WCR3_72		WCR3_H134	10.000	175.710	0.016	0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	1,958,924.643	No	0.000	0.000
	WCR3_73		WCR3_H133	10.000	145.240	0.006	0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	1,141,551.246	No	0.000	0.000
4	WCR3_74		WCR3_H132	10.000	65.280	0.009	0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	1,474,616.508	No	0.000	0.000
4	WCR3_75		WCR3_H131	8.000	235.650	0.014	0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	1,003,891.681	No	0.000	0.000
	WCR3_76		WCR3_H130	8.000	300.000	0.005	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	599,858.213	No	0.000	0.000
	WCR3_77	WCR3_H128	WCR3_H129	8.000	348.630	0.005	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	592,387.233	No	0.000	0.000
	WCR3_78	WCR3_H127	WCR3_H128	8.000	232.240	0.009	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	787,245.331	No	0.000	0.000
	WCR3_79	WCR3_H126	WCR3_H127	8.000	111.860	0.004	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	555,708.217	No	0.000	0.000
	WCR3_8	WCR3_86C	WCR3_86	15.000	192.490	0.010	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	4,529,211.774	No	0.000	0.000
	WCR3_80	WCR3_H125	WCR3_H126	8.000	163.480	0.005	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	600,811.475	No	0.000	0.000
	WCR3_9	WCR3_86B	WCR3_86C	15.000	303.380	0.009	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	4,301,936.044	No	0.000	0.000
	WCR5_10-WCR5_11	WCR5_10	WCR5_11	12.000	165.680	0.018	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	3,371,276.495	No	0.000	0.000
	WCR5 11-WCR5 12	WCR5_11	WCR5_12	12.000	374.150	0.018	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	3,369,443.514	No	0.000	0.000
	WCR5 12-WCR5 13	WCR5_12	WCR5_13	12.000	277.850	0.014	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	2,963,283.964	No	0.000	0.000
	WCR5 13-WCR5 14	WCR5_13	WCR5_14	12.000	196.370	0.010	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	2,460,284.883	No	0.000	0.000
Ħ	WCR5_14-WCR5_15	WCR5_14	WCR5 15	12.000	168.090	0.011	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	2,659,206.292	No	0.000	0.000
Ħ	WCR5 15-WCR5 16	WCR5_15	WCR5_16	12.000	371.750	0.016	0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	3,150,987.534	No	0.000	0.000
Ħ	WCR5 16-WCR5 17	WCR5_16	WCR5 17	12.000	306.640	0.013	0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	2,820,746.567	No	0.000	0.000
Ħ	WCR5 17-WCR5 18	WCR5_17	WCR5_18	12.000	346.280	0.011	0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	2,654,390.210	No	0.000	0.000
Ħ	WCR5 18-WCR5 19	WCR5 18	WCR5_19	12.000	195.440	0.020	0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	3,533,228.658	No	0.000	0.000
Ħ	WCR5 19-WCR5 20	WCR5_19	WCR5_20	12.000	730.040		0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	2,912,664.328	No	0.000	0.000
Ħ	WCR5 1-WCR5 2	WCR5_1	WCR5 2	10.000	1,986.790		0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	976,028.614	No	0.000	0.000
=	WCR5 20-WCR5 21	WCR5_20	WCR5_21	12.000	399.480		0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	2,134,740.756	No	0.000	0.000
=	WCR5_20-WCR5_21 WCR5_21-WCR5_22	WCR5_21	WCR5_22	12.000	1,025.410		0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	3,113,575.077	No	0.000	0.000
=	WCR5_21-WCR5_22 WCR5_22-WCR5_23	WCR5_21	WCR5_23	15.000	441.760	0.013	0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	2,046,935.507	No	0.000	0.000
=	WCR5_22-WCR5_23 WCR5_23-WCR5_24	WCR5_22 WCR5_23	WCR5_23	15.000	660.870	0.002	0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	4,284,933.502	No	0.000	0.000
=																			
=	WCR5_24-WCR5_25	WCR5_24	WCR5_25	15.000	866.430 411.850	0.006	0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	3,445,040.731	No No	0.000	0.000
=	WCR5_25-WCR5_26	WCR5_25	WCR5_26	15.000			0.000		Free Surface			0.000				3,183,864.549			
4	WCR5_26-WCR5_27	WCR5_26	WCR5_27	15.000	353.460		0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	3,181,856.484	No	0.000	0.000
4	WCR5_27-WCR5_28	WCR5_27	WCR5_28	15.000	231.180		0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	3,170,590.774	No	0.000	0.000
	WCR5_28-WCR5_29	WCR5_28	HWY52_5	15.000	1,193.690		0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	5,476,835.631	No	0.000	0.000
	WCR5_2-WCR5_3	WCR5_2	WCR5_3	10.000	539.910		0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	1,607,899.348	No	0.000	0.000
	WCR5_3-WCR5_4	WCR5_3	WCR5_4	10.000	1,192.000		0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	1,883,292.112	No	0.000	0.000
	WCR5_4-WCR5_5	WCR5_4	WCR5_5	12.000	580.040		0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	1,431,508.715	No	0.000	0.000
	WCR5_5-WCR5_6	WCR5_5	WCR5_6	12.000	871.120		0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	1,326,447.964	No	0.000	0.000
	WCR5_6-WCR5_7	WCR5_6	WCR5_7	12.000	443.620	0.003	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,327,686.733	No	0.000	0.000
	WCR5 7-WCR5 8	WCR5_7	WCR5_8	12.000	490.120	0.016	0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	3,175,473.560	No	0.000	0.000
						0.021	0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	3,648,356.247	No	0.000	0.000

ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth	Adjusted Velocity
WCR5_9-WCR5_10	WCR5_9	WCR5_10	12.000	822.970	0.022	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	3,688,762.390	No	0.000	0.000
WCR7_10-WCR7_11	WCR7_10	WCR7_11	8.000	541.220	0.007	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	720,126.831	No	0.000	0.000
WCR7_11-WCR7_12	WCR7_11	WCR7_12	8.000	386.680	0.005	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	594,654.285	No	0.000	0.000
WCR7_12-WCR7_13	WCR7_12	WCR7_13	10.000	582.070	0.010	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,548,573.905	No	0.000	0.000
WCR7_13-WCR7_14	WCR7_13	WCR7_14	10.000	686.300	0.009	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,426,141.262	No	0.000	0.000
WCR7_14-WCR7_15	WCR7_14	WCR7_15	10.000	269.660	0.007	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,291,106.520	No	0.000	0.000
WCR7_15-WCR7_16	WCR7_15	WCR7_16	10.000	495.150	0.008	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,382,468.177	No	0.000	0.000
WCR7_16-WCR7_17	WCR7_16	WCR7_17	10.000	307.790	0.006	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,195,701.456	No	0.000	0.000
WCR7_17-WCR7_18	WCR7_17	WCR7_18	10.000	565.400	0.003	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	877,454.384	No	0.000	0.000
WCR7_18-I25_36	WCR7_18	125_36	10.000	1,385.670	0.011	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,579,387.657	No	0.000	0.000
WCR7_1-WCR7_2	WCR7_1	WCR7_2	8.000	799.050	0.022	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,269,705.921	No	0.000	0.000
WCR7_2-WCR7_3	WCR7_2	WCR7_3	8.000	815.360	0.020	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,184,642.934	No	0.000	0.000
WCR7_3-WCR7_4	WCR7_3	WCR7_4	8.000	766.230	0.016	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,057,200.871	No	0.000	0.000
WCR7_4-WCR7_5	WCR7_4	WCR7_5	8.000	477.510	0.012	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	942,971.089	No	0.000	0.000
WCR7_5-WCR7_6	WCR7_5	WCR7_6	8.000	442.930	0.018	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,132,947.029	No	0.000	0.000
WCR7_6-WCR7_7	WCR7_6	WCR7_7	8.000	234.100	0.017	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,094,952.309	No	0.000	0.000
WCR7_7-WCR7_8	WCR7_7	WCR7_8	8.000	1,045.230	0.017	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,110,156.458	No	0.000	0.000
WCR7_8-WCR7_9	WCR7_8	WCR7_9	8.000	308.600	0.013	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	954,891.495	No	0.000	0.000
WCR7_9-WCR7_10	WCR7_9	WCR7_10	8.000	479.290	0.012	0.000	0.000	Free Surface	0.000	0.000		0.000	0.000	0.000	941,218.444	No	0.000	0.000

	ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
	AIF1_119	5,068.710	0.000	0.000	0.000	5,058.105	Not Full	Yes	-0.525	10.605
	ARF1_12	5,190.400	0.000	0.000	0.000	5,179.325	Not Full	Yes	-0.361	11.075
	ARF1_16	5,191.000	0.000	0.000	0.000	5,181.046	Not Full	No	-0.440	9.954
	ARF1_17	5,195.200	0.000	0.000	0.000	5,184.039	Not Full	No	-0.428	11.161
	ARF1_2	5,190.990	0.000	0.000	0.000	5,173.835	Not Full	Yes	-0.568	17.155
	ARF1_28	5,201.050	0.000	0.000	0.000	5,189.726	Not Full	No	-0.470	11.324
	ARF1_29	5,202.190	0.000	0.000	0.000	5,190.762	Not Full	No	-0.445	11.428
	ARF1_3	5,188.520	0.000	0.000	0.000	5,176.105	Not Full	No	-0.402	12.415
	ARF1_31	5,204.680	0.000	0.000	0.000	5,193.923	Not Full	No	-0.424	10.757
	ARF1_32	5,205.700	0.000	0.000	0.000	5,194.954	Not Full	No	-0.412	10.746
	ARF1_33	5,208.560	0.000	0.000	0.000	5,197.197	Not Full	No	-0.430	11.363
	ARF1_34	5,209.050	0.000	0.000	0.000	5,198.223	Not Full	No	-0.394	10.827
٦	ARF1_35	5,209.820	0.000	0.000	0.000	5,198.953	Not Full	Yes	-0.384	10.867
7	ARF1_36	5,213.560	0.000	0.000	0.000	5,201.344	Not Full	No	-0.422	12.216
7	ARF1_37	5,213.040	0.000	0.000	0.000	5,202.254	Not Full	No	-0.402	10.786
	ARF1_4	5,189.400	0.000	0.000	0.000	5,178.020	Not Full	No	-0.456	11.380
ī	ARF2_1	5,214.270	0.000	0.000	0.000	5,205.588	Not Full	No	-0.418	8.682
	ARF2_2	5,217.170	59,250.218	225,620.011	0.000	5,206.685	Not Full	No	-0.401	10.485
Ē	BFF1_61	5,112.000	0.000	0.000	0.000	5,100.440	Not Full	No	-0.667	11.560
	BFF1_62	5,110.000	0.000	0.000	0.000	5,098.440	Not Full	No	-0.667	11.560
1	BFF1_63	5,110.000	16,750.074	67,000.295	0.000	5,096.848	Not Full	No	-0.529	13.152
1	CCF3_39E	5,127.025	28,500.469	114,001.877	0.000	5,116.712	Not Full	No	-0.536	10.313
Ī	CCF3_60	5,134.515	0.000	0.000	0.000	5,123.515	Not Full	No	-0.833	11.000
	CCF3_60A	5,126.015	42,999.824	167,114.552	0.000	5,118.147	Not Full	No	-0.602	7.868
i	CCF4_41	5,130.900	36,750.226	144,266.023	0.000	5,119.318	Not Full	No	-0.428	11.582
	CCF4 42	5,139.500	0.000	0.000	0.000	5,127.781	Not Full	No	-0.536	11.719
1	CCF4_43	5,148.430	0.000	0.000	0.000	5,136.711	Not Full	No	-0.536	11.719
	CCF4 44	5,154.330	0.000	0.000	0.000	5,142.559	Not Full	No	-0.518	11.771
1	CCF4_45	5,160.270	0.000	0.000	0.000	5,148.499	Not Full	No	-0.518	11.771
	CCF6_105	5,098.110	163,118.819	528,373.057	0.000	5,087.055	Not Full	No	-0.675	11.055
1	CCF6_106	5,098.070	0.000	0.000	0.000	5,082.130	Not Full	No	-0.670	15.940
	CCF6_610	5,118.330	0.000	0.000	0.000	5,107.882	Not Full	No	-0.454	10.448
Ī	CCF6_611	5,120.270	0.000	0.000	0.000	5,109.711	Not Full	No	-0.446	10.559
	CCF6_612	5,123.450	0.000	0.000	0.000	5,112.276	Not Full	No	-0.451	11.174
Ī	CCF6_613	5,124.860	0.000	0.000	0.000	5,113.857	Not Full	No	-0.429	11.003
٦	CCF6_614	5,125.820	0.000	0.000	0.000	5,114.978	Not Full	No	-0.418	10.842
	CCF6_615	5,110.580	0.000	0.000	0.000	5,095.868	Not Full	No	-0.842	14.712
	CCF6_68	5,111.480	0.000	0.000	0.000	5,098.505	Not Full		-0.452	12.975
ij	CCF6_69	5,113.690	0.000	0.000	0.000	5,102.377	Not Full		-0.450	11.313
	CCF9_46	5,168.820	31,499.988	125,071.153	0.000	5,150.273	Not Full		-0.463	18.547
7	CFF1_17	5,094.225	0.000	0.000	0.000	5,082.902	Not Full		-0.893	11.323

ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
CFF1_18	5,096.025	0.000	0.000	0.000	5,085.239	Not Full	No	-0.896	10.786
CFF1_19	5,097.625	0.000	0.000	0.000	5,086.777	Not Full	No	-0.888	10.848
CFF1_19B1	5,098.735	0.000	0.000	0.000	5,087.732	Not Full	No	-0.703	11.003
CFF1_19B2	5,100.735	0.000	0.000	0.000	5,088.838	Not Full	No	-0.688	11.898
CFF1_20	5,101.125	0.000	0.000	0.000	5,089.669	Not Full	No	-0.696	11.456
CFF1_21	5,103.925	33,750.707	133,299.782	0.000	5,092.002	Not Full	No	-0.693	11.923
CFF1_22	5,106.175	0.000	0.000	0.000	5,093.663	Not Full	No	-0.702	12.512
CFF1_22A	5,112.405	0.000	0.000	0.000	5,100.620	Not Full	No	-0.619	11.785
CFF1_22B	5,106.965	0.000	0.000	0.000	5,095.280	Not Full	No	-0.618	11.685
CFF1_22C	5,104.765	56,250.699	215,559.751	0.000	5,093.045	Not Full	No	-0.554	11.720
CFF1_22D	5,107.255	0.000	0.000	0.000	5,095.055	Not Full	No	-0.833	12.200
CFF1_22E	5,106.875	0.000	0.000	0.000	5,096.885	Not Full	No	-0.833	9.990
CFF1_22F1	5,108.455	0.000	0.000	0.000	5,098.345	Not Full	No	-0.833	10.110
CFF1_23	5,105.785	0.000	0.000	0.000	5,095.091	Not Full	No	-0.714	10.694
CFF1_24	5,106.475	0.000	0.000	0.000	5,096.259	Not Full	No	-0.716	10.216
CFF1_25	5,107.655	0.000	0.000	0.000	5,097.654	Not Full	No	-0.711	10.001
CFF1_26	5,110.015	0.000	0.000	0.000	5,100.250	Not Full	No	-0.715	9.765
CFF1_27	5,113.825	0.000	0.000	0.000	5,103.575	Not Full	No	-0.720	10.250
CFF1_28	5,116.225	0.000	0.000	0.000	5,105.505	Not Full	No	-0.720	10.720
CFF1_29	5,122.135	0.000	0.000	0.000	5,109.242	Not Full	No	-0.773	12.893
CFF1_30	5,125.325	0.000	0.000	0.000	5,115.002	Not Full	No	-0.773	10.323
CFF1_31	5,128.455	0.000	0.000	0.000	5,116.604	Not Full	No	-0.721	11.851
CHF1A_22	5,068.620	73,249.892	269,117.000	0.000	5,055.905	Not Full	No	-1.095	12.715
CHF1A_23	5,070.640	0.000	0.000	0.000	5,052.596	Not Full	No	-1.114	18.044
CHF1A_24	5,052.800	0.000	0.000	0.000	5,042.476	Not Full	No	-1.024	10.324
CHF1A_25	5,050.970	0.000	0.000	0.000	5,039.323	Not Full	No	-0.977	11.647
CHF1A_A1A	5,049.900	0.000	0.000	0.000	5,038.436	Not Full	No	-0.974	11.464
CHF1A_C1	5,075.600	0.000	0.000	0.000	5,061.712	Not Full	No	-1.208	13.888
CHF1B_12	5,105.600	0.000	0.000	0.000	5,083.662	Not Full	No	-1.148	21.938
CHF1B_14A	5,122.490	0.000	0.000	0.000	5,102.128	Not Full	No	-1.112	20.362
CHF1B_15A	5,119.230	0.000	0.000	0.000	5,102.975	Not Full	No	-0.725	16.255
CHF1B_17	5,116.660	0.000	0.000	0.000	5,099.440	Not Full	No	-1.000	17.220
CHF1B_18	5,112.550	22,999.671	91,998.685	0.000	5,097.026	Not Full	No	-1.164	15.524
CHF1B 20	5,085.470	0.000	0.000	0.000	5,074.081	Not Full		-1.139	11.389
CHF3A_15	5,125.860	0.000	0.000	0.000	5,104.201	Not Full	No	-0.869	21.659
CHF3A_15B	5,119.230	0.000	0.000	0.000	5,103.515	Not Full		-0.865	15.715
CHF3C_8	5,125.190	0.000	0.000	0.000	5,116.323	Not Full		-0.967	8.867
CHF3C_9	5,124.720	0.000	0.000	0.000	5,114.843	Not Full		-0.947	9.877
CMF2_22G	5,109.075	0.000	0.000	0.000	5,099.925	Not Full		-0.833	9.150
CMF2_32	5,114.005	0.000	0.000	0.000	5,102.255	Not Full		-0.593	11.750
CMF2_33	5,113.055	0.000	0.000	0.000	5,103.073	Not Full		-0.546	9.982

ID ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
CMF2_34	5,113.115	0.000	0.000	0.000	5,103.408	Not Full	No	-0.540	9.707
CMF2_35	5,114.465	0.000	0.000	0.000	5,104.144	Not Full	Yes	-0.554	10.321
CMF2_36	5,117.345	0.000	0.000	0.000	5,107.054	Not Full	No	-0.614	10.291
CMF2_37	5,118.695	0.000	0.000	0.000	5,108.408	Not Full	No	-0.611	10.287
CMF2_38	5,119.295	0.000	0.000	0.000	5,108.979	Not Full	No	-0.599	10.316
CMF2_39	5,120.035	0.000	0.000	0.000	5,109.775	Not Full	No	-0.594	10.260
CMF2_39A	5,121.225	0.000	0.000	0.000	5,110.411	Not Full	Yes	-0.537	10.814
CMF2_39B	5,120.725	0.000	0.000	0.000	5,114.225	Not Full	No	-0.634	6.500
CMF2_39C	5,124.225	0.000	0.000	0.000	5,115.023	Not Full	No	-0.535	9.202
CMF2_39D	5,128.225	0.000	0.000	0.000	5,115.772	Not Full	No	-0.536	12.453
COMPF1_101	5,102.060	130,749.071	438,630.099	0.000	5,084.700	Not Full	No	-0.660	17.360
CSF1_C2A	5,068.715	0.000	0.000	0.000	5,050.091	Not Full	Yes	-0.974	18.624
CSF1_C2C	5,068.425	0.000	0.000	0.000	5,050.296	Not Full	No	-1.109	18.129
CSF1_C3A	5,080.635	0.000	0.000	0.000	5,068.116	Not Full	No	-1.029	12.519
CSF1_C3B	5,076.545	0.000	0.000	0.000	5,066.954	Not Full	No	-1.001	9.591
CSF1_C4B	5,073.805	0.000	0.000	0.000	5,065.299	Not Full	No	-1.036	8.506
CSF1_C5B	5,073.395	0.000	0.000	0.000	5,063.429	Not Full	No	-1.056	9.966
CSF1_C6C	5,069.785	44,075.503	171,047.237	0.000	5,062.469	Not Full	Yes	-0.966	7.316
ECF1_100	5,047.600	0.000	0.000	0.000	5,025.384	Not Full	No	-1.586	22.216
ECF1_102	5,047.000	0.000	0.000	0.000	5,024.957	Not Full	No	-1.563	22.043
ECF1_108	5,032.950	107,999.959	373,521.459	0.000	5,017.985	Not Full	No	-1.845	14.965
ECF1_118	5,028.750	0.000	0.000	0.000	5,020.774	Not Full	No	-0.516	7.976
ECF1_119	5,026.890	0.000	0.000	0.000	5,018.230	Not Full	Yes	-0.500	8.660
ECF1_2271	5,029.400	43,097.744	167,472.548	0.000	5,010.454	Not Full	Yes	-1.316	18.946
ECF1_24	5,038.000	0.000	0.000	0.000	5,028.060	Not Full	No	-1.340	9.940
ECF1_25	5,035.470	0.000	0.000	0.000	5,026.552	Not Full	No	-1.518	8.918
ECF1_26	5,036.230	0.000	0.000	0.000	5,023.919	Not Full	No	-1.691	12.311
ECF1_27	5,033.480	0.000	0.000	0.000	5,022.197	Not Full	No	-1.873	11.283
ECF1_28	5,032.150	0.000	0.000	0.000	5,014.820	Not Full	No	-1.850	17.330
ECF1_29	5,030.800	0.000	0.000	0.000	5,011.587	Not Full	No	-1.783	19.213
ECF1_44	5,039.800	0.000	0.000	0.000	5,027.422	Not Full	No	-1.328	12.378
ECF1_97	5,040.000	0.000	0.000	0.000	5,027.035	Not Full	No	-1.365	12.965
ECF1A2_131	5,060.000	22,374.712	89,498.846	0.000	5,048.881	Not Full	No	-0.449	11.119
ECF1A2_132	5,059.800	0.000	0.000	0.000	5,046.765	Not Full	Yes	-0.365	13.035
ECF21_120	5,065.390	210,160.721	653,853.116	0.000	5,056.164	Not Full	No	-0.396	9.226
ECF21_121	5,065.000	0.000	0.000	0.000	5,054.923	Not Full	No	-0.357	10.077
ECF21_123	5,065.000	0.000	0.000	0.000	5,053.478	Not Full	No	-0.402	11.522
ECF21_124	5,065.000	0.000	0.000	0.000	5,051.955	Not Full		-0.395	13.045
ECF21_130	5,062.000	0.000	0.000	0.000	5,050.483	Not Full		-0.347	11.517
ECF21_131	5,050.560	0.000	0.000	0.000	5,033.259	Not Full		-0.508	17.301
ECF21_132	5,050.500	0.000	0.000	0.000	5,032.163	Not Full	No	-0.503	18.337

	ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
	ECF21_133	5,050.800	0.000	0.000	0.000	5,030.145	Not Full	Yes	-1.355	20.655
	ECF21_22A	5,054.700	0.000	0.000	0.000	5,033.194	Not Full	No	-1.316	21.506
	ECF21_23	5,050.000	0.000	0.000	0.000	5,029.626	Not Full	No	-1.374	20.374
	ECF21_24	5,050.000	0.000	0.000	0.000	5,029.905	Not Full	No	-1.355	20.095
	ECF21_9	5,047.000	17,749.433	70,997.733	0.000	5,028.813	Not Full	No	-1.487	18.187
	ECF3_217	5,026.385	0.000	0.000	0.000	5,017.259	Not Full	Yes	-0.846	9.126
	ECF3_218	5,027.535	0.000	0.000	0.000	5,016.028	Not Full	No	-0.907	11.507
	ECF4_133	5,060.500	0.000	0.000	0.000	5,044.788	Not Full	No	-0.392	15.712
	ECF4_134	5,053.280	0.000	0.000	0.000	5,043.252	Not Full	No	0.272	10.028
	ECF4_135	5,056.270	23,925.591	95,702.364	0.000	5,042.096	Not Full	Yes	-0.424	14.174
	ECF5_204	5,046.995	0.000	0.000	0.000	5,036.100	Not Full	No	-1.075	10.895
	ECF5_205	5,049.085	0.000	0.000	0.000	5,035.172	Not Full	No	-1.075	13.913
	ECF5_208	5,047.375	0.000	0.000	0.000	5,032.740	Not Full	No	-1.075	14.635
	ECF5_209	5,042.395	0.000	0.000	0.000	5,032.273	Not Full	Yes	-0.902	10.122
П	ECF5_213	5,046.395	0.000	0.000	0.000	5,031.712	Not Full	No	-0.903	14.683
П	ECF5_214	5,041.285	55,827.339	214,011.948	0.000	5,031.132	Not Full	No	-0.913	10.153
	ECF5_215	5,041.125	0.000	0.000	0.000	5,029.593	Not Full	No	-1.082	11.532
П	ECF5_216	5,036.155	0.000	0.000	0.000	5,023.092	Not Full	No	-1.083	13.063
	EHF1_2	5,109.900	0.000	0.000	0.000	5,099.384	Not Full	No	-0.383	10.516
	EHF1_3	5,108.400	0.000	0.000	0.000	5,100.544	Not Full	No	-0.422	7.856
	EHF1_4	5,112.700	0.000	0.000	0.000	5,101.942	Not Full	Yes	-0.424	10.758
	EHF1_5	5,115.000	0.000	0.000	0.000	5,103.567	Not Full	No	-0.500	11.433
	EHF1_6	5,118.300	0.000	0.000	0.000	5,107.041	Not Full	No	-0.526	11.259
	EHF1_7	5,127.100	0.000	0.000	0.000	5,114.647	Not Full	No	-0.520	12.453
	EHF1_8	5,131.700	0.000	0.000	0.000	5,120.467	Not Full	No	-0.500	11.233
	EHF10_11	5,145.910	0.000	0.000	0.000	5,131.880	Not Full	No	-0.496	14.030
	EHF10_12	5,147.180	0.000	0.000	0.000	5,132.956	Not Full	No	-0.461	14.224
	EHF10_13	5,149.870	0.000	0.000	0.000	5,135.142	Not Full	No	-0.494	14.728
	EHF10_14	5,149.450	0.000	0.000	0.000	5,136.358	Not Full	No	-0.449	13.092
	EHF10_15	5,150.380	0.000	0.000	0.000	5,137.589	Not Full	No	-0.448	12.791
	EHF10_16	5,151.800	0.000	0.000	0.000	5,138.788	Not Full	No	-0.448	13.012
	EHF10_17	5,152.630	0.000	0.000	0.000	5,139.551	Not Full	No	-0.436	13.079
	EHF10_18	5,153.120	0.000	0.000	0.000	5,140.043	Not Full	Yes	-0.443	13.077
	EHF11_146	5,162.560	35,999.986	141,523.147	0.000	5,146.420	Not Full	No	-0.446	16.140
	EHF11_147	5,158.690	0.000	0.000	0.000	5,145.382	Not Full	No	-0.465	13.308
同	EHF11_148	5,153.110	0.000	0.000	0.000	5,143.254	Not Full	No	-0.472	9.856
f	EHF3_10	5,147.800	0.000	0.000	0.000	5,136.341	Not Full	No	-0.525	11.459
f	EHF3_11	5,159.100	0.000	0.000	0.000	5,146.546	Not Full	No	-0.521	12.554
f	EHF3_12	5,169.300	0.000	0.000	0.000	5,149.599	Not Full	No	-0.467	19.701
同	EHF3_42	5,168.000	0.000	0.000	0.000	5,150.643	Not Full	Yes	-0.424	17.357
f	EHF3_9	5,136.500	0.000	0.000	0.000	5,125.178	Not Full	No	-0.488	11.322

ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
EHF4_1	5,109.600	0.000	0.000	0.000	5,098.760	Not Full	No	-0.507	10.840
EHF7_1	5,166.480	0.000	0.000	0.000	5,151.665	Not Full	No	-0.432	14.815
EHF7_6	5,164.680	43,250.384	168,030.599	0.000	5,153.267	Not Full	No	-0.430	11.413
EHF9_1	5,078.280	0.000	0.000	0.000	5,068.409	Not Full	No	-0.538	9.871
EHF9_10	5,140.060	0.000	0.000	0.000	5,128.204	Not Full	No	-0.483	11.856
EHF9_19	5,155.080	0.000	0.000	0.000	5,141.762	Not Full	No	-0.455	13.318
EHF9_2	5,102.420	0.000	0.000	0.000	5,085.915	Not Full	No	-0.542	16.505
EHF9_3	5,107.570	0.000	0.000	0.000	5,095.693	Not Full	No	-0.544	11.877
EHF9_4	5,118.840	0.000	0.000	0.000	5,103.564	Not Full	No	-0.543	15.276
EHF9_5	5,127.680	0.000	0.000	0.000	5,115.784	Not Full	No	-0.543	11.896
EHF9_6	5,127.520	0.000	0.000	0.000	5,117.178	Not Full	No	-0.479	10.342
EHF9_7	5,137.990	0.000	0.000	0.000	5,123.716	Not Full	No	-0.531	14.274
EHF9_8	5,137.740	0.000	0.000	0.000	5,125.594	Not Full	No	-0.493	12.146
EHF9_9	5,139.150	0.000	0.000	0.000	5,127.324	Not Full	No	-0.493	11.826
EP_1	5,194.550	50,014.061	192,758.604	0.000	5,181.979	Not Full	No	-0.488	12.571
EP_2	5,134.160	137,936.108	458,933.479	0.000	5,121.177	Not Full	No	-0.300	12.983
EP_3	5,114.460	0.000	0.000	0.000	5,101.961	Not Full	No	-0.316	12.499
EVF1 7	4,998.450	47,000.142	181,739.717	0.000	4,988.419	Not Full	No	-0.564	10.031
EVF1A1 51	5,012.830	0.000	0.000	0.000	4,997.161	Not Full	No	-1.019	15.669
EVF1A1_52	5,010.640	0.000	0.000	0.000	4,996.549	Not Full	No	-0.711	14.091
EVF1A2 1	5,014.410	0.000	0.000	0.000	4,997.981	Not Full	No	-0.819	16.429
EVF1A2 50	5,014.510	0.000	0.000	0.000	4,997.850	Not Full	No	-0.750	16.660
EVF2_1A	4,997.540	0.000	0.000	0.000	4,985.020	Not Full	No	-1.000	12.520
EVF2 2	4,996.690	0.000	0.000	0.000	4,985.219	Not Full	Yes	-0.761	11.471
EVF2_3	4,996.740	0.000	0.000	0.000	4,986.275	Not Full	No	-0.805	10.465
EVF2_4	4,998.320	0.000	0.000	0.000	4,986.420	Not Full	No	-0.554	11.900
EVF2_4A	4,994.440	15,249.594	60,998.377	0.000	4,983.351	Not Full	No	-0.659	11.089
EVF2_5	4,994.950	0.000	0.000	0.000	4,983.903	Not Full	No	-0.737	11.047
EVF2_5A	4,998.320	0.000	0.000	0.000	4,987.033	Not Full	No	-0.570	11.287
EVF2_6	4,997.130	0.000	0.000	0.000	4,987.731	Not Full	No	-0.563	9.399
EVF2_6A	4,995.080	0.000	0.000	0.000	4,984.114	Not Full	No	-0.766	10.966
EVF2_7	4,995.890	0.000	0.000	0.000	4,984.378	Not Full	No	-0.732	11.512
EVF2 8	4,996.820	0.000	0.000	0.000	4,984.681	Not Full		-0.749	12.139
EVF3_47	5,015.880	0.000	0.000	0.000	4,998.829	Not Full	No	-0.801	17.051
EVF3 48	5,014.910	0.000	0.000	0.000	4,998.319	Not Full		-0.811	16.591
EVF4 46	5,017.080	50,718.221	195,333.012	0.000	4,999.342	Not Full		-0.808	17.738
FMF4_4_4	5,116.700	0.000	0.000	0.000	5,105.362	Not Full		-0.638	11.338
FMF6 1	5,127.260	0.000	0.000	0.000	5,114.703	Not Full		-0.503	12.557
FMF6_2	5,129.260	0.000	0.000	0.000	5,116.777	Not Full		-0.410	12.483
FMF6_4_6	5,124.560	47,999.502	185,393.375	0.000	5,106.552	Not Full		-0.648	18.008
FMF7_3	5,131.760	0.000	0.000	0.000	5,119.533	Not Full		-0.393	12.227

ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
FMF7_4	5,136.220	0.000	0.000	0.000	5,123.596	Not Full	No	-0.391	12.624
FMF7_5	5,140.390	0.000	0.000	0.000	5,127.240	Not Full	No	-0.396	13.150
FMF8_1	5,148.970	0.000	0.000	0.000	5,136.234	Not Full	No	-0.503	12.736
FMF8_10	5,160.550	0.000	0.000	0.000	5,145.627	Not Full	No	-0.329	14.923
FMF8_11	5,159.940	45,499.663	176,253.964	0.000	5,146.078	Not Full	No	-0.329	13.862
FMF8_2	5,149.930	0.000	0.000	0.000	5,137.284	Not Full	No	-0.402	12.646
FMF8_3	5,151.500	0.000	0.000	0.000	5,138.939	Not Full	No	-0.408	12.561
FMF8_4	5,153.490	0.000	0.000	0.000	5,140.064	Not Full	No	-0.393	13.426
FMF8_6	5,146.040	0.000	0.000	0.000	5,130.132	Not Full	No	-0.435	15.908
FMF8_8	5,155.950	0.000	0.000	0.000	5,143.594	Not Full	No	-0.433	12.356
FMF8_9	5,159.460	0.000	0.000	0.000	5,145.026	Not Full	No	-0.340	14.434
FMF9_1	5,189.630	0.000	0.000	0.000	5,172.355	Not Full	No	-0.419	17.275
FMF9_10	5,162.750	0.000	0.000	0.000	5,153.953	Not Full	No	-0.494	8.797
FMF9_11	5,164.610	0.000	0.000	0.000	5,150.556	Not Full	No	-0.471	14.054
FMF9_12	5,162.750	0.000	0.000	0.000	5,148.455	Not Full	No	-0.471	14.295
FMF9_13	5,162.520	0.000	0.000	0.000	5,147.930	Not Full	No	-0.477	14.590
FMF9_15	5,172.560	34,616.147	136,463.830	0.000	5,159.790	Not Full	No	-0.467	12.770
FMF9_22	5,178.510	0.000	0.000	0.000	5,158.052	Not Full	Yes	-0.434	20.458
FMF9_23	5,173.130	0.000	0.000	0.000	5,159.326	Not Full	No	-0.470	13.804
FMF9_3	5,162.290	0.000	0.000	0.000	5,147.347	Not Full	Yes	-0.450	14.943
FMF9_35	5,174.800	0.000	0.000	0.000	5,158.869	Not Full	No	-0.457	15.931
FMF9_9	5,174.730	0.000	0.000	0.000	5,156.452	Not Full	No	-0.475	18.278
GVF1_0	5,069.880	18,999.353	75,997.411	0.000	5,061.176	Not Full	No	-0.520	8.704
GVF1_100	5,086.630	0.000	0.000	0.000	5,074.887	Not Full	No	-0.380	11.743
GVF1_101	5,083.880	0.000	0.000	0.000	5,072.217	Not Full	No	-0.329	11.663
GVF1_102	5,079.520	0.000	0.000	0.000	5,067.935	Not Full	No	-0.321	11.585
GVF1_103	5,078.780	0.000	0.000	0.000	5,067.151	Not Full	No	-0.286	11.629
GVF1_104	5,078.130	0.000	0.000	0.000	5,066.445	Not Full	No	-0.392	11.685
GVF1_105	5,074.200	0.000	0.000	0.000	5,062.398	Not Full	No	-0.418	11.802
GVF1_106	5,071.440	0.000	0.000	0.000	5,059.624	Not Full	No	-0.402	11.816
GVF1_107	5,070.010	0.000	0.000	0.000	5,058.055	Not Full	No	-0.422	11.955
GVF1_108	5,064.570	0.000	0.000	0.000	5,052.803	Not Full	No	-0.374	11.767
GVF1_109	5,062.860	0.000	0.000	0.000	5,050.533	Not Full	No	-0.474	12.327
GVF1_111	5,041.130	0.000	0.000	0.000	5,029.741	Not Full	No	-0.356	11.389
GVF1_113	5,037.460	0.000	0.000	0.000	5,025.780	Not Full	No	-0.297	11.680
GVF1_114	5,036.980	0.000	0.000	0.000	5,025.180	Not Full	No	-0.306	11.800
GVF1_115	5,036.250	0.000	0.000	0.000	5,024.218	Not Full	No	-0.329	12.032
GVF1_116	5,036.640	0.000	0.000	0.000	5,023.373	Not Full	Yes	-0.487	13.267
GVF1_117	5,036.520	60,750.697	230,282.000	0.000	5,022.970	Not Full	No	-0.530	13.550
GVF1_36	5,063.750	0.000	0.000	0.000	5,049.793	Not Full	No	-0.433	13.957
GVF1_37	5,061.780	0.000	0.000	0.000	5,047.668	Not Full	No	-0.419	14.112

ID		Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
GVF1	_40	5,062.570	0.000	0.000	0.000	5,046.656	Not Full	No	-0.431	15.914
GVF1	_41	5,060.770	0.000	0.000	0.000	5,045.716	Not Full	No	-0.460	15.054
GVF1	48	5,053.840	0.000	0.000	0.000	5,041.977	Not Full	No	-0.460	11.863
GVF1	_50	5,052.490	0.000	0.000	0.000	5,039.648	Not Full	No	-0.469	12.842
GVF1	_51	5,052.020	39,599.985	154,684.742	0.000	5,035.165	Not Full	Yes	-0.499	16.855
GVF1	_52	5,051.260	0.000	0.000	0.000	5,034.346	Not Full	No	-0.507	16.914
GVF1	_53	5,049.200	0.000	0.000	0.000	5,033.829	Not Full	No	-0.535	15.371
GVF1	_56	5,047.700	0.000	0.000	0.000	5,033.221	Not Full	Yes	-0.493	14.479
GVF1	_57	5,046.840	0.000	0.000	0.000	5,032.840	Not Full	No	-0.493	14.000
GVF1	_58	5,044.590	0.000	0.000	0.000	5,032.119	Not Full	No	-0.525	12.471
GVF1	_59	5,042.030	0.000	0.000	0.000	5,031.170	Not Full	Yes	-0.514	10.860
GVF1	60	5,038.910	0.000	0.000	0.000	5,030.131	Not Full	No	-0.649	8.779
GVF1		5,040.570	0.000	0.000	0.000	5,029.499	Not Full	No	-0.701	11.071
GVF1	78	5,041.100	0.000	0.000	0.000	5,029.022	Not Full	No	-0.628	12.078
GVF1		5,041.000	0.000	0.000	0.000	5,028.338	Not Full	No	-0.632	12.662
GVF1		5,038.390	0.000	0.000	0.000	5,027.604	Not Full	No	-0.646	10.786
GVF1	_	5,037.800	0.000	0.000	0.000	5,027.234	Not Full	No	-0.786	10.566
GVF1		5,106.750	103,750.521	361,019.612	0.000	5,094.322	Not Full	No	-0.364	12.428
GVF1	_	5,104.310	0.000	0.000	0.000	5,092.593	Not Full	No	-0.404	11.717
GVF1		5,099.330	0.000	0.000	0.000	5,087.688	Not Full	No	-0.409	11.642
GVF1	_	5,095.600	0.000	0.000	0.000	5,083.563	Not Full	No	-0.434	12.037
GVF1		5,090.720	0.000	0.000	0.000	5,078.873	Not Full	No	-0.434	11.847
HWY5	_	5,018.000	93,516.445	330,910.960	0.000	5,004.841	Not Full	No	-0.919	13.159
HWY52		4,949.000	14,166.715	56,666.859	0.000	4,936.837	Not Full	No	-0.663	12.163
HWY52	_	4,945.000	118,285.875	403,421.572	0.000	4,933.509	Not Full	No	-0.641	11.491
HWY52		4,942.120	0.000	0.000	0.000	4,930.008	Not Full	No	-1.142	12.112
HWY5	_	5,035.250	0.000	0.000	0.000	5,000.116	Not Full	No	-0.994	35.134
HWY5		5,025.320	0.000	0.000	0.000	4,998.045	Not Full	No	-1.005	27.275
HWY5	_	5,010.170	0.000	0.000	0.000	4,992.229	Not Full	Yes	-0.921	17.941
HWY5		5,002.380	495,303.654	1,343,754.722	0.000	4,981.904	Not Full	No	-1.286	20.476
HWY5	_	4,990.000	0.000	0.000	0.000	4,972.448	Not Full	No	-0.792	17.552
HWY5		4,977.000	0.000	0.000	0.000	4,965.178	Not Full	No	-0.792	11.822
HWY5	_	4,979.360	154,282.982	504,198.208	0.000	4,960.086	Not Full	No	-1.064	19.274
HWY5		4,948.500	0.000	0.000	0.000	4,939.670	Not Full		-0.650	8.830
125	_	5,220.000	59,018.378	224,899.684	0.000	5,206.734	Not Full		-0.433	13.266
125_		5,156.010	0.000	0.000	0.000	5,147.737	Not Full		-0.543	8.273
125_		5,154.000	0.000	0.000	0.000	5,146.784	Not Full		-0.566	7.216
125_		5,155.000	0.000	0.000	0.000	5,145.478	Not Full		-0.542	9.522
125_		5,155.070	0.000	0.000	0.000	5,145.148	Not Full		-0.532	9.922
125_		5,157.090	226,265.675	695,774.311	0.000	5,144.907	Not Full		-0.363	12.183
125_		5,158.050	0.000	0.000	0.000	5,144.506	Not Full		-0.364	13.544

	ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
125	5_16	5,176.000	0.000	0.000	0.000	5,143.180	Not Full	No	-0.360	32.820
125	5_17	5,153.000	164,607.778	532,446.850	0.000	5,140.796	Not Full	No	-1.024	12.204
125	5_18	5,120.000	0.000	0.000	0.000	5,106.900	Not Full	No	-1.000	13.100
125	5_19	5,101.320	128,851.151	433,268.477	0.000	5,092.897	Not Full	Yes	-0.603	8.423
12	5_2	5,192.000	231,396.393	709,077.753	0.000	5,178.886	Not Full	No	-0.281	13.114
125	5_20	5,100.300	0.000	0.000	0.000	5,091.218	Not Full	No	-0.602	9.082
125	5_21	5,104.180	0.000	0.000	0.000	5,086.411	Not Full	No	-0.739	17.769
125	5_22	5,091.630	0.000	0.000	0.000	5,079.381	Not Full	No	-0.899	12.249
125	5_23	5,065.480	137,892.908	458,811.439	0.000	5,053.592	Not Full	No	-0.638	11.888
125	5_24	5,058.000	0.000	0.000	0.000	5,046.158	Not Full	Yes	-0.742	11.842
125	5_25	5,060.930	0.000	0.000	0.000	5,044.986	Not Full	No	-0.744	15.944
125	5_26	5,061.820	142,845.066	472,801.286	0.000	5,043.555	Not Full	No	-1.025	18.265
125	5_27	5,053.670	0.000	0.000	0.000	5,040.505	Not Full	No	-0.865	13.165
125	5_28	5,057.640	0.000	0.000	0.000	5,038.980	Not Full	No	-0.770	18.660
125	5_29	5,053.000	144,267.786	476,796.631	0.000	5,037.447	Not Full	No	-1.203	15.553
	5_3	5,183.000	0.000	0.000	0.000	5,169.975	Not Full	Yes	-0.425	13.025
125	5_30	5,029.050	117,885.556	402,290.669	0.000	5,019.189	Not Full	Yes	-0.701	9.861
	_ 5_31	5,046.550	0.000	0.000	0.000	5,016.315	Not Full	No	-0.705	30.235
	5_32	5,046.000	0.000	0.000	0.000	5,015.608	Not Full	No	-0.702	30.392
	5_33	5,050.000	0.000	0.000	0.000	5,014.978	Not Full	No	-0.702	35.022
		5,033.000	0.000	0.000	0.000	5,013.319	Not Full	No	-0.701	19.681
	5_35	5,033.180	0.000	0.000	0.000	5,011.496	Not Full	No	-0.874	21.684
		5,024.780	0.000	0.000	0.000	5,007.650	Not Full	Yes	-0.740	17.130
	5_4	5,181.940	158,692.260	516,261.993	0.000	5,168.904	Not Full	No	-0.496	13.036
	5_5	5,180.000	0.000	0.000	0.000	5,166.906	Not Full	No	-0.494	13.094
	5_6	5,176.000	0.000	0.000	0.000	5,163.918	Not Full	No	-0.482	12.082
	5_7	5,172.980	0.000	0.000	0.000	5,160.609	Not Full	No	-0.481	12.371
	5_8	5,171.000	0.000	0.000	0.000	5,158.099	Not Full	Yes	-0.551	12.901
	5_9	5,168.930	292,603.570	863,544.350	0.000	5,155.915	Not Full	No	-0.665	13.015
	F1 1	4,993.140	0.000	0.000	0.000	4,982.466	Not Full	No	-0.584	10.674
	- 1_10	4,994.650	6,000.478	24,001.911	0.000	4,982.856	Not Full	No	-0.894	11.794
	- 1_1A	4,992.460	0.000	0.000	0.000	4,987.630	Not Full	No	-1.000	4.830
	F1 2	4,992.940	0.000	0.000	0.000	4,982.714	Not Full	No	-0.566	10.226
	- 1 2A	4,993.170	0.000	0.000	0.000	4,986.910	Not Full		-1.000	6.260
	F1 3	4,992.980	0.000	0.000	0.000	4,982.777	Not Full	No	-0.633	10.203
	1_3A	4,992.130	0.000	0.000	0.000	4,986.450	Not Full		-1.000	5.680
	F1_4	4,992.310	0.000	0.000	0.000	4,985.750	Not Full		-1.000	6.560
	F1_5	4,991.820	0.000	0.000	0.000	4,985.470	Not Full		-1.000	6.350
	F1_6	4,991.120	0.000	0.000	0.000	4,985.080	Not Full		-1.000	6.040
	F1_7	4,992.280	0.000	0.000	0.000	4,984.100	Not Full		-1.000	8.180
	F1_8	4,992.920	0.000	0.000	0.000	4,983.870	Not Full		-1.000	9.050

ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
KEF1_80	4,993.540	0.000	0.000	0.000	4,982.034	Not Full	No	-0.596	11.506
KEF1_81	4,992.760	0.000	0.000	0.000	4,981.719	Not Full	No	-0.591	11.041
KEF1_82	4,990.810	0.000	0.000	0.000	4,981.017	Not Full	No	-0.563	9.793
KEF1_83	4,989.710	0.000	0.000	0.000	4,980.344	Not Full	No	-0.686	9.366
KEF1_9	4,994.310	0.000	0.000	0.000	4,983.190	Not Full	No	-1.000	11.120
KFF1_10	4,997.270	59,250.218	225,620.011	0.000	4,983.957	Not Full	No	-0.673	13.313
KFF1_11	4,998.630	0.000	0.000	0.000	4,984.070	Not Full	No	-1.000	14.560
KFF1_14	5,000.070	0.000	0.000	0.000	4,984.910	Not Full	No	-1.000	15.160
KFF1_15	5,000.120	0.000	0.000	0.000	4,986.020	Not Full	No	-1.000	14.100
KFF1_16	5,001.010	0.000	0.000	0.000	4,986.750	Not Full	No	-1.000	14.260
KFF1_9	4,995.240	0.000	0.000	0.000	4,983.349	Not Full	No	-0.691	11.891
LCFA_1	5,012.427	0.000	0.000	0.000	4,996.971	Not Full	Yes	-0.979	15.456
LCFA_10	5,023.387	0.000	0.000	0.000	5,010.596	Not Full	No	-0.437	12.791
LCFA_11	5,026.087	0.000	0.000	0.000	5,013.416	Not Full	No	-0.438	12.671
LCFA_12	5,027.167	0.000	0.000	0.000	5,014.423	Not Full	No	-0.421	12.744
LCFA_13	5,028.197	0.000	0.000	0.000	5,015.660	Not Full	No	-0.444	12.537
LCFA_14	5,030.217	0.000	0.000	0.000	5,017.404	Not Full	No	-0.430	12.813
LCFA_15	5,031.377	0.000	0.000	0.000	5,018.732	Not Full	No	-0.432	12.645
LCFA_16	5,033.227	0.000	0.000	0.000	5,020.411	Not Full	No	-0.453	12.816
LCFA_17	5,041.107	48,278.862	186,414.715	0.000	5,029.163	Not Full	No	-0.511	11.944
LCFA 3	5,013.587	0.000	0.000	0.000	5,002.040	Not Full	No	-0.454	11.547
LCFA_4	5,016.087	0.000	0.000	0.000	5,003.272	Not Full	No	-0.291	12.815
LCFA_5	5,016.697	10,500.476	42,001.904	0.000	5,004.665	Not Full	No	-0.298	12.032
LCFA_6	5,018.577	0.000	0.000	0.000	5,005.639	Not Full	Yes	-0.345	12.938
LCFA 7	5,018.577	0.000	0.000	0.000	5,006.612	Not Full		-0.372	11.965
LCFA_8	5,019.587	0.000	0.000	0.000	5,007.423	Not Full		-0.430	12.164
LCFA 9	5,020.547	0.000	0.000	0.000	5,008.074	Not Full		-0.420	12.473
LCFB_1	5,019.517	0.000	0.000	0.000	5,007.246	Not Full	Yes	-0.457	12.271
LCFB 2	5,020.547	0.000	0.000	0.000	5,008.246	Not Full		-0.477	12.301
LCFB_3	5,022.307	0.000	0.000	0.000	5,009.981	Not Full	No	-0.482	12.326
LCFB 4	5,023.587	29,750.389	118,674.618	0.000	5,010.916	Not Full	No	-0.488	12.671
NMS_1	5,190.130	0.000	0.000	0.000	5,180.148	Not Full	No	-0.626	9.982
NMS_10	5,211.030	0.000	0.000	0.000	5,203.000	Not Full		-0.603	8.030
NMS_11	5,214.550	0.000	0.000	0.000	5,207.301	Not Full		-0.502	7.249
NMS 12	5,217.140	0.000	0.000	0.000	5,210.722	Not Full		-0.481	6.418
NMS_13	5,223.610	0.000	0.000	0.000	5,214.122	Not Full		-0.481	9.488
NMS_14	5,225.100	0.000	0.000	0.000	5,215.212	Not Full		-0.492	9.888
NMS_15	5,226.430	0.000	0.000	0.000	5,216.701	Not Full		-0.502	9.729
NMS_16	5,233.130	0.000	0.000	0.000	5,219.656	Not Full		-0.467	13.474
NMS_17	5,241.740	0.000	0.000	0.000	5,226.415	Not Full		-0.558	15.325
NMS_18	5,250.320	0.000	0.000	0.000	5,237.542	Not Full		-0.591	12.778

	ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
	NMS_19	5,252.800	0.000	0.000	0.000	5,240.968	Not Full	No	-0.585	11.832
	NMS_2	5,190.240	0.000	0.000	0.000	5,183.860	Not Full	No	-0.603	6.380
	NMS_20	5,251.790	157,499.941	512,999.807	0.000	5,242.232	Not Full	No	-0.502	9.558
	NMS_3	5,191.230	0.000	0.000	0.000	5,185.301	Not Full	No	-0.502	5.929
	NMS_4	5,195.030	0.000	0.000	0.000	5,188.202	Not Full	No	-0.502	6.828
	NMS_5	5,196.680	0.000	0.000	0.000	5,189.998	Not Full	No	-0.586	6.682
	NMS_6	5,198.380	0.000	0.000	0.000	5,191.898	Not Full	No	-0.586	6.482
	NMS_7	5,200.000	0.000	0.000	0.000	5,193.758	Not Full	No	-0.585	6.242
	NMS_8	5,203.910	0.000	0.000	0.000	5,198.041	Not Full	No	-0.502	5.869
	NMS_9	5,210.370	0.000	0.000	0.000	5,201.637	Not Full	No	-0.486	8.733
	OGF1_1	5,165.050	0.000	0.000	0.000	5,151.065	Not Full	No	-0.833	13.985
	OGF1_17	5,150.610	0.000	0.000	0.000	5,138.985	Not Full	No	-0.833	11.625
	OGF1_18	5,148.840	0.000	0.000	0.000	5,137.445	Not Full	No	-0.833	11.395
	OGF1_2	5,160.050	0.000	0.000	0.000	5,146.865	Not Full	No	-0.833	13.185
	OGF1_25	5,148.140	0.000	0.000	0.000	5,136.135	Not Full	No	-0.833	12.005
	OGF1_3	5,159.350	0.000	0.000	0.000	5,146.225	Not Full	No	-0.833	13.125
	OGF1_4	5,152.800	0.000	0.000	0.000	5,140.735	Not Full	No	-0.833	12.065
	OGF1_5	5,150.890	0.000	0.000	0.000	5,139.645	Not Full	No	-0.833	11.245
	OGF1_69	5,151.490	0.000	0.000	0.000	5,139.622	Not Full	Yes	-0.566	11.868
	OGF1_70	5,150.690	0.000	0.000	0.000	5,138.975	Not Full	No	-0.563	11.715
	OGF1_71	5,149.600	0.000	0.000	0.000	5,138.351	Not Full	No	-0.467	11.249
	OGF1_72	5,148.590	0.000	0.000	0.000	5,137.874	Not Full	No	-0.605	10.716
	OGF1_73	5,149.230	0.000	0.000	0.000	5,137.158	Not Full	Yes	-0.560	12.072
	OGF1_74	5,148.230	0.000	0.000	0.000	5,135.953	Not Full	No	-0.605	12.277
	OGF1_75	5,148.230	0.000	0.000	0.000	5,135.079	Not Full	No	-0.579	13.151
	OGF2_29	5,177.635	0.000	0.000	0.000	5,163.790	Not Full	No	-0.552	13.845
	OGF2_31	5,172.695	0.000	0.000	0.000	5,161.282	Not Full	No	-0.570	11.413
	OGF2_32	5,167.395	0.000	0.000	0.000	5,155.854	Not Full	No	-0.568	11.541
	OGF2_33	5,162.905	0.000	0.000	0.000	5,151.045	Not Full	No	-0.546	11.860
	OGF2_34	5,162.905	0.000	0.000	0.000	5,149.335	Not Full	No	-0.547	13.570
	OGF2_46	5,158.455	0.000	0.000	0.000	5,146.602	Not Full	No	-0.560	11.853
	OGF2_49	5,156.745	0.000	0.000	0.000	5,144.611	Not Full	No	-0.551	12.134
	OGF2_50	5,155.135	0.000	0.000	0.000	5,143.304	Not Full	Yes	-0.498	11.831
	OGF2_65	5,153.045	49,150.061	189,599.821	0.000	5,142.976	Not Full	No	-0.522	10.069
	OGF2_68	5,154.360	0.000	0.000	0.000	5,142.428	Not Full	No	-0.611	11.932
	OTF1_101	5,021.153	0.000	0.000	0.000	5,004.293	Not Full	No	-1.000	16.860
	OTF1_102	5,011.353	0.000	0.000	0.000	5,003.318	Not Full	No	-0.925	8.035
	OTF1_103	5,010.453	0.000	0.000	0.000	5,003.318	Not Full	No	-0.665	7.135
	OTF1_108	5,011.000	0.000	0.000	0.000	4,999.146	Not Full	No	-1.187	11.854
	OTF1_30	5,023.393	0.000	0.000	0.000	5,016.723	Not Full		-0.667	6.670
fi	OTF1_37	5,021.223	0.000	0.000	0.000	5,016.053	Not Full		-0.667	5.170

	ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
	OTF1_43	5,019.833	64,337.736	241,426.929	0.000	5,014.649	Not Full	No	-0.351	5.184
	OTF1_44	5,018.643	0.000	0.000	0.000	5,012.850	Not Full	No	-0.340	5.793
	OTF1_46	5,021.543	0.000	0.000	0.000	5,015.263	Not Full	No	-0.833	6.280
	OTF1_47	5,021.643	0.000	0.000	0.000	5,015.223	Not Full	No	-0.833	6.420
	OTF1_48	5,019.783	0.000	0.000	0.000	5,013.303	Not Full	No	-0.833	6.480
	OTF1_60A	5,011.220	0.000	0.000	0.000	4,993.350	Not Full	No	-1.340	17.870
	OTF1_61A	5,011.010	0.000	0.000	0.000	4,992.999	Not Full	No	-1.371	18.011
	OTF1_62	5,017.723	27,999.349	111,997.398	0.000	5,012.207	Not Full	No	-0.619	5.516
	OTF1_64	5,015.763	0.000	0.000	0.000	5,010.972	Not Full	No	-0.625	4.791
	OTF1_65	5,016.743	0.000	0.000	0.000	5,011.202	Not Full	No	-0.357	5.541
	OTF1_80	5,013.043	0.000	0.000	0.000	5,009.175	Not Full	No	-0.355	3.868
	OTF1_82	5,013.773	0.000	0.000	0.000	5,009.655	Not Full	No	-0.622	4.118
	OTF1_87	5,013.123	21,850.552	87,402.207	0.000	5,008.534	Not Full	No	-0.562	4.589
	OTF1_88	5,027.903	16,699.674	66,798.695	0.000	5,019.137	Not Full	No	-0.553	8.766
	OTF1_89	5,022.873	0.000	0.000	0.000	5,017.140	Not Full	Yes	2.360	5.733
	OTF1_90	5,023.493	0.000	0.000	0.000	5,016.609	Not Full	No	-0.510	6.884
٦	OTF1_92	5,022.393	0.000	0.000	0.000	5,015.904	Not Full	No	-0.516	6.489
	OTF1_93	5,021.323	0.000	0.000	0.000	5,015.787	Not Full	No	-0.532	5.536
1	OTF1_94	5,017.163	0.000	0.000	0.000	5,012.827	Not Full	No	-0.563	4.336
	OTF1_95	5,012.943	29,275.189	116,937.287	0.000	5,008.918	Not Full	Yes	-0.402	4.025
Ī	OTF1_96	5,013.243	0.000	0.000	0.000	5,007.341	Not Full	No	-0.772	5.902
1	OTF1_97	5,012.803	0.000	0.000	0.000	5,006.972	Not Full	No	-0.641	5.831
1	OTF1_98	5,011.373	0.000	0.000	0.000	5,005.728	Not Full	No	-0.665	5.645
ī	RMF1_114	5,083.790	0.000	0.000	0.000	5,069.171	Not Full	No	-0.719	14.619
Ī	RMF1_118	5,074.620	0.000	0.000	0.000	5,060.105	Not Full	No	-0.565	14.515
1	SCC_01	5,118.460	48,695.022	187,936.195	0.000	5,101.767	Not Full	No	-0.460	16.693
1	SCC_02	5,113.610	45,550.063	176,438.226	0.000	5,096.644	Not Full	No	-0.549	16.966
1	SCC_03	5,106.940	0.000	0.000	0.000	5,092.137	Not Full	No	-0.547	14.803
i	SCC_04	5,111.500	0.000	0.000	0.000	5,090.349	Not Full	No	-0.544	21.151
1	SCC_05	5,108.930	0.000	0.000	0.000	5,088.751	Not Full	No	-0.543	20.179
1	SCC_06	5,106.410	0.000	0.000	0.000	5,087.517	Not Full	No	-0.547	18.893
1	SCC_07	5,102.770	9,999.356	39,997.425	0.000	5,084.597	Not Full	No	-0.723	18.173
i	SCC_08	5,097.960	0.000	0.000	0.000	5,081.285	Not Full	No	-0.745	16.675
=	SCC 09	5,094.160	0.000	0.000	0.000	5,076.844	Not Full	No	-0.736	17.316
ī	SCC_10	5,093.370	0.000	0.000	0.000	5,075.810	Not Full	Yes	-0.670	17.560
i	SCC_11	5,089.070	0.000	0.000	0.000	5,073.630	Not Full	No	-0.790	15.440
i	SCC_11A	5,087.810	517,999.485	1,395,342.347	0.000	5,065.999	Not Full		-0.401	21.811
1	SCC_12	5,087.290	0.000	0.000	0.000	5,065.508	Not Full		-0.402	21.782
Ħ	SCC_13	5,085.400	0.000	0.000	0.000	5,064.561	Not Full		-0.399	20.839
	SCC_14	5,081.740	0.000	0.000	0.000	5,063.368	Not Full		-0.402	18.372
╡	SCC_15	5,079.780	0.000	0.000	0.000	5,062.169	Not Full		-0.401	17.611

	ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
	SCC_16	5,077.060	0.000	0.000	0.000	5,060.946	Not Full	No	-0.404	16.114
	SCC_17	5,074.870	0.000	0.000	0.000	5,059.718	Not Full	No	-0.402	15.152
	SCC_18	5,073.800	0.000	0.000	0.000	5,058.971	Not Full	No	-0.399	14.829
	SCC_19	5,072.830	0.000	0.000	0.000	5,057.808	Not Full	No	-0.402	15.022
	SCC_20	5,071.610	0.000	0.000	0.000	5,056.778	Not Full	No	-0.402	14.832
	SCC_21	5,069.850	0.000	0.000	0.000	5,056.128	Not Full	No	-0.402	13.722
	SUN_1	5,117.830	58,999.658	224,841.521	0.000	5,104.343	Not Full	No	-0.463	13.487
	SUN_10	5,081.060	0.000	0.000	0.000	5,069.146	Not Full	No	-0.481	11.914
	SUN_11	5,071.850	0.000	0.000	0.000	5,059.233	Not Full	No	-0.514	12.617
	SUN_12	5,054.840	0.000	0.000	0.000	5,042.364	Not Full	Yes	-0.373	12.476
	SUN_13	5,053.120	0.000	0.000	0.000	5,040.454	Not Full	No	-0.432	12.666
	SUN_14	5,050.790	0.000	0.000	0.000	5,036.918	Not Full	No	-0.479	13.872
	SUN_15	5,035.740	0.000	0.000	0.000	5,029.309	Not Full	Yes	-0.358	6.431
	SUN_2	5,109.460	0.000	0.000	0.000	5,097.571	Not Full	No	-0.456	11.889
	SUN_3	5,103.540	0.000	0.000	0.000	5,091.689	Not Full	No	-0.417	11.851
	SUN_4	5,096.140	0.000	0.000	0.000	5,088.457	Not Full	No	-0.400	7.683
	SUN_5	5,099.970	0.000	0.000	0.000	5,087.239	Not Full	Yes	-0.378	12.731
ī	SUN_6	5,104.710	0.000	0.000	0.000	5,085.588	Not Full	No	-0.378	19.122
=	SUN 7	5,112.510	0.000	0.000	0.000	5,084.339	Not Full	No	-0.378	28.171
	SUN_8	5,094.800	0.000	0.000	0.000	5,082.891	Not Full	No	-0.476	11.909
i	SUN_9	5,087.680	0.000	0.000	0.000	5,076.775	Not Full	No	-0.471	10.905
٦	TOE 2576	5,140.690	0.000	0.000	0.000	5,129.354	Not Full	No	-0.986	11.336
i	TOE 2577	5,137.370	0.000	0.000	0.000	5,127.454	Not Full	No	-1.106	9.916
ī	TOE 2578	5,132.730	0.000	0.000	0.000	5,123.325	Not Full	No	-1.105	9.405
ī	TOE 2579	5,129.120	0.000	0.000	0.000	5,118.917	Not Full	No	-1.053	10.203
ī	TOE 2580	5,123.350	0.000	0.000	0.000	5,113.226	Not Full	No	-0.964	10.124
ī	TOE 2581	5,125.960	0.000	0.000	0.000	5,111.191	Not Full	No	-0.949	14.769
Ħ	TOE 2582	5,126.690	0.000	0.000	0.000	5,109.406	Not Full	No	-0.954	17.284
Ħ	TOE 2583	5,127.830	0.000	0.000	0.000	5,107.537	Not Full	No	-0.923	20.293
ī	TOE 2584	5,127.830	0.000	0.000	0.000	5,105.848	Not Full	No	-0.932	21.982
	TOE 2585	5,078.040	0.000	0.000	0.000	5,064.270	Not Full	No	-1.050	13.770
i	TOE 2586	5,048.720	0.000	0.000	0.000	5,037.128	Not Full	No	-0.992	11.592
	TOE 2587	5,051.780	0.000	0.000	0.000	5,035.000	Not Full		-1.100	16.780
	TOE 2588	5,042.550	0.000	0.000	0.000	5,024.612	Not Full	No	-1.118	17.938
Ħ	TOE 2589	5,027.940	53,249.740	204,588.246	0.000	5,012.431	Not Full		-1.099	15.509
Ħ١	TOE_2590	5,029.380	0.000	0.000	0.000	5,009.454	Not Full	No	-1.186	19.926
Ħ	TOE_2591	5,026.905	0.000	0.000	0.000	5,008.752	Not Full		-1.173	18.153
٦	TOE_2592	5,109.510	0.000	0.000	0.000	5,097.701	Not Full		-0.436	11.809
Ħ	TOE_2593	5,110.100	0.000	0.000	0.000	5,097.271	Not Full		-0.486	12.829
Ħ	TOE_2594	5,034.380	0.000	0.000	0.000	5,016.390	Not Full		-0.740	17.990
=	TOE 2595	5,027.210	0.000	0.000	0.000	5,015.609	Not Full		-0.671	11.601

	ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
	TOE_2596	5,030.630	0.000	0.000	0.000	5,014.831	Not Full	No	-2.079	15.799
	TOE_2597	5,029.850	0.000	0.000	0.000	5,014.491	Not Full	No	-2.019	15.359
	TOE_2598	5,030.780	0.000	0.000	0.000	5,013.897	Not Full	No	-0.943	16.883
	TOE_2609	5,049.595	0.000	0.000	0.000	5,039.753	Not Full	Yes	-0.912	9.842
	TOE_2610	5,049.965	0.000	0.000	0.000	5,040.682	Not Full	No	-1.133	9.283
	TOE_2612	5,052.325	0.000	0.000	0.000	5,042.836	Not Full	No	-1.139	9.489
	TOE_2615	5,011.000	51,746.381	199,091.963	0.000	4,995.136	Not Full	Yes	-0.989	15.864
	TOE_2619	5,011.075	0.000	0.000	0.000	4,994.397	Not Full	No	-1.128	16.678
	TOE_2620	5,141.225	0.000	0.000	0.000	5,129.382	Not Full	Yes	-0.743	11.843
	TOE_2621	5,148.225	0.000	0.000	0.000	5,131.905	Not Full	No	-0.810	16.320
	TOE_2622	5,148.225	0.000	0.000	0.000	5,133.818	Not Full	No	-0.757	14.407
	TOE_2623	5,158.225	0.000	0.000	0.000	5,144.065	Not Full	No	-0.833	14.160
	TOE_2624	5,168.225	0.000	0.000	0.000	5,154.505	Not Full	No	-0.833	13.720
	TOE_2625	5,173.225	0.000	0.000	0.000	5,160.575	Not Full	No	-0.833	12.650
	TOE_2626	5,185.225	14,250.235	57,000.939	0.000	5,168.595	Not Full	No	-0.577	16.630
	TOE_2628	5,083.085	0.000	0.000	0.000	5,068.810	Not Full	Yes	-1.025	14.275
	TOE_2629	5,085.095	0.000	0.000	0.000	5,070.472	Not Full	No	-0.803	14.623
	TOE_2630	5,088.805	0.000	0.000	0.000	5,074.493	Not Full	Yes	-0.672	14.312
	TOE_2631	5,095.275	44,999.983	174,427.134	0.000	5,076.086	Not Full	No	-0.799	19.189
	TOE_2635	5,080.000	0.000	0.000	0.000	5,072.240	Not Full	No	-0.833	7.760
	TOE_2636	5,085.000	0.000	0.000	0.000	5,071.110	Not Full	No	-0.833	13.890
	TOE_2637	5,085.000	0.000	0.000	0.000	5,072.796	Not Full	No	-0.714	12.204
	TOE_2638	5,085.000	0.000	0.000	0.000	5,071.672	Not Full	No	-0.668	13.328
	TOE_2639	5,085.000	0.000	0.000	0.000	5,070.913	Not Full	No	-0.657	14.087
	TOE_2640	5,091.070	0.000	0.000	0.000	5,077.273	Not Full	No	-0.687	13.797
	TOE_2646	5,212.890	0.000	0.000	0.000	5,202.610	Not Full	No	-0.266	10.280
	TOE_2647	5,214.610	0.000	0.000	0.000	5,204.195	Not Full	Yes	-0.382	10.415
	TOE_2648	5,057.225	0.000	0.000	0.000	5,037.374	Not Full	No	-0.561	19.851
	TOE_2649	5,058.225	0.000	0.000	0.000	5,038.049	Not Full	No	-0.566	20.176
	TOE_2650	5,051.225	32,937.108	130,325.262	0.000	5,035.489	Not Full	No	-0.806	15.736
	TOE_2651	5,033.085	0.000	0.000	0.000	5,017.849	Not Full	Yes	-0.576	15.236
	TOE_2652	5,031.225	0.000	0.000	0.000	5,017.809	Not Full	No	-0.546	13.416
	TOE_2653	5,048.625	0.000	0.000	0.000	5,016.241	Not Full	No	-0.544	32.384
Ī	TOE_2654	5,029.225	34,394.387	135,653.075	0.000	5,014.423	Not Full	No	-0.722	14.802
	TOE_2655	5,028.225	0.000	0.000	0.000	5,010.388	Not Full	Yes	-0.842	17.837
	TOE_2656	5,040.685	0.000	0.000	0.000	5,028.129	Not Full	No	-0.846	12.556
	TOE_2657	5,072.520	113,160.917	388,704.998	0.000	5,059.009	Not Full	No	-0.377	13.511
	TOE_2659	5,069.950	0.000	0.000	0.000	5,056.143	Not Full	No	-0.373	13.807
	TOE_2660	5,063.730	0.000	0.000	0.000	5,051.343	Not Full		-0.354	12.387
	TOE_2661	5,060.080	0.000	0.000	0.000	5,047.994	Not Full	No	-0.353	12.086
7	TOE 2662	5,055.000	0.000	0.000	0.000	5,041.470	Not Full		-0.765	13.530

	ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
	TOE_2663	5,059.350	0.000	0.000	0.000	5,046.871	Not Full	No	-0.375	12.479
	TOE_2664	5,051.225	0.000	0.000	0.000	5,039.002	Not Full	Yes	-0.573	12.223
	TOE_2673	5,142.740	0.000	0.000	0.000	5,127.338	Not Full	No	-0.535	15.402
	TOE_2710	5,188.970	121,000.274	411,089.749	0.000	5,171.869	Not Full	Yes	-0.154	17.101
	TOE_2711	5,175.840	0.000	0.000	0.000	5,168.648	Not Full	No	-0.235	7.192
	TOE_2712	5,183.520	0.000	0.000	0.000	5,171.253	Not Full	No	0.030	12.267
	TOE_2713	5,179.770	0.000	0.000	0.000	5,170.699	Not Full	No	0.006	9.071
	TOE_2714	5,179.540	0.000	0.000	0.000	5,170.276	Not Full	No	0.022	9.264
	TOE_2715	5,171.960	0.000	0.000	0.000	5,168.053	Not Full	No	0.230	3.907
	TOE_2716	5,173.770	0.000	0.000	0.000	5,167.319	Not Full	No	0.036	6.451
	TOE_2717	5,171.760	0.000	0.000	0.000	5,166.370	Not Full	No	-0.423	5.390
	TOE_2718	5,169.220	0.000	0.000	0.000	5,159.920	Not Full	Yes	-0.163	9.300
	TOE_2719	5,171.870	0.000	0.000	0.000	5,157.470	Not Full	No	-0.334	14.400
	TOE_2720	5,162.710	0.000	0.000	0.000	5,153.683	Not Full	Yes	-0.160	9.027
	TOE_2721	5,160.580	0.000	0.000	0.000	5,151.444	Not Full	No	-0.469	9.136
$\Box$	TOE_2722	5,153.520	0.000	0.000	0.000	5,144.526	Not Full	No	-0.467	8.994
	TOE_2723	5,149.910	0.000	0.000	0.000	5,140.833	Not Full	No	-0.480	9.077
Ħ	TOE 2724	5,137.860	0.000	0.000	0.000	5,129.334	Not Full	Yes	-0.280	8.526
Ħ	TOE 2725	5,133.820	0.000	0.000	0.000	5,126.477	Not Full	No	-0.296	7.343
Ħ	TOE 2726	5,130.690	0.000	0.000	0.000	5,123.106	Not Full	No	-0.467	7.584
	TOE_2727	5,121.990	0.000	0.000	0.000	5,112.797	Not Full	No	-0.527	9.193
Ħ	TOE 2728	5,115.430	0.000	0.000	0.000	5,104.625	Not Full	No	-0.518	10.805
Ħ	TOE 2729	5,114.600	0.000	0.000	0.000	5,101.922	Not Full	No	-0.461	12.678
Ħ	TOE 2730	5,107.960	0.000	0.000	0.000	5,095.390	Not Full	No	-0.344	12.570
Ħ	TOE 2731	5,101.300	0.000	0.000	0.000	5,092.496	Not Full	No	-0.421	8.804
Ħ	TOE 2732	5,104.000	0.000	0.000	0.000	5,094.355	Not Full	No	-0.332	9.645
Ħ	TOE 2733	5,112.400	0.000	0.000	0.000	5,095.636	Not Full	Yes	-0.341	16.764
Ħ	TOE 2734	5,010.600	0.000	0.000	0.000	4,998.534	Not Full	No	-1.491	12.066
Ħ	TOE 2735	5,014.525	0.000	0.000	0.000	4,999.475	Not Full	No	-1.150	15.050
$\Box$	TOE_2736	5,017.825	0.000	0.000	0.000	5,000.415	Not Full	No	-1.110	17.410
	TOE_2737	5,023.625	0.000	0.000	0.000	5,003.189	Not Full	No	-1.136	20.436
f	TOE_2738	5,023.325	0.000	0.000	0.000	5,004.130	Not Full	No	-0.995	19.195
F	TOE_2739	5,020.425	0.000	0.000	0.000	5,005.120	Not Full	No	-1.105	15.305
F	TOE_2740	5,022.425	0.000	0.000	0.000	5,006.162	Not Full	No	-1.063	16.263
ΠÍ	TOE 2741	5,025.425	0.000	0.000	0.000	5,007.118	Not Full	No	-1.007	18.307
Ħ	TOE_2742	5,025.825	0.000	0.000	0.000	5,007.399	Not Full	No	-1.126	18.426
F	TOE_2743	5,026.525	0.000	0.000	0.000	5,007.942	Not Full	No	-1.283	18.583
Ħ	TOE_2744	5,029.425	0.000	0.000	0.000	5,010.248	Not Full	Yes	0.223	19.177
Ħ	TOE_2745	5,028.225	0.000	0.000	0.000	5,010.380	Not Full	No	-0.295	17.845
Ħ	TOE_2746	5,027.525	0.000	0.000	0.000	5,014.824	Not Full	No	-1.001	12.701
H	TOE_2747	5,053.435	92,584.765	328,169.958	0.000	5,038.704	Not Full	No	-1.021	14.731

ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
TOE_2748	5,094.000	0.000	0.000	0.000	5,081.323	Not Full	No	-0.427	12.677
TOE_2749	5,090.550	0.000	0.000	0.000	5,078.103	Not Full	No	-0.397	12.447
TOE_2750	5,087.000	0.000	0.000	0.000	5,074.225	Not Full	No	-0.525	12.775
TOE_2751	5,081.000	0.000	0.000	0.000	5,068.796	Not Full	No	-0.784	12.204
TOE_2752	5,075.220	0.000	0.000	0.000	5,062.988	Not Full	No	-0.732	12.232
TOE_2753	5,069.870	0.000	0.000	0.000	5,058.891	Not Full	No	-0.749	10.979
TOE_2754	5,066.730	0.000	0.000	0.000	5,054.895	Not Full	No	-0.695	11.835
TOE_2755	5,064.690	0.000	0.000	0.000	5,053.744	Not Full	No	-0.726	10.946
TOE_2756	5,059.960	0.000	0.000	0.000	5,047.157	Not Full	No	-0.723	12.803
TOE_2757	5,058.890	0.000	0.000	0.000	5,046.356	Not Full	No	-0.774	12.534
TOE_2758	5,033.130	0.000	0.000	0.000	5,020.087	Not Full	No	-0.703	13.043
TOE_2759	5,062.630	33,805.427	133,499.838	0.000	5,050.640	Not Full	No	-0.730	11.990
TOE_2760	5,053.320	0.000	0.000	0.000	5,039.983	Not Full	No	-0.807	13.337
TOE_2761	5,030.160	0.000	0.000	0.000	5,019.217	Not Full	No	-0.853	10.943
TOE_2762	5,029.520	0.000	0.000	0.000	5,019.109	Not Full	No	-0.711	10.411
TOE_2763	5,031.630	0.000	0.000	0.000	5,017.084	Not Full	No	-0.746	14.546
TOE_2764	5,030.240	0.000	0.000	0.000	5,018.172	Not Full	No	-0.768	12.068
TOE_2765	5,031.520	0.000	0.000	0.000	5,016.203	Not Full	No	-0.647	15.317
TOE_2766	5,029.380	0.000	0.000	0.000	5,015.893	Not Full	No	-0.727	13.487
TOE_2767	5,028.000	0.000	0.000	0.000	5,015.353	Not Full	No	-0.917	12.647
TOE_2768	5,027.030	0.000	0.000	0.000	5,013.388	Not Full	No	-1.042	13.642
TOE_2769	5,021.960	0.000	0.000	0.000	5,009.303	Not Full	No	-0.757	12.657
TOE_2770	5,018.710	0.000	0.000	0.000	5,008.208	Not Full	No	-0.752	10.502
TOE_2771	5,019.010	3,500.639	14,002.555	0.000	5,007.164	Not Full	No	-0.926	11.846
TOE_2772	5,020.000	0.000	0.000	0.000	5,006.753	Not Full	Yes	-0.777	13.247
TOE_2773	5,019.000	0.000	0.000	0.000	5,006.132	Not Full	No	-0.518	12.868
TOE_2774	5,017.000	0.000	0.000	0.000	5,005.991	Not Full	No	0.341	11.009
TOE_2775	5,015.840	0.000	0.000	0.000	5,005.133	Not Full	No	-0.667	10.707
TOE_2776	5,014.980	0.000	0.000	0.000	5,004.491	Not Full	No	-0.549	10.489
TOE_2777	5,012.960	0.000	0.000	0.000	5,003.957	Not Full	No	-0.573	9.003
TOE_2778	5,012.130	0.000	0.000	0.000	5,003.488	Not Full	No	-0.552	8.642
TOE_2779	5,009.900	0.000	0.000	0.000	5,003.315	Not Full	No	-0.265	6.585
TOE_2780	5,011.970	0.000	0.000	0.000	5,003.060	Not Full	No	-0.050	8.910
TOE_2781	5,011.660	0.000	0.000	0.000	5,002.900	Not Full	No	0.100	8.760
TOE_2782	5,011.310	0.000	0.000	0.000	5,002.050	Not Full	No	-0.890	9.260
TOE_2783	5,008.830	0.000	0.000	0.000	5,001.819	Not Full	No	-0.741	7.011
TOE_2784	5,006.790	0.000	0.000	0.000	5,000.717	Not Full	No	-0.833	6.073
TOE_2785	5,012.690	0.000	0.000	0.000	5,000.587	Not Full	No	-0.833	12.103
TOE_2786	5,008.290	92,388.925	327,593.797	0.000	5,001.700	Not Full	No	0.060	6.590
TOE_2787	5,016.850	0.000	0.000	0.000	5,000.297	Not Full	No	0.067	16.553
TOE_2788	5,014.290	0.000	0.000	0.000	5,000.446	Not Full	No	-0.694	13.844

ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
TOE_2789	5,007.240	0.000	0.000	0.000	4,996.128	Not Full	No	-1.022	11.112
TOE_2790	5,012.380	44,943.823	174,221.813	0.000	4,996.350	Not Full	No	-0.730	16.030
TOE_2791	5,004.080	0.000	0.000	0.000	4,995.697	Not Full	No	-1.003	8.383
TOE_2792	5,003.840	0.000	0.000	0.000	4,995.425	Not Full	No	-1.125	8.415
TOE_2793	5,008.860	0.000	0.000	0.000	4,994.800	Not Full	No	-1.190	14.060
TOE_2794	5,009.670	0.000	0.000	0.000	4,994.244	Not Full	No	-1.076	15.426
TOE_2795	5,011.010	0.000	0.000	0.000	4,993.922	Not Full	No	-0.898	17.088
TOE_2798	5,011.503	65,534.375	245,144.888	0.000	5,000.988	Not Full	Yes	-0.445	10.515
TOE_2799	5,007.780	0.000	0.000	0.000	5,000.231	Not Full	No	-0.855	7.549
TOE_2800	5,010.450	0.000	0.000	0.000	4,992.621	Not Full	No	-2.279	17.829
TOE_2801	5,055.525	0.000	0.000	0.000	5,045.298	Not Full	No	-1.157	10.227
TOE_2802	5,061.985	0.000	0.000	0.000	5,047.250	Not Full	No	-1.015	14.735
TOE_2803	5,065.905	0.000	0.000	0.000	5,048.160	Not Full	No	-0.995	17.745
TOE_2804	5,067.345	0.000	0.000	0.000	5,049.156	Not Full	No	-0.989	18.189
TOE_2805	5,093.920	0.000	0.000	0.000	5,081.845	Not Full	No	-1.065	12.075
TOE_2806	5,098.000	0.000	0.000	0.000	5,085.160	Not Full	No	-1.080	12.840
TOE_2807	5,096.900	0.000	0.000	0.000	5,087.413	Not Full	No	-0.967	9.487
TOE_2808	5,105.750	0.000	0.000	0.000	5,094.804	Not Full	No	-1.076	10.946
TOE_2809	5,152.350	0.000	0.000	0.000	5,134.005	Not Full	No	-0.579	18.345
TOE_2817	5,046.820	0.000	0.000	0.000	5,031.809	Not Full	No	-0.841	15.011
TOE_2818	5,034.360	0.000	0.000	0.000	5,021.098	Not Full	Yes	-0.842	13.262
TOE_2819	5,101.240	0.000	0.000	0.000	5,090.287	Not Full	No	-1.013	10.953
TOE_2825	5,011.300	0.000	0.000	0.000	4,991.651	Not Full	No	-1.849	19.649
TOE_2826	5,010.820	0.000	0.000	0.000	4,991.011	Not Full	Yes	-1.439	19.809
TOE_2827	5,010.790	0.000	0.000	0.000	4,990.328	Not Full	No	-1.712	20.462
TOE_2828	5,009.220	0.000	0.000	0.000	4,989.464	Not Full	No	-1.406	19.756
TOE_2829	5,007.990	0.000	0.000	0.000	4,988.121	Not Full	Yes	-1.699	19.869
TOE_2830	5,007.630	0.000	0.000	0.000	4,987.968	Not Full	No	-1.462	19.662
TOE_2831	5,006.030	0.000	0.000	0.000	4,987.491	Not Full	No	-1.409	18.539
TOE_2832	5,004.210	0.000	0.000	0.000	4,987.088	Not Full	No	-1.622	17.122
TOE_2833	5,004.410	0.000	0.000	0.000	4,986.831	Not Full	No	-1.449	17.579
TOE_2834	5,004.240	0.000	0.000	0.000	4,985.853	Not Full	No	-1.587	18.387
TOE_2835	5,001.480	0.000	0.000	0.000	4,984.868	Not Full	No	-1.532	16.612
TOE_2836	5,000.540	0.000	0.000	0.000	4,983.987	Not Full	No	-1.473	16.553
TOE_2837	5,000.330	0.000	0.000	0.000	4,983.539	Not Full	No	-1.131	16.791
TOE_2838	5,005.660	0.000	0.000	0.000	4,982.371	Not Full	No	-1.409	23.289
TOE_2839	5,002.590	0.000	0.000	0.000	4,982.883	Not Full	No	-1.427	19.707
TOE_2840	5,006.110	0.000	0.000	0.000	4,981.703	Not Full	No	-1.557	24.407
TOE_2841	5,002.460	0.000	0.000	0.000	4,980.853	Not Full	No	-1.757	21.607
TOE_2842	5,002.920	0.000	0.000	0.000	4,979.925	Not Full	Yes	-1.685	22.995
TOE_2843	5,000.380	0.000	0.000	0.000	4,980.449	Not Full	No	-1.921	19.931

	ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
	TOE_2844	4,994.190	0.000	0.000	0.000	4,978.499	Not Full	No	-1.821	15.691
	TOE_2845	4,993.980	0.000	0.000	0.000	4,978.491	Not Full	Yes	-1.489	15.489
╗.	TOE_2846	4,991.150	0.000	0.000	0.000	4,977.943	Not Full	No	-1.557	13.207
	TOE_2847	4,990.880	0.000	0.000	0.000	4,977.039	Not Full	No	-1.831	13.841
╗.	TOE_2848	4,990.370	0.000	0.000	0.000	4,976.503	Not Full	No	-1.857	13.867
	TOE_2849	4,990.000	0.000	0.000	0.000	4,973.926	Not Full	No	-2.054	16.074
╗.	TOE_2850	4,988.020	0.000	0.000	0.000	4,969.779	Not Full	No	-2.031	18.241
	TOE_2851	4,987.060	0.000	0.000	0.000	4,967.582	Not Full	No	-1.828	19.478
╗.	TOE_2852	4,985.500	0.000	0.000	0.000	4,967.293	Not Full	Yes	-1.447	18.207
	TOE_2853	4,986.910	0.000	0.000	0.000	4,967.296	Not Full	No	-1.784	19.614
╗.	TOE_2854	4,987.460	0.000	0.000	0.000	4,970.109	Not Full	No	-0.641	17.351
	TOE_2855	4,986.200	0.000	0.000	0.000	4,971.112	Not Full	No	-0.568	15.088
	TOE_2856	4,988.050	0.000	0.000	0.000	4,971.871	Not Full	No	-0.609	16.179
	TOE_2857	4,987.820	0.000	0.000	0.000	4,972.235	Not Full	Yes	-0.615	15.585
╗.	TOE_2858	4,988.840	0.000	0.000	0.000	4,975.907	Not Full	No	-0.723	12.933
	TOE_2859	4,989.490	0.000	0.000	0.000	4,977.896	Not Full	Yes	-0.654	11.594
╗.	TOE_2860	4,985.430	0.000	0.000	0.000	4,966.528	Not Full	No	-1.392	18.902
	TOE_2861	4,983.250	0.000	0.000	0.000	4,965.503	Not Full	No	-1.677	17.747
╗.	TOE_2862	4,982.380	0.000	0.000	0.000	4,965.473	Not Full	Yes	-1.237	16.907
	TOE_2863	4,982.420	0.000	0.000	0.000	4,964.832	Not Full	No	-1.578	17.588
╗.	TOE_2864	4,980.720	0.000	0.000	0.000	4,964.010	Not Full	No	-1.700	16.710
	TOE_2865	4,981.960	0.000	0.000	0.000	4,963.807	Not Full	No	-1.403	18.153
╗.	TOE_2866	4,982.300	0.000	0.000	0.000	4,963.265	Not Full	No	-1.405	19.035
	TOE_2867	4,984.250	29,000.149	115,931.741	0.000	4,962.402	Not Full	No	-1.698	21.848
٦.	TOE_2868	4,980.960	0.000	0.000	0.000	4,961.311	Not Full	No	-1.479	19.649
٦.	TOE_2869	4,978.450	0.000	0.000	0.000	4,960.463	Not Full	No	-1.427	17.987
٦.	TOE_2870	4,976.690	0.000	0.000	0.000	4,959.652	Not Full	No	-1.448	17.038
٦.	TOE_2871	4,974.820	0.000	0.000	0.000	4,958.819	Not Full	No	-1.391	16.001
٦.	TOE_2872	4,973.300	0.000	0.000	0.000	4,957.970	Not Full	No	-1.510	15.330
٦.	TOE_2873	4,970.750	0.000	0.000	0.000	4,957.354	Not Full	No	-1.286	13.396
٦.	TOE_2874	4,969.570	0.000	0.000	0.000	4,956.953	Not Full	No	-1.497	12.617
٦.	TOE_2875	4,967.820	0.000	0.000	0.000	4,956.520	Not Full	No	-1.570	11.300
Ī.	TOE_2876	4,970.850	0.000	0.000	0.000	4,956.179	Not Full	No	-1.511	14.671
	TOE_2877	4,969.020	0.000	0.000	0.000	4,955.547	Not Full	No	-1.393	13.473
j .	TOE_2878	4,975.470	0.000	0.000	0.000	4,954.869	Not Full	No	-1.441	20.601
	TOE_2879	4,993.130	0.000	0.000	0.000	4,954.155	Not Full	No	-1.385	38.975
_	TOE_2880	4,992.470	0.000	0.000	0.000	4,953.724	Not Full	No	-1.676	38.746
_	TOE_2881	4,986.390	0.000	0.000	0.000	4,953.343	Not Full	No	-1.377	33.047
	TOE_2882	4,983.690	72,499.653	266,786.005	0.000	4,952.899	Not Full		-1.421	30.791
_	TOE_2883	4,977.290	0.000	0.000	0.000	4,952.510	Not Full		-1.460	24.780
_	TOE 2884	4,973.860	0.000	0.000	0.000	4,951.618	Not Full		-1.442	22.242

ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
TOE_28	85 4,966.950	0.000	0.000	0.000	4,950.685	Not Full	No	-1.565	16.265
TOE_28	86 4,962.980	0.000	0.000	0.000	4,949.921	Not Full	Yes	-1.459	13.059
TOE_28	87 4,963.360	0.000	0.000	0.000	4,949.213	Not Full	No	-1.567	14.147
TOE_28	88 4,965.190	0.000	0.000	0.000	4,948.430	Not Full	No	-1.130	16.760
TOE_28	89 4,956.350	45,236.143	175,290.535	0.000	4,941.146	Not Full	No	-1.624	15.204
TOE_28	90 4,957.260	0.000	0.000	0.000	4,940.775	Not Full	No	-1.585	16.485
TOE_28	91 4,956.430	0.000	0.000	0.000	4,939.542	Not Full	No	-1.798	16.888
TOE_28	92 4,952.720	0.000	0.000	0.000	4,939.531	Not Full	Yes	-1.279	13.189
TOE_28	93 4,951.610	0.000	0.000	0.000	4,938.568	Not Full	No	-1.492	13.042
TOE_28	94 4,950.110	0.000	0.000	0.000	4,937.649	Not Full	No	-1.411	12.461
TOE_28	95 4,948.680	0.000	0.000	0.000	4,936.638	Not Full	No	-1.432	12.042
TOE_28	96 4,945.630	0.000	0.000	0.000	4,935.897	Not Full	No	-1.283	9.733
TOE_28	97 4,944.050	0.000	0.000	0.000	4,934.678	Not Full	No	-1.792	9.372
TOE 28	98 4,942.250	0.000	0.000	0.000	4,932.966	Not Full	Yes	-1.344	9.284
TOE 28	99 4,941.010	0.000	0.000	0.000	4,932.111	Not Full	No	-1.489	8.899
TOE 29	00 4,939.280	0.000	0.000	0.000	4,931.121	Not Full	No	-1.619	8.159
TOE 29		0.000	0.000	0.000	4,931.034	Not Full	No	-1.496	8.046
TOE 29	02 4,941.290	0.000	0.000	0.000	4,930.277	Not Full	No	-1.433	11.013
TOE 29		0.000	0.000	0.000	4,929.333	Not Full	No	-1.357	7.517
TOE 29		146,306.825	482,375.442	0.000	4,929.234	Not Full	No	-0.636	4.826
TOE 29		0.000	0.000	0.000	5,002.201	Not Full	No	-0.824	17.424
TOE 29		0.000	0.000	0.000	5,001.332	Not Full	No	-1.093	18.393
TOE 29		0.000	0.000	0.000	5,009.927	Not Full	Yes	-0.753	13.813
TOE 29		0.000	0.000	0.000	5,100.410	Not Full	No	-0.457	14.790
TOE 29		0.000	0.000	0.000	5,103.372	Not Full	No	-0.495	12.728
TOE 29		55,624.299	213,269.634	0.000	5,116.967	Not Full	No	-0.500	10.133
TOE 29		0.000	0.000	0.000	4,970.453	Not Full	No	-2.037	17.567
TOE 29		0.000	0.000	0.000	4,988.779	Not Full	No	-1.751	20.441
TOE 29		0.000	0.000	0.000	5,083.584	Not Full	No	-0.716	17.976
TOE 29		0.000	0.000	0.000	5,079.759	Not Full	No	-0.771	15.461
TOE 29		0.000	0.000	0.000	5,070.413	Not Full	No	-0.767	15.967
TOE 29		198,058.965	622,138.019	0.000	5,057.829	Not Full	Yes	-0.691	23.141
TOE 29		0.000	0.000	0.000	5,057.337	Not Full	No	-0.583	14.073
TOE 29		0.000	0.000	0.000	5,056.646	Not Full		-0.634	14.294
TOE 29		0.000	0.000	0.000	5,056.220	Not Full	No	-0.490	13.890
TOE 29		0.000	0.000	0.000	5,056.119	Not Full		-0.341	14.441
TOE 29		0.000	0.000	0.000	5,055.513	Not Full		-0.457	12.317
TOE_29		0.000	0.000	0.000	4,928.443	Not Full		-0.687	1.557
TOE_29		0.000	0.000	0.000	4,929.133	Not Full		-0.617	4.927
TOE_29		0.000	0.000	0.000	5,087.466	Not Full		-0.494	11.534
TOE 29		0.000	0.000	0.000	5,088.149	Not Full		-0.191	10.211

ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
TOE_2964	5,098.200	19,787.033	79,148.130	0.000	5,087.481	Not Full	No	-0.719	10.719
TOE_2965	5,099.700	0.000	0.000	0.000	5,088.910	Not Full	Yes	-0.590	10.790
TOE_2966	5,104.500	0.000	0.000	0.000	5,096.054	Not Full	No	-0.746	8.446
TOE_2967	5,109.100	0.000	0.000	0.000	5,098.203	Not Full	Yes	-0.597	10.897
TOE_2968	5,110.300	0.000	0.000	0.000	5,100.083	Not Full	No	-0.717	10.217
TOE_2969	5,111.800	0.000	0.000	0.000	5,099.164	Not Full	No	-0.636	12.636
TOE_2970	5,116.500	51,750.701	199,107.757	0.000	5,103.830	Not Full	No	-0.570	12.670
TOE_2971	5,115.900	0.000	0.000	0.000	5,102.603	Not Full	No	-0.597	13.297
TOE_2972	5,117.400	0.000	0.000	0.000	5,101.278	Not Full	No	-0.622	16.122
TOE_2973	5,120.000	0.000	0.000	0.000	5,105.873	Not Full	No	-0.627	14.127
TOE_2977	5,105.640	13,249.435	52,997.740	0.000	5,099.334	Not Full	No	-0.483	6.306
TOE_2978	5,133.570	29,250.709	116,847.788	0.000	5,112.733	Not Full	No	-0.987	20.837
TOE_2979	5,125.960	0.000	0.000	0.000	5,110.809	Not Full	No	-0.951	15.151
TOE_2980	5,135.280	0.000	0.000	0.000	5,109.300	Not Full	Yes	-0.940	25.980
TOE_2981	5,129.120	0.000	0.000	0.000	5,118.091	Not Full	No	-1.053	11.029
TOE_2982	5,156.250	0.000	0.000	0.000	5,134.500	Not Full	No	-1.500	21.750
TOE_2983	5,156.910	500,421.412	1,355,387.386	0.000	5,133.789	Not Full	No	-1.171	23.121
TOE_2984	5,083.315	0.000	0.000	0.000	5,073.524	Not Full	No	-0.861	9.791
TOE_2985	5,135.145	0.000	0.000	0.000	5,119.075	Not Full	No	-0.690	16.070
TOE_2986	5,135.995	37,500.466	147,008.900	0.000	5,119.343	Not Full	No	-0.712	16.652
TOE_2987	5,143.225	0.000	0.000	0.000	5,124.316	Not Full	Yes	-0.699	18.909
TOE_2988	5,151.225	0.000	0.000	0.000	5,126.278	Not Full	No	-0.707	24.947
TOE_2989	5,151.225	27,999.349	111,997.398	0.000	5,128.336	Not Full	No	-0.709	22.889
TOE_2990	5,127.040	0.000	0.000	0.000	5,116.776	Not Full	No	-0.431	10.264
TOE_2991	5,143.225	0.000	0.000	0.000	5,122.364	Not Full	No	-0.721	20.861
TOE_2992	5,107.670	0.000	0.000	0.000	5,092.244	Not Full	No	-0.359	15.426
TOE_2994	5,011.000	0.000	0.000	0.000	4,993.202	Not Full	No	-1.868	17.798
TOE_2997	5,102.000	0.000	0.000	0.000	5,087.077	Not Full	No	-0.456	14.923
TOE_3003	5,171.230	0.000	0.000	0.000	5,155.175	Not Full	No	-0.833	16.055
TOE_3005	5,011.000	0.000	0.000	0.000	4,993.013	Not Full	No	-2.257	17.987
VPF1_1	5,067.160	0.000	0.000	0.000	5,054.801	Not Full	No	-0.559	12.359
VPF1_103	5,067.570	0.000	0.000	0.000	5,052.757	Not Full	No	-0.893	14.813
VPF1_11	5,075.480	0.000	0.000	0.000	5,064.511	Not Full	No	-1.239	10.969
VPF1_12	5,071.900	0.000	0.000	0.000	5,060.981	Not Full	No	-1.169	10.919
VPF1_126	5,074.140	0.000	0.000	0.000	5,055.890	Not Full	No	-0.667	18.250
VPF1_127	5,066.000	0.000	0.000	0.000	5,051.180	Not Full	No	-0.667	14.820
VPF1_128	5,059.140	0.000	0.000	0.000	5,046.440	Not Full	No	-0.667	12.700
VPF1_129	5,058.660	20,999.512	83,998.048	0.000	5,045.548	Not Full	No	-0.528	13.112
VPF1_13	5,078.400	0.000	0.000	0.000	5,059.085	Not Full	No	-1.265	19.315
VPF1_130	5,056.230	0.000	0.000	0.000	5,043.799	Not Full	No	-0.567	12.431
VPF1_14	5,069.300	0.000	0.000	0.000	5,055.205	Not Full	Yes	-0.845	14.095

	ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
	VPF1_15	5,069.300	0.000	0.000	0.000	5,054.755	Not Full	No	-0.895	14.545
	VPF1_15A	5,064.530	40,750.545	158,891.188	0.000	5,051.214	Not Full	Yes	-0.836	13.316
	VPF1_16	5,062.560	0.000	0.000	0.000	5,049.451	Not Full	No	-1.449	13.109
	VPF1_17	5,058.600	0.000	0.000	0.000	5,038.266	Not Full	Yes	-0.884	20.334
	VPF1_18A	5,058.100	0.000	0.000	0.000	5,037.177	Not Full	No	-0.973	20.923
	VPF1_19A	5,056.800	0.000	0.000	0.000	5,036.212	Not Full	No	-0.968	20.588
	VPF1_20A	5,054.500	0.000	0.000	0.000	5,035.094	Not Full	No	-0.946	19.406
	VPF1_21A	5,054.700	0.000	0.000	0.000	5,033.959	Not Full	No	-1.171	20.741
	VPF1_32A	5,080.000	15,999.834	63,999.336	0.000	5,066.641	Not Full	No	-1.309	13.359
	VPF1_58	5,067.590	18,499.673	73,998.692	0.000	5,054.339	Not Full	No	-0.611	13.251
	VPF1_7	5,085.770	0.000	0.000	0.000	5,075.251	Not Full	No	-0.999	10.519
	VPF1_718	5,092.100	64,215.336	241,046.633	0.000	5,079.111	Not Full	No	-0.989	12.989
	VPF1_8	5,082.650	0.000	0.000	0.000	5,071.905	Not Full	No	-0.855	10.745
	VPFE_10A	5,083.640	0.000	0.000	0.000	5,069.765	Not Full	No	-0.935	13.875
	VPFE_717	5,098.830	0.000	0.000	0.000	5,085.417	Not Full	No	-0.546	13.413
	VRF1D_702	5,136.180	0.000	0.000	0.000	5,123.220	Not Full	No	-0.594	12.960
	VRF1D_703	5,125.680	0.000	0.000	0.000	5,113.600	Not Full	No	-0.563	12.080
	VRF1D_704	5,119.340	0.000	0.000	0.000	5,107.262	Not Full	No	-0.561	12.078
	VRF1D_705	5,116.570	0.000	0.000	0.000	5,104.439	Not Full	No	-0.564	12.131
	VRF1D_707	5,113.290	0.000	0.000	0.000	5,101.323	Not Full	No	-0.550	11.967
	VRF1D_708	5,111.140	0.000	0.000	0.000	5,099.283	Not Full	No	-0.490	11.857
	VRF1D_709	5,108.490	0.000	0.000	0.000	5,098.101	Not Full	Yes	-0.423	10.389
	VRF1D_710	5,110.890	0.000	0.000	0.000	5,097.500	Not Full	No	-0.424	13.390
	VRF1D_711	5,115.620	0.000	0.000	0.000	5,096.620	Not Full	No	-0.434	19.000
	VRF1D_712	5,119.540	0.000	0.000	0.000	5,095.808	Not Full	No	-0.415	23.732
	VRF1D_713	5,116.910	0.000	0.000	0.000	5,095.057	Not Full	No	-0.416	21.853
	VRF1D_714	5,112.260	0.000	0.000	0.000	5,094.124	Not Full	No	-0.470	18.136
	VRF1D_715	5,110.280	0.000	0.000	0.000	5,092.860	Not Full	No	-0.554	17.420
	VRF1D_716	5,102.500	39,500.625	154,321.482	0.000	5,088.963	Not Full	No	-0.471	13.537
	VRF1G_186	5,145.220	0.000	0.000	0.000	5,136.100	Not Full	No	-0.553	9.120
	VRF1G_188	5,141.220	0.000	0.000	0.000	5,128.683	Not Full	No	-0.471	12.537
	VRF1G_204	5,146.770	0.000	0.000	0.000	5,127.037	Not Full	Yes	-0.623	19.733
	VRF1G_205	5,137.330	0.000	0.000	0.000	5,125.812	Not Full	No	-0.618	11.518
	VRGC1_698	5,157.760	161,700.419	524,492.316	0.000	5,137.678	Not Full	No	-0.515	20.082
	VRGC1_699	5,153.370	0.000	0.000	0.000	5,134.954	Not Full	No	-0.549	18.416
	VRGC2_206	5,137.400	0.000	0.000	0.000	5,124.561	Not Full	No	-0.739	12.839
ā	VRGC2_526	5,142.130	0.000	0.000	0.000	5,131.838	Not Full	No	-0.692	10.292
Ī	VRGC2_527	5,138.210	72,750.213	267,564.495	0.000	5,127.221	Not Full	No	-0.689	10.989
同	VRGC2_543	5,134.310	0.000	0.000	0.000	5,119.101	Not Full	Yes	-0.499	15.209
同	VRGC2_544	5,125.790	0.000	0.000	0.000	5,117.244	Not Full	No	-0.546	8.546
回	VRGC2_545	5,121.520	0.000	0.000	0.000	5,111.960	Not Full	Yes	-0.710	9.560

	ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
	VRGC2_580	5,120.220	0.000	0.000	0.000	5,110.429	Not Full	No	-0.741	9.791
	VRGC2_581	5,123.750	0.000	0.000	0.000	5,108.921	Not Full	No	-0.779	14.829
	VRGC2_582	5,116.400	69,000.454	255,913.995	0.000	5,107.193	Not Full	No	-0.787	9.207
	VRGC2_583	5,116.440	0.000	0.000	0.000	5,104.437	Not Full	No	-1.163	12.003
	VRGC4_365	5,191.820	163,750.978	530,102.646	0.000	5,179.383	Not Full	No	-0.410	12.437
	VRGC4_366	5,189.850	0.000	0.000	0.000	5,178.019	Not Full	No	-0.464	11.831
	VRGC4_389	5,191.830	0.000	0.000	0.000	5,176.807	Not Full	No	-0.456	15.023
	VRGC4_415	5,189.660	0.000	0.000	0.000	5,175.396	Not Full	Yes	-0.398	14.264
	VRGC4_416	5,192.130	0.000	0.000	0.000	5,173.517	Not Full	No	-0.446	18.613
	VRGC4_417	5,183.930	0.000	0.000	0.000	5,170.992	Not Full	No	-0.622	12.938
	VRGC4_418	5,153.010	23,474.871	93,899.485	0.000	5,147.090	Not Full	No	-0.453	5.920
	VRGC4_419	5,150.600	0.000	0.000	0.000	5,143.511	Not Full	No	-0.522	7.089
	VRGC4_420	5,150.350	0.000	0.000	0.000	5,140.059	Not Full	No	-0.525	10.291
	VRGC6 183	5,175.770	158,274.660	515,119.440	0.000	5,146.523	Not Full	No	-0.450	29.247
	VRGC6 184	5,155.730	0.000	0.000	0.000	5,145.132	Not Full	No	-0.531	10.598
	VRGC6 185	5,152.370	0.000	0.000	0.000	5,140.335	Not Full	No	-0.569	12.035
	WCR10	5,106.000	202,023.284	632,671.368	0.000	5,094.368	Not Full	No	-0.299	11.632
7	WCR3 100	5,023.010	0.000	0.000	0.000	5,015.616	Not Full	No	-0.914	7.394
٦	WCR3_100A	5,026.060	0.000	0.000	0.000	5,017.485	Not Full	No	-0.785	8.575
٦	WCR3 100B	5,027.500	0.000	0.000	0.000	5,019.276	Not Full	No	-0.784	8.224
7	WCR3_101	5,028.990	0.000	0.000	0.000	5,021.066	Not Full	No	-0.784	7.924
7	WCR3 102	5,029.520	0.000	0.000	0.000	5,022.209	Not Full	No	-0.791	7.311
7	WCR3_103	5,030.990	0.000	0.000	0.000	5,024.595	Not Full	No	-0.855	6.395
7	WCR3_11A	5,068.180	0.000	0.000	0.000	5,055.846	Not Full	Yes	-0.804	12.334
7	WCR3_184	5,094.790	39,958.545	155,995.637	0.000	5,082.689	Not Full	No	-0.645	12.101
7	WCR3_80	4,964.020	6,999.837	27,999.349	0.000	4,951.384	Not Full	No	-0.866	12.636
7	WCR3_81	4,964.350	0.000	0.000	0.000	4,953.420	Not Full	No	-0.910	10.930
7	WCR3_82	4,964.780	0.000	0.000	0.000	4,954.291	Not Full	No	-0.679	10.489
7	WCR3_83	4,967.250	0.000	0.000	0.000	4,957.200	Not Full	No	-0.680	10.050
7	WCR3_84	4,968.740	0.000	0.000	0.000	4,958.860	Not Full	No	-0.680	9.880
7	WCR3_85	4,974.200	0.000	0.000	0.000	4,962.825	Not Full	No	-0.715	11.375
7	WCR3_86	4,976.960	0.000	0.000	0.000	4,965.608	Not Full	No	-0.682	11.352
7	WCR3 86A	4,989.610	0.000	0.000	0.000	4,973.649	Not Full	No	-0.751	15.961
7	WCR3 86B	4,983.490	45,999.343	178,080.793	0.000	4,970.610	Not Full		-0.730	12.880
=	WCR3 86C	4,983.460	0.000	0.000	0.000	4,967.666	Not Full		-0.744	15.794
=	WCR3 87	4,990.560	0.000	0.000	0.000	4,976.171	Not Full		-0.749	14.389
=	WCR3 88	4,994.080	0.000	0.000	0.000	4,978.312	Not Full		-0.748	15.768
=	WCR3_89	4,988.470	0.000	0.000	0.000	4,981.101	Not Full		-0.749	7.369
=	WCR3_90	5,000.230	0.000	0.000	0.000	4,985.163	Not Full		-0.817	15.067
4	WCR3_91	4,999.540	0.000	0.000	0.000	4,987.008	Not Full		-0.702	12.532
=	WCR3_91	4,999.290	0.000	0.000	0.000	4,988.888	Not Full		-0.702	10.402

	ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
	WCR3_93	4,998.750	0.000	0.000	0.000	4,990.396	Not Full	No	-0.704	8.354
	WCR3_94	5,007.400	0.000	0.000	0.000	4,995.439	Not Full	No	-0.851	11.961
	WCR3_94A	5,010.850	56,354.379	215,938.805	0.000	4,997.647	Not Full	No	-0.693	13.203
	WCR3_95	5,012.370	0.000	0.000	0.000	4,998.745	Not Full	No	-0.745	13.625
	WCR3_96	5,013.040	0.000	0.000	0.000	5,001.551	Not Full	No	-0.729	11.489
	WCR3_97	5,013.510	0.000	0.000	0.000	5,004.161	Not Full	No	-0.729	9.349
	WCR3_98	5,018.000	105,750.680	366,904.080	0.000	5,008.354	Not Full	No	-0.796	9.646
	WCR3_99	5,021.010	0.000	0.000	0.000	5,010.136	Not Full	No	-0.784	10.874
	WCR3_H125	5,085.240	0.000	0.000	0.000	5,072.800	Not Full	No	-0.667	12.440
	WCR3_H126	5,080.230	0.000	0.000	0.000	5,071.780	Not Full	No	-0.667	8.450
	WCR3_H127	5,081.120	0.000	0.000	0.000	5,071.100	Not Full	No	-0.667	10.020
	WCR3_H128	5,077.710	0.000	0.000	0.000	5,068.900	Not Full	No	-0.667	8.810
	WCR3_H129	5,079.410	0.000	0.000	0.000	5,067.000	Not Full	No	-0.667	12.410
	WCR3_H130	5,078.600	0.000	0.000	0.000	5,065.300	Not Full	No	-0.667	13.300
	WCR3_H131	5,076.050	166,249.377	536,938.266	0.000	5,062.148	Not Full	No	-0.486	13.902
	WCR3_H132	5,077.020	0.000	0.000	0.000	5,061.402	Not Full	No	-0.431	15.618
٦	WCR3_H133	5,074.230	0.000	0.000	0.000	5,060.298	Not Full	No	-0.535	13.932
	WCR3_H134	5,072.210	0.000	0.000	0.000	5,057.255	Not Full	No	-0.845	14.955
	WCR3_H135	5,080.510	0.000	0.000	0.000	5,062.365	Not Full	No	-0.765	18.145
	WCR3_H136	5,079.790	0.000	0.000	0.000	5,064.380	Not Full	No	-0.720	15.410
	WCR3_H137	5,080.010	0.000	0.000	0.000	5,066.380	Not Full	No	-0.720	13.630
	WCR3_H138	5,078.740	0.000	0.000	0.000	5,068.582	Not Full	No	-0.718	10.158
	WCR3_H139	5,081.290	0.000	0.000	0.000	5,070.282	Not Full	No	-0.718	11.008
	WCR3_H140	5,085.040	0.000	0.000	0.000	5,072.923	Not Full	No	-0.757	12.117
	WCR3_H141	5,085.410	55,936.779	214,412.060	0.000	5,073.411	Not Full	Yes	-0.689	11.999
	WCR3_H146	5,089.800	0.000	0.000	0.000	5,077.659	Not Full	No	-0.675	12.141
	WCR3_H164	5,096.500	0.000	0.000	0.000	5,079.323	Not Full	No	-0.610	17.177
	WCR3 H165	5,095.420	0.000	0.000	0.000	5,080.023	Not Full	No	-0.610	15.397
	WCR3_H171	5,093.250	0.000	0.000	0.000	5,081.233	Not Full	Yes	-0.600	12.017
	WCR3_H185	5,097.730	0.000	0.000	0.000	5,085.500	Not Full	No	-0.833	12.230
	WCR3 H186	5,104.280	0.000	0.000	0.000	5,092.000	Not Full	No	-0.833	12.280
ī	WCR3 H187	5,105.550	0.000	0.000	0.000	5,093.300	Not Full	No	-0.833	12.250
ī	WCR3_H188	5,106.480	0.000	0.000	0.000	5,095.000	Not Full	No	-0.667	11.480
	WCR3_H189	5,108.120	0.000	0.000	0.000	5,097.800	Not Full	No	-0.667	10.320
	WCR3_H190	5,111.400	0.000	0.000	0.000	5,099.400	Not Full	No	-0.667	12.000
	WCR3_H191	5,113.380	0.000	0.000	0.000	5,101.380	Not Full	No	-0.667	12.000
	WCR3_H192	5,116.340	0.000	0.000	0.000	5,104.340	Not Full		-0.667	12.000
	WCR3_H192A	5,120.060	0.000	0.000	0.000	5,108.060	Not Full		-0.667	12.000
=1	WCR3_H193	5,123.260	0.000	0.000	0.000	5,111.260	Not Full		-0.667	12.000
	WCR3_H194	5,127.280	0.000	0.000	0.000	5,115.290	Not Full		-0.667	11.990
Ħ١	WCR3 I1	5,069.640	0.000	0.000	0.000	5,056.522	Not Full		-0.838	13.118

	ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
	WCR3_I10	5,049.360	0.000	0.000	0.000	5,037.313	Not Full	No	-0.757	12.047
	WCR3_I11	5,046.150	57,873.578	221,342.792	0.000	5,035.399	Not Full	No	-0.871	10.751
	WCR3_I12	5,050.460	0.000	0.000	0.000	5,032.972	Not Full	Yes	-0.718	17.488
	WCR3_I13	5,046.090	0.000	0.000	0.000	5,031.572	Not Full	No	-0.718	14.518
	WCR3_I13A	5,041.820	0.000	0.000	0.000	5,030.099	Not Full	No	-0.841	11.721
	WCR3_I14	5,040.390	0.000	0.000	0.000	5,028.792	Not Full	No	-0.848	11.598
	WCR3_I15	5,039.430	0.000	0.000	0.000	5,027.046	Not Full	No	-0.784	12.384
	WCR3_I2	5,066.970	0.000	0.000	0.000	5,053.872	Not Full	No	-0.828	13.098
	WCR3_I4	5,065.060	0.000	0.000	0.000	5,051.373	Not Full	No	-0.927	13.687
	WCR3_I5	5,059.210	0.000	0.000	0.000	5,046.831	Not Full	No	-0.829	12.379
	WCR3_I6	5,056.080	62,625.576	236,107.250	0.000	5,045.094	Not Full	No	-0.786	10.986
	WCR3_I7	5,053.870	0.000	0.000	0.000	5,043.084	Not Full	No	-0.786	10.786
	WCR3_I8	5,051.680	0.000	0.000	0.000	5,040.913	Not Full	Yes	-0.757	10.767
	WCR3_I9	5,048.680	0.000	0.000	0.000	5,039.113	Not Full	No	-0.757	9.567
$\Box$	WCR3-I_3	5,066.070	0.000	0.000	0.000	5,052.872	Not Full	No	-0.828	13.198
$\Box$	WCR5_1	5,170.000	221,854.956	684,293.211	0.000	5,157.514	Not Full	No	-0.319	12.486
同	WCR5 10	5,094.000	0.000	0.000	0.000	5,081.431	Not Full	No	-0.569	12.569
同	WCR5_11	5,092.990	0.000	0.000	0.000	5,078.321	Not Full	No	-0.569	14.669
Ħ	WCR5 12	5,084.000	0.000	0.000	0.000	5,071.464	Not Full	No	-0.536	12.536
	WCR5_13	5,080.000	0.000	0.000	0.000	5,067.517	Not Full	No	-0.483	12.483
	WCR5_14	5,078.000	0.000	0.000	0.000	5,065.494	Not Full	No	-0.506	12.506
	WCR5_15	5,076.000	0.000	0.000	0.000	5,063.448	Not Full	No	-0.552	12.552
	WCR5_16	5,070.000	74,067.812	271,658.277	0.000	5,057.512	Not Full	No	-0.488	12.488
	WCR5_17	5,066.000	0.000	0.000	0.000	5,053.531	Not Full	No	-0.469	12.469
	WCR5_18	5,062.000	0.000	0.000	0.000	5,049.450	Not Full	No	-0.550	12.550
	WCR5_19	5,058.000	0.000	0.000	0.000	5,045.503	Not Full	No	-0.497	12.497
	WCR5_2	5,162.980	0.000	0.000	0.000	5,149.280	Not Full	No	-0.454	13.700
	WCR5_20	5,048.000	0.000	0.000	0.000	5,035.610	Not Full	No	-0.390	12.390
	WCR5_21	5,045.000	0.000	0.000	0.000	5,032.473	Not Full	No	-0.517	12.527
	WCR5_22	5,029.000	7,325.277	29,301.109	0.000	5,016.790	Not Full	Yes	-0.460	12.210
Ħ	WCR5_23	5,028.000	0.000	0.000	0.000	5,015.508	Not Full	No	-0.742	12.492
Ħ	WCR5_24	5,022.000	24,495.831	97,983.323	0.000	5,009.586	Not Full	No	-0.664	12.414
Ħ	WCR5_25	5,017.080	0.000	0.000	0.000	5,004.513	Not Full	No	-0.637	12.567
	WCR5_26	5,018.000	0.000	0.000	0.000	5,002.383	Not Full	No	-0.637	15.617
	WCR5_27	5,018.000	0.000	0.000	0.000	5,000.545	Not Full	No	-0.635	17.455
	WCR5 28	5,016.000	0.000	0.000	0.000	4,999.154	Not Full	No	-0.796	16.846
	WCR5_3	5,156.000	0.000	0.000	0.000	5,143.217	Not Full		-0.486	12.783
	WCR5_4	5,138.000	255,202.464	769,807.041	0.000	5,125.648	Not Full		-0.252	12.352
H	WCR5_5	5,136.000	0.000	0.000	0.000	5,123.703	Not Full		-0.197	12.297
Ħ.	WCR5_6	5,138.000	0.000	0.000	0.000	5,121.153	Not Full		-0.197	16.847
Ħ.	WCR5_7	5,132.000	0.000	0.000	0.000	5,119.446	Not Full		-0.554	12.554

ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
WCR5_8	5,124.000	0.000	0.000	0.000	5,111.413	Not Full	No	-0.587	12.587
WCR5_9	5,112.000	0.000	0.000	0.000	5,099.410	Not Full	No	-0.590	12.590
WCR7_1	5,154.000	0.000	0.000	0.000	5,141.000	Not Full	No	-0.667	13.000
WCR7_10	5,062.000	0.000	0.000	0.000	5,049.334	Not Full	No	-0.333	12.666
WCR7_11	5,058.000	0.000	0.000	0.000	5,045.375	Not Full	Yes	-0.292	12.625
WCR7_12	5,055.990	133,904.110	447,543.083	0.000	5,043.401	Not Full	No	-0.432	12.589
WCR7_13	5,050.000	0.000	0.000	0.000	5,037.421	Not Full	No	-0.413	12.579
WCR7_14	5,044.000	0.000	0.000	0.000	5,031.447	Not Full	No	-0.387	12.553
WCR7_15	5,042.000	0.000	0.000	0.000	5,029.429	Not Full	No	-0.405	12.571
WCR7_16	5,038.000	0.000	0.000	0.000	5,025.368	Not Full	No	-0.365	12.632
WCR7_17	5,036.000	0.000	0.000	0.000	5,023.518	Not Full	Yes	-0.256	12.482
WCR7_18	5,034.990	213,754.960	663,208.919	0.000	5,021.557	Not Full	No	-0.276	13.433
WCR7_2	5,136.000	0.000	0.000	0.000	5,123.000	Not Full	No	-0.667	13.000
WCR7_3	5,120.000	0.000	0.000	0.000	5,107.000	Not Full	No	-0.667	13.000
WCR7_4	5,108.000	0.000	0.000	0.000	5,095.000	Not Full	No	-0.667	13.000
WCR7_5	5,102.000	0.000	0.000	0.000	5,089.000	Not Full	No	-0.667	13.000
WCR7_6	5,094.000	0.000	0.000	0.000	5,081.000	Not Full	No	-0.667	13.000
WCR7_7	5,090.000	103,770.681	361,078.922	0.000	5,077.262	Not Full	No	-0.405	12.738
WCR7_8	5,072.000	0.000	0.000	0.000	5,059.294	Not Full	No	-0.383	12.706
WCR7_9	5,068.000	0.000	0.000	0.000	5,055.286	Not Full	No	-0.380	12.714

	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth (ft)	Adjusted Velocity
	AIF1_119-ECF21_120	AIF1_119	ECF21_120	12.000	488.407	0.004	709,007.958	231,369.033	Free Surface	2.982	0.475	0.458	0.475	0.441	0.866	1,547,662.229	No	0.475	2.982
	ARF1_12-ARF1_4	ARF1_12	ARF1_4	8.000	154.018	0.004	225,620.011	59,250.218	Free Surface	2.239	0.458	0.430	0.305	0.274	0.815	525,053.946	No	0.305	2.239
	ARF1_16-ARF1_12	ARF1_16	ARF1_12	8.000	132.199	0.011	225,620.011	59,250.218	Free Surface	3.344	0.339	0.248	0.226	0.274	1.449	909,644.038	No	0.226	3.344
	ARF1_17-ARF1_16	ARF1_17	ARF1_16	8.000	314.508	0.009	225,620.011	59,250.218	Free Surface	3.111	0.358	0.274	0.239	0.274	1.308	822,988.236	No	0.239	3.111
	ARF1_28-ARF1_17	ARF1_28	ARF1_17	8.000	284.662	0.020	225,620.011	59,250.218	Free Surface	4.064	0.295	0.189	0.196	0.274	1.905	1,193,034.187	No	0.196	4.064
	ARF1_29-ARF1_28	ARF1_29	ARF1_28	8.000	66.881	0.012	225,620.011	59,250.218	Free Surface	3.437	0.333	0.239	0.222	0.274	1.507	945,043.898	No	0.222	3.437
	ARF1_2-FMF9_1	ARF1_2	FMF9_1	10.000	336.918	0.004	225,620.011	59,250.218	Free Surface	2.340	0.318	0.219	0.265	0.257	0.941	1,029,721.578	Yes	0.280	2.172
	ARF1_31-ARF1_29	ARF1_31	ARF1_29	8.000	345.854	0.009	225,620.011	59,250.218	Free Surface	3.035	0.364	0.284	0.243	0.274	1.263	795,342.077	No	0.243	3.035
	ARF1_32-ARF1_31	ARF1_32	ARF1_31	8.000	124.179	0.007	225,620.011	59,250.218	Free Surface	2.852	0.382	0.309	0.254	0.274	1.156	730,184.738	No	0.254	2.852
	ARF1_33-ARF1_32	ARF1_33	ARF1_32	8.000	224.073	0.010	225,620.011	59,250.218	Free Surface	3.138	0.356	0.271	0.237	0.274	1.324	832,905.398	No	0.237	3.138
	ARF1_34-ARF1_33	ARF1_34	ARF1_33	8.000	155.283	0.006	225,620.011	59,250.218	Free Surface	2.597	0.409	0.351	0.273	0.274	1.011	642,238.703	No	0.273	2.597
	ARF1_35-ARF1_34	ARF1_35	ARF1_34	8.000	103.489	0.005	225,620.011	59,250.218	Free Surface	2.475	0.424	0.375	0.283	0.274	0.943	601,337.528	No	0.283	2.475
	ARF1_36-ARF1_35	ARF1_36	ARF1_35	8.000	271.125	0.009	225,620.011	59,250.218	Free Surface	3.010	0.367	0.287	0.244	0.274	1.249	786,423.378	No	0.244	3.010
	ARF1_37-ARF1_36	ARF1_37	ARF1_36	8.000	113.306	0.006	225,620.011	59,250.218	Free Surface	2.710	0.396	0.331	0.264	0.274	1.075	680,924.666	No	0.264	2.710
	ARF1_3-ARF1_2	ARF1_3	ARF1_2	8.000	201.740	0.006	225,620.011	59,250.218	Free Surface	2.703	0.397	0.333	0.265	0.274	1.071	678,362.734	No	0.265	2.703
	ARF1_4-ARF1_3	ARF1_4	ARF1_3	8.000	122.407	0.015	225,620.011	59,250.218	Free Surface	3.697	0.315	0.216	0.210	0.274	1.669	1,045,721.845	No	0.210	3.697
	ARF2_1-TOE_2647	ARF2_1	TOE_2647	8.000	158.000	0.008	225,620.011	59,250.218	Free Surface	2.946	0.372	0.295	0.248	0.274	1.211	763,554.513	No	0.248	2.946
	ARF2_2-ARF2_1	ARF2_2	ARF2_1	8.000	151.286	0.006	225,620.011	59,250.218	Free Surface	2.695	0.398	0.334	0.265	0.274	1.066	675,771.581	No	0.265	2.695
	BFF1_61-BFF1_62	BFF1_61	BFF1_62	8.000	397.643	0.005	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	601,633.726	No	0.000	0.000
	BFF1_62-BFF1_63	BFF1_62	BFF1_63	8.000	345.405	0.005	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	600,374.865	Yes	0.069	0.000
	BFF1_63-TOE_2733	BFF1_63	TOE_2733	8.000	197.672	0.007	67,000.295	16,750.074	Free Surface	1.986	0.207	0.094	0.138	0.147	1.126	713,929.656	Yes	0.232	0.960
=	CCF3_39E-CMF2_39D	CCF3_39E	CMF2_39D	10.000	161.407	0.004	263,680.995	71,500.293	Free Surface	2.339	0.357	0.272	0.297	0.278	0.882	968,552.158	No	0.297	2.339
	CCF3_60A-CCF3_39E	CCF3_60A	CCF3_39E	10.000	310.798	0.004	167,114.552	42,999.824	Free Surface	2.091	0.278	0.169	0.232	0.220	0.905	990,944.494	No	0.232	2.091
	CCF3_60-CCF3_60A	CCF3_60	CCF3_60A	10.000	135.757	0.040	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	3,061,985.380	Yes	0.006	0.000
=	CCF4 4-1-TOE 2990	CCF4_41	TOE_2990	8.000	204.703	0.012	253,583.000	68,250.214	Free Surface	3.500	0.358	0.274	0.238	0.292	1.472	926,183.223	No	0.238	3.500
	CCF4 4-2-CCF4 41	CCF4 42	CCF4 41	8.000	274.850	0.030	125,071.153	31,499.988	Free Surface	3.990	0.197	0.085	0.131	0.202	2.324	1,478,629.209	No	0.131	3.990
	CCF4 4-3-CCF4 42	CCF4_43	CCF4 42	8.000	287.880	0.031	125,071.153	31,499.988	Free Surface	4.004	0.196	0.084	0.131	0.202	2.335	1,485,724.658	No	0.131	4.004
╗	CCF4 4-4-CCF4 43	CCF4 44	CCF4 43	8.000	307.760	0.018	125,071.153	31,499.988	Free Surface	3.337	0.223	0.109	0.149	0.202	1.819	1,148,410.503	No	0.149	3.337
	CCF4 4-5-CCF4 44	CCF4_45	CCF4_44	8.000	312.018	0.018	125,071.153	31,499.988	Free Surface	3.327	0.223	0.109	0.149	0.202	1.812	1,143,577.617	No	0.149	3.327
7	CCF6_105-CCF6_106	CCF6_105	CCF6 106	12.000	300.958	0.015	709,007.958	231,369.033	Free Surface	4.966	0.325	0.228	0.325	0.441	1.802	3,112,332.973	No	0.325	4.966
	CCF6 106-TOE 2640	CCF6_106	TOE_2640	12.000	304.102	0.015	709,007.958	231,369.033	Free Surface	4.858	0.330	0.235	0.330	0.441	1.747	3,018,825.908	No	0.330	4.858
=	CCF6 6-10-CCF6 69	CCF6_610	CCF6 69	8.000	294.243	0.018	253,583.000	68,250.214	Free Surface	4.097	0.319	0.220	0.212	0.292	1.839	1,152,419.655	No	0.212	4.097
=	CCF6 6-11-CCF6 610	CCF6_611	CCF6_610	8.000	108.377	0.016	253,583.000	68,250.214	Free Surface	3.881	0.332	0.237	0.221	0.292	1.704	1,068,707.131	No	0.221	3.881
=	CCF6 6-12-CCF6 611	CCF6 612	CCF6 611	8.000	139.412	0.017	253,583.000	68,250.214	Free Surface	4.008	0.324	0.227	0.216	0.292	1.783	1,117,689.788	No	0.216	4.008
=	CCF6 6-13-CCF6 612	CCF6 613	CCF6 612	8.000	116.143	0.012	253,583.000	68,250.214	Free Surface	3.523	0.356	0.271	0.237	0.292	1.486	934,707.955	No	0.237	3.523
	CCF6_6-14-CCF6_613	CCF6_614	CCF6 613	8.000	93.593	0.010	253,583.000	68,250.214	Free Surface	3.314	0.372	0.295	0.248	0.292	1.363	859,168.773	No	0.248	3.314
Ħ	CCF6 6-15-CCF6 105	CCF6 615	CCF6_105	12.000	250.404	0.035	253,583.000		Free Surface	4.935	0.158	0.054	0.158	0.259	2.634	4,699,501.517	Yes	0.171	4.388
	CCF6 6-8-CCF6 615	CCF6 68	CCF6 615	8.000	122.248	0.018	253,583.000	68,250.214	Free Surface	4.040	0.322	0.224	0.215	0.292	1.803	1,130,246.077	No	0.215	4.040
Ħ	CCF6 6-9-CCF6 68	CCF6_69	CCF6 68	8.000	210.219	0.017	253,583.000	68,250.214	Free Surface	3.985	0.325	0.229	0.217	0.292	1.768	1,108,600.417	No	0.217	3.985
	CCF9 4-6-CCF4 45	CCF9 46	CCF4 45	8.000	295.271	0.005	125,071.153	31,499.988	Free Surface	2.147	0.305	0.202	0.203	0.202	0.988	618,590.475	No	0.203	2.147
	CFF1 17-TOE 2631	CFF1_17	TOE_2631	15.000	200.085	0.011	858,114.812	290,401.811	Free Surface	4.590	0.286	0.178	0.357	0.455	1.599	4,819,738.677	No	0.357	4.590
=	CFF1 18-CFF1 17	CFF1 18	CFF1 17	15.000	192.033	0.012	858,114.812	290,401.811	Free Surface	4.651	0.283	0.175	0.354	0.455	1.628	4,908,843.591	No	0.354	4.651
=	CFF1 19B1-CFF1 19	CFF1_19B1	CFF1_19	12.000	114.139	0.008	430,160.526	127,750.992	Free Surface	3.412	0.297	0.192	0.297	0.340	1.301	2,245,553.259	No	0.297	3.412
=	CFF1 19B2-CFF1 19B1	CFF1_19B2	CFF1_19B1	12.000	135.089	0.007	430,160.526	127,750.992	Free Surface	3.174	0.313	0.212	0.313	0.340	1.176	2,030,162.628	No	0.313	3.174
=	CFF1 19-CFF1 18	CFF1 19	CFF1_18	15.000	128.744	0.011	858,114.812	290,401.811	Free Surface	4.505	0.290	0.183	0.362	0.455	1.557	4,695,185.852	No	0.362	4.505
=	CFF1 20-CFF1 19	CFF1 20	CFF1 19	12.000	259.752	0.011	527,092.609		Free Surface		0.304	0.201	0.304	0.378	1.518	2,619,928.491	No	0.304	4.037
=	CFF1 21-CFF1 20	CFF1 21	CFF1 20	12.000		0.011	527,092.609	162,650.819			0.307	0.205	0.307	0.378	1.492	2,574,854.316	No	0.307	3.987
Ħ	CFF1_22A-CFF1_22B	CFF1_22A	CFF1 22B	10.000	369.202	0.014	263,680.995		Free Surface		0.258	0.145	0.215	0.278	1.655	1,814,859.742	No	0.215	3.669
Ħ	CFF1 22B-CFF1 22C	CFF1_22B	CFF1_22C	10.000			263,680.995	71,500.293			0.258	0.146	0.215	0.278	1.651	1,810,337.033	No	0.215	3.663
	CFF1 22C-CFF1 19B2	CFF1_22C	CFF1_19B2	10.000	289.466		430,160.526	127,750.992			0.336	0.243	0.280	0.359	1.616	1,771,578.311	No	0.280	4.144
Ħ	CFF1 22-CFF1 21	CFF1_22	CFF1_21	12.000	185.308		433,406.789	128,900.111			0.298	0.194	0.298	0.341	1.295	2,235,268.786	No	0.298	3.408
Ħ	CFF1 22D-CFF1 22C	CFF1_22D	CFF1_22C	10.000	133.147		0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	1,832,565.336	No	0.000	0.000
=	CFF1 22E-CFF1 22D	CFF1_22E	CFF1_22D	10.000	130.967		0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	1,715,954.795	No	0.000	0.000
	CFF1 22F1-CFF1 22E	CFF1_22F1	CFF1_22E	10.000	217.475		0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	1,128,189.005	No	0.000	0.000
4			CFF1_22	12.000			433,406.789	128,900.111			0.286	0.178	0.286	0.341	1.407	2,428,997.525	No	0.286	3.617
		CFF1 23					,	,								,,,55520			
	CFF1_23-CFF1_22	CFF1_23 CFF1_24				0.010	433,406,789	128,900,111	Free Surface	3.660	0.284	0.176	0.284	0.341	1.430	2,469,290,350	No	0.284	3,660
	CFF1_23-CFF1_22 CFF1_24-CFF1_23	CFF1_24	CFF1_23	12.000	100.548		433,406.789 433,406,789	128,900.111 128.900.111			0.284 0.289	0.176 0.182	0.284	0.341 0.341	1.430 1.377	2,469,290.350 2,376,498,473	No No	0.284 0.289	3.660 3.561
	CFF1_23-CFF1_22				100.548	0.009	433,406.789 433,406.789 433,406.789	128,900.111 128,900.111 128,900.111	Free Surface	3.561	0.284 0.289 0.285	0.176 0.182 0.177	0.284 0.289 0.285	0.341 0.341 0.341	1.430 1.377 1.416	2,469,290.350 2,376,498.473 2,444,570.671	No No No	0.284 0.289 0.285	3.660 3.561 3.633

FULL BUII	LDOUT PIPE TABLE													1		1			
	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth (ft)	Adjusted Velocity
	CFF1_28-CFF1_27	CFF1_28	CFF1_27	12.000	145.140	0.010	433,406.789	128,900.111	Free Surface	3.728	0.280	0.171	0.280	0.341	1.468	2,534,226.581	No	0.280	3.728
	CFF1_29-CFF1_28	CFF1_29	CFF1_28	12.000	150.879	0.024	433,406.789	128,900.111	Free Surface	5.013	0.227	0.113	0.227	0.341	2.210	3,841,988.751	No	0.227	5.013
	CFF1_30-CFF1_29	CFF1_30	CFF1_29	12.000	241.294	0.023	433,406.789	128,900.111	Free Surface	4.999	0.227	0.113	0.227	0.341	2.202	3,827,344.160	No	0.227	4.999
	CFF1_31-CFF1_30	CFF1_31	CFF1_30	12.000	118.736	0.010	433,406.789	128,900.111	Free Surface	3.740	0.279	0.170	0.279	0.341	1.475	2,545,706.000	No	0.279	3.740
CH	HF1A_22-CHF1A_23	CHF1A_22	CHF1A_23	18.000	160.160	0.019	1,635,716.886	625,921.684	Free Surface	6.567	0.270	0.160	0.405	0.603	2.152	10,243,088.805	No	0.405	6.567
☐ CH	HF1A_23-CHF1A_24	CHF1A_23	CHF1A_24	18.000	434.970	0.023	1,635,716.886	625,921.684	Free Surface	7.021	0.258	0.145	0.386	0.603	2.360	11,248,363.236	No	0.386	7.021
☐ CH	HF1A_24-CHF1A_25	CHF1A_24	CHF1A_25	18.000	292.440	0.010	1,635,716.886	625,921.684	Free Surface	5.245	0.318	0.219	0.476	0.603	1.573	7,481,584.554	No	0.476	5.245
СН	IF1A_25-CHF1A_A1A	CHF1A_25	CHF1A_A1A	18.000	123.397	0.007	1,635,716.886	625,921.684	Free Surface	4.614	0.349	0.261	0.523	0.603	1.313	6,262,836.979	Yes	0.524	4.599
СН	F1A_A1A-TOE_2586	CHF1A_A1A	TOE_2586	18.000	158.077	0.007	1,635,716.886	625,921.684	Free Surface	4.584	0.350	0.264	0.526	0.603	1.301	6,207,300.817	No	0.526	4.584
☐ CH	HF1A_C1-CHF1A_22	CHF1A_C1	CHF1A_22	18.000	101.324	0.058	1,473,345.957	552,671.792	Free Surface	9.409	0.195	0.083	0.292	0.571	3.672	17,749,713.432	Yes	0.324	8.126
☐ CH	HF1B_12-CHF1B_20	CHF1B_12	CHF1B_20	18.000	340.960	0.027	1,473,345.957	552,671.792	Free Surface	7.218	0.235	0.121	0.352	0.571	2.552	12,205,355.972	No	0.352	7.218
СН	HF1B_14A-CHF1B_17	CHF1B_14A	CHF1B_17	18.000	122.228	0.017	1,421,643.166	529,672.121	Free Surface	6.063	0.259	0.147	0.388	0.560	2.033	9,689,124.841	No	0.388	6.063
CHF	F1B_15A-CHF1B_14A	CHF1B_15A	CHF1B_14A	18.000	195.015	0.001	1,421,643.166	529,672.121	Free Surface	2.390	0.516	0.528	0.775	0.560	0.537	2,692,660.183	No	0.775	2.390
CHF	F1B_15A-CHF3A_15B	CHF3A_15B	CHF1B_15A	18.000	180.259	0.003	1,421,643.166	529,672.121	Free Surface	3.090	0.423	0.374	0.635	0.560	0.786	3,805,405.449	No	0.635	3.090
☐ CH	HF1B_17-CHF1B_18	CHF1B_17	CHF1B_18	18.000	330.000	0.006	1,421,643.166	529,672.121	Free Surface	4.263	0.333	0.240	0.500	0.560	1.244	5,924,634.458	No	0.500	4.263
☐ CH	HF1B_18-CHF1B_12	CHF1B_18	CHF1B_12	18.000	400.000	0.033	1,473,345.957	552,671.792	Free Surface	7.707	0.224	0.110	0.336	0.571	2.793	13,386,173.134	No	0.336	7.707
CI	HF1B_20-TOE_2585	CHF1B_20	TOE_2585	18.000	392.558	0.025	1,473,345.957	552,671.792	Free Surface	6.966	0.241	0.127	0.361	0.571	2.430	11,610,027.069	No	0.361	6.966
СН	IF3A_15-CHF3A_15B	CHF3A_15	CHF3A_15B	18.000	180.044	0.003	1,421,643.166	529,672.121	Free Surface	3.115	0.421	0.370	0.631	0.560	0.795	3,847,134.378	No	0.631	3.115
c	CHF3C_8-CHF3C_9	CHF3C_8	CHF3C_9	18.000	288.213	0.005	1,355,387.386	500,421.412	Free Surface	3.727	0.355	0.271	0.533	0.547	1.049	5,009,536.836	No	0.533	3.727
С	CHF3C_9-TOE_2580	CHF3C_9	TOE_2580	18.000	339.237	0.004	1,355,387.386	500,421.412	Free Surface	3.542	0.369	0.290	0.553	0.547	0.976	4,669,246.805	No	0.553	3.542
E CM	/F2_22G-CFF1_22F1	CMF2_22G	CFF1_22F1	10.000	50.170	0.028	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	2,587,708.428	No	0.000	0.000
c	MF2_32-CFF1_22A	CMF2_32	CFF1_22A	10.000	151.294	0.009	263,680.995	71,500.293	Free Surface	3.131	0.288	0.181	0.240	0.278	1.328	1,452,948.058	No	0.240	3.131
	CMF2_33-CMF2_32	CMF2_33	CMF2_32	10.000	127.250	0.004	263,680.995	71,500.293	Free Surface	2.444	0.345	0.256	0.288	0.278	0.938	1,029,443.086	No	0.288	2.444
	CMF2_34-CMF2_33	CMF2_34	CMF2_33	10.000	31.066	0.004	263,680.995	71,500.293	Free Surface	2.385	0.351	0.265	0.293	0.278	0.906	995,000.873	No	0.293	2.385
	CMF2_35-CMF2_34	CMF2_35	CMF2_34	10.000	109.503	0.005	263,680.995	71,500.293	Free Surface	2.547	0.335	0.242	0.279	0.278	0.995	1,090,089.794	No	0.279	2.547
	CMF2 36-CMF2 35	CMF2_36	CMF2_35	10.000	215.403	0.013	263,680.995	71,500.293	Free Surface	3.567	0.263	0.151	0.219	0.278	1.592	1,744,243.654	No	0.219	3.567
	CMF2 37-CMF2 36	CMF2_37	CMF2_36	10.000	95.722	0.012	263,680.995	71,500.293	Free Surface	3.481	0.267	0.156	0.223	0.278	1.539	1,685,918.996	No	0.223	3.481
	CMF2 38-CMF2 37	CMF2_38	CMF2_37	10.000	36.580	0.010	263,680.995	71,500.293	Free Surface	3.242	0.281	0.173	0.234	0.278	1.394	1,525,893.681	No	0.234	3.242
F c	MF2 39A-CMF2 39	CMF2_39A	CMF2_39	10.000	94.496	0.004	263,680.995	71,500.293	Free Surface	2.350	0.355	0.270	0.296	0.278	0.888	975,390.304	No	0.296	2.350
E CN	MF2 39B-CMF2 39A	CMF2_39B	CMF2_39A	10.000	156.532	0.019	263,680.995	71,500.293	Free Surface	4.061	0.240	0.126	0.200	0.278	1.905	2,093,583.694	No	0.200	4.061
E CN	MF2 39C-CMF2 39B	CMF2_39C	CMF2_39B	10.000	127.599	0.004	263,680.995	71,500.293	Free Surface	2.328	0.358	0.274	0.298	0.278	0.876	962,841.442	No	0.298	2.328
	CMF2 39-CMF2 38	CMF2 39	CMF2 38	10.000	65.228	0.009	263,680.995	71,500.293	Free Surface	3.146	0.287	0.180	0.240	0.278	1.337	1,462,862.125	No	0.240	3.146
	MF2 39D-CMF2 39C	CMF2_39D	CMF2 39C	10.000	138.889	0.004	263,680.995	71,500.293	Free Surface	2.337	0.357	0.272	0.297	0.278	0.881	967,923.923	No	0.297	2.337
	MPF1 10.1-TOE 2941		TOE 2941	12.000	179.590	0.005	438,630.099	130,749.071	Free Surface	2.880	0.340	0.249	0.340	0.343	1.018	1,760,761.108	No	0.340	2.880
	SF1 C2A-TOE 2804	CSF1 C2A	TOE 2804	18.000	237.022	0.003	1,074,330.451	379,477.297	Free Surface	3.004	0.351	0.264	0.526	0.485	0.852	4,064,442.599	No	0.526	3.004
	SF1 C2C-CSF1 C2A	CSF1_C2C	CSF1 C2A	18.000	14.583	0.010	1,074,330.451	379,477.297	Free Surface	4.538	0.261	0.149	0.391	0.485	1.517	7,225,549.849	No	0.391	4.538
	SF1 C3A-CSF1 C3B	CSF1 C3A	CSF1 C3B	18.000		0.004	968,433.703	335,401.794	Free Surface	3.157	0.314	0.214	0.471	0.459	0.953	4,532,537.708	No	0.471	3.157
	SF1 C3B-CSF1 C4B	CSF1_C3B	CSF1 C4B	18.000	414.773	0.003	968,433.703	335,401.794	Free Surface	2.910	0.333	0.239	0.499	0.459	0.850	4,048,353.344	No	0.499	2.910
	SF1 C4B-CSF1 C5B	CSF1 C4B	CSF1 C5B	18.000	412.389	0.004	968,433.703	335,401.794	Free Surface	3.223	0.309	0.208	0.464	0.459	0.981	4,664,630.000	No	0.464	3.223
	SF1 C5B-CSF1 C6C	CSF1 C5B	CSF1 C6C	18.000	180.189	0.005	968,433.703	335,401.794	Free Surface	3.418	0.296	0.191	0.444	0.459	1.065	5,064,930.575	No	0.444	3.418
	SF1 C6C-CSF1 C2C	CSF1 C6C	CSF1 C2C	18.000			1,074,330.451	379,477.297			0.356	0.271	0.534	0.485	0.829	3,959,290.219	No	0.534	2.948
	CF1 100-ECF1 102	ECF1_100	ECF1 102	30.000				1,876,718.173			0.366	0.285	0.914	0.835	0.840	14,412,685.329	Yes	0.925	3.853
	CF1 102-ECF1 26	ECF1 102	ECF1 26	30.000			4,114,322.790				0.375	0.299	0.937	0.835	0.802	13,774,775.041	No	0.937	3.791
	CF1 108-ECF1 28	ECF1 108	ECF1_28	30.000				1,984,718.133			0.262	0.150	0.655	0.856	1.679	28,680,223.705	No	0.655	6.507
	CF1 118-ECF1 119	ECF1 118	ECF1_119	12.000		0.006		302,350.926			0.484	0.474	0.484	0.496	1.045	1,874,045.649	No	0.484	3.642
	CF1 119-TOE 2594	ECF1 119	TOE 2594	12.000			887,581.330	302,350.926			0.500	0.500	0.500	0.496	0.983	1,774,422.234	No	0.500	3.496
	CF1 2271-TOE 2655	ECF1 2271	TOE 2655	30.000			,	2,027,815.876			0.408	0.349	1.020	0.864	0.727	12,574,544.023	Yes	1.421	2.359
	ECF1_24-ECF1_44	ECF1_24	ECF1_44	30.000				1,817,718.516			0.464	0.439	1.160	0.824	0.518	9,115,619.517	No	1.160	2.781
	ECF1 25-ECF1 100	ECF1 25	ECF1_100	30.000				1,876,718.173			0.393	0.326	0.982	0.835		12,620,046.817	No	0.982	3.557
	ECF1 26-ECF1 27	ECF1_26	ECF1_27	30.000				1,876,718.173			0.324	0.227	0.809	0.835		18,157,932.414		0.809	4.629
	ECF1 27-ECF1 108	ECF1 27	ECF1_108	30.000				1,876,718.173			0.251	0.138	0.627	0.835		29,871,083.103	No	0.627	6.607
	ECF1 28-ECF1 29	ECF1_28	ECF1_29	30.000				1,984,718.133			0.260	0.148	0.650	0.856		29,107,942.782		0.650	6.575
	CF1 29-ECF1 2271	ECF1 29	ECF1 2271	30.000				1,984,718.133			0.287	0.140	0.717	0.856		24,003,856.458	Yes	0.851	4.528
	ECF1_29-ECF1_2271 ECF1_44-ECF1_97	ECF1_44	ECF1_97	30.000				1,876,718.173			0.469	0.447	1.172	0.835	0.522	9,194,468.376	No	1.172	2.818
	ECF1_44-ECF1_97 ECF1_97-ECF1_25	ECF1 97	ECF1 25	30.000				1,876,718.173			0.454	0.447	1.172	0.835	0.555	9,719,681.687	No	1.135	2.936
	1A2 131-ECF1_25							463,904.465			0.454	0.423	0.551	0.598	1.172	2,166,340.368	Yes	0.593	4.056
	F1A2_131-ECF1A2_132			12.000				463,904.465			0.635	0.732	0.635	0.598	0.891	1,738,336.479	No	0.635	3.740
_	F21_120-ECF21_121			12.000				441,529.754			0.604	0.732	0.604	0.586	0.891	1,798,953.748	No	0.604	3.809
	F21_120-ECF21_121			12.000				441,529.754			0.643	0.745	0.643	0.586	0.835	1,638,612.605	No	0.643	3.538
	1 21_121-EUF21_123	LOI Z I_ IZ I	LOI 2 I_ 123	12.000	219.090	0.004	1,220,004.330	++1,528.754	i iee Juliace	5.556	0.043	0.745	0.043	0.300	0.000	1,000,012.005	140	0.043	5.556

FULL	BUILDOUT PIPE TABLE																		
	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth (ft)	Adjusted Velocity
	ECF21_123-ECF21_124	ECF21_123	ECF21_124	12.000	249.288	0.005	1,220,064.330	441,529.754	Free Surface	3.855	0.598	0.668	0.598	0.586	0.961	1,826,926.891	No	0.598	3.855
	ECF21_124-ECF21_130	ECF21_124	ECF21_130	12.000	256.838	0.005	1,220,064.330	441,529.754	Free Surface	3.799	0.605	0.680	0.605	0.586	0.939	1,793,096.783	No	0.605	3.799
	ECF21_130-ECF1A2_131	ECF21_130	ECF1A2_131	12.000	316.851	0.004	1,220,064.330	441,529.754	Free Surface	3.474	0.653	0.762	0.653	0.586	0.810	1,602,102.791	No	0.653	3.474
	ECF21_131-ECF21_132	ECF21_131	ECF21_132	8.000	138.119	0.006	83,998.048		Free Surface		0.238	0.124	0.159	0.165	1.076	677,140.724	No	0.159	2.044
	ECF21_132-ECF21_133	ECF21_132	ECF21_133	8.000	299.894	0.006	83,998.048	20,999.512	Free Surface		0.245	0.132	0.163	0.165	1.016	638,711.151	No	0.163	1.960
	ECF21_133-ECF21_24	ECF21_133	ECF21_24	30.000	232.963	0.001	3,972,513.639	1,799,969.082	Free Surface	2.803	0.458	0.430	1.145	0.820	0.527	9,242,619.204	No	1.145	2.803
	ECF21_22A-ECF21_133	ECF21_22A	ECF21_133	24.000	347.152	0.010	3,933,550.710	1,778,969.570	Free Surface	6.409	0.342	0.252	0.684	0.873	1.596	15,624,736.073	Yes	0.840	4.863
	ECF21_23-ECF21_9	ECF21_23	ECF21_9	30.000	457.000	0.001	3,972,513.639	1,799,969.082	Free Surface	2.866	0.450	0.417	1.126	0.820	0.544	9,524,883.908	No	1.126	2.866
	ECF21_24-ECF21_23	ECF21_24	ECF21_23	30.000				1,799,969.082			0.458	0.429	1.145	0.820	0.527	9,249,524.645	No	1.145	2.805
	ECF21_9-ECF1_24	ECF21_9	ECF1_24	30.000	492.000		, ,	1,817,718.516			0.405	0.345	1.013	0.824	0.672	11,611,684.604	Yes	1.036	3.223
	ECF3_217-ECF3_218	ECF3_217	ECF3_218	18.000	469.731		1,417,627.590				0.436	0.394	0.654	0.559	0.741	3,600,918.864	No	0.654	2.965
	ECF3_218-TOE_2746	ECF3_218	TOE_2746	18.000	297.552		1,417,627.590	527,889.401			0.395	0.330	0.593	0.559	0.893	4,296,433.228	No	0.593	3.374
	ECF4_133-ECF4_134	ECF4_133	ECF4_134	12.000	398.994		1,271,844.765				0.608	0.685	0.608	0.598	0.971	1,857,266.033	Yes	0.940	2.569
	ECF4_134-ECF4_135	ECF4_134	ECF4_135	12.000	300.951		1,271,844.765	463,904.465		2.506	1.000	1.235	1.000	0.536	0.442	1,029,635.546	No	1.000	2.506
	ECF4_135-TOE_2662	ECF4_135	TOE_2662	15.000	88.785		1,580,829.504	600,990.974			0.661	0.774	0.826	0.626	0.588	2,041,934.441	No	0.826	2.843
	ECF5_204-ECF5_205	ECF5_204	ECF5_205	18.000	92.979		1,290,558.293	472,062.062			0.283	0.175	0.425	0.533	1.549	7,367,341.389	No	0.425	4.850
	ECF5_205-ECF5_208	ECF5_205	ECF5_208	18.000	243.553		1,290,558.293				0.283	0.175	0.425	0.533	1.549	7,369,094.379	Yes	0.425	4.847
	ECF5_208-ECF5_209	ECF5_208	ECF5_209	18.000	59.397		1,290,558.293	472,062.062			0.284	0.176	0.425	0.533	1.545	7,349,732.797	Yes	0.487	4.020
	ECF5_209-ECF5_213	ECF5_209	ECF5_213	18.000	204.830		1,290,558.293				0.398	0.335	0.598	0.533	0.801	3,855,901.750	No	0.598	3.040
	ECF5_213-ECF5_214	ECF5_213	ECF5_214	18.000	189.500		1,290,558.293	472,062.062			0.398	0.334	0.597	0.533	0.803	3,863,009.650	No	0.597	3.044
	ECF5_214-ECF5_215	ECF5_214	ECF5_215	18.000	373.761		1,417,627.590				0.391	0.323	0.587	0.559	0.912	4,382,464.774	No	0.587	3.424
	ECF5_215-ECF5_216	ECF5_215	ECF5_216	18.000	501.110		1,417,627.590	527,889.401			0.279	0.169	0.418	0.559	1.758	8,366,467.435	No	0.418	5.456
	ECF5_216-ECF3_217	ECF5_216	ECF3_217	18.000	465.922		1,417,627.590		Free Surface		0.278	0.169	0.417	0.559	1.762	8,382,439.078	Yes	0.511	4.133
	EHF1_2-EHF4_1	EHF1_2	EHF4_1	8.000	72.518		168,030.599 168,030,599		Free Surface		0.426	0.377	0.284	0.235	0.698	445,508.194	No	0.284	1.836
	EHF1_3-EHF1_2	EHF1_3	EHF1_2	8.000 8.000	209.536 264.573		168,030.599		Free Surface Free Surface		0.367 0.364	0.287 0.283	0.244 0.242	0.235 0.235	0.930	586,049.477 594,651.505	No	0.244 0.242	2.243 2.267
	EHF1_4-EHF1_3	EHF1_4	EHF1_3 EHF1_4	8.000	72.008	0.005	168.030.599	-,	Free Surface		0.364	0.263	0.242	0.235	0.945 1.949		No No	0.242	3.804
	EHF1_5-EHF1_4	EHF1_5 EHF1_6	EHF1_5	8.000	83.531	0.021	168,030.599	43,250.384	Free Surface		0.230	0.137	0.167	0.235	2.703	1,224,387.430 1,711,509.151	No	0.167	4.825
	EHF1_6-EHF1_5 EHF1_7-EHF1_6	EHF1_0	EHF1_5	8.000	219.245		168,030.599		Free Surface		0.212	0.106	0.141	0.235	2.703	1,579,448.808	No	0.147	4.625
	EHF1 8-EHF1 7	EHF1_7	EHF1_0	8.000	271.700		168,030.599	43,250.384	Free Surface		0.250	0.100	0.147	0.235	1.956	1,228,729.304	No	0.147	3.814
	EHF10_11-EHF9_10	EHF10 11	EHF9 10	8.000			141,523.147		Free Surface		0.255	0.137	0.107	0.235	1.578	990,677.374	No	0.170	3.114
	EHF10 12-EHF10 11	EHF10 12	EHF10 11	8.000	104.212		141,523.147		Free Surface		0.308	0.207	0.206	0.215	1.094	685,264.637	No	0.206	2.393
	EHF10 13-EHF10 12	EHF10 13	EHF10 12	8.000			141,523.147		Free Surface		0.259	0.147	0.172	0.215	1.539	965,656.503	No	0.172	3.058
	EHF10 14-EHF10 13	EHF10 14	EHF10 13	8.000	185.568		141,523.147		Free Surface		0.327	0.231	0.218	0.215	0.978	613,334.939	No	0.218	2.210
	EHF10 15-EHF10 14	EHF10 15	EHF10 14	8.000	179.349		141,523.147		Free Surface		0.328	0.233	0.219	0.215	0.969	607,587.024	No	0.219	2.195
	EHF10 16-EHF10 15	EHF10 16	EHF10 15	8.000	191.512		141,523.147		Free Surface		0.328	0.232	0.218	0.215	0.973	609,934.416	No	0.218	2.201
	EHF10 17-EHF10 16	EHF10 17	EHF10 16	8.000	99.824		141,523.147		Free Surface		0.346	0.257	0.231	0.215	0.876	550,262.793	No	0.231	2.044
	EHF10 18-EHF10 17	EHF10 18	EHF10_17	8.000	48.315	0.005	141,523.147		Free Surface		0.335	0.242	0.223	0.215	0.933	585,310.316	No	0.223	2.137
	EHF11 146-EHF11 147	EHF11 146	EHF11 147	8.000	149.540		141,523.147		Free Surface		0.330	0.236	0.220	0.215	0.958	600,780.117	No	0.220	2.177
F	EHF11 147-EHF11 148	EHF11 147	EHF11 148	8.000	258.010	0.007	141,523.147	35,999.986	Free Surface	2.456	0.303	0.199	0.202	0.215	1.135	710,533.609	No	0.202	2.456
	EHF11_148-EHF9_19	EHF11_148	EHF9_19	8.000	162.000		141,523.147		Free Surface		0.292	0.186	0.194	0.215	1.218	762,854.562	No	0.194	2.584
	EHF3_10-EHF3_9	EHF3_10	EHF3_9	8.000	275.063	0.040	168,030.599	43,250.384	Free Surface	4.810	0.212	0.099	0.141	0.235	2.692	1,704,154.670	No	0.141	4.810
	EHF3_11-EHF3_10	EHF3_11	EHF3_10	8.000	280.011	0.036	168,030.599	43,250.384	Free Surface	4.607	0.219	0.105	0.146	0.235	2.537	1,603,157.020	No	0.146	4.607
	EHF3_12-EHF3_11	EHF3_12	EHF3_11	8.000	280.647	0.010	168,030.599	43,250.384	Free Surface	2.962	0.299	0.195	0.199	0.235	1.377	862,347.690	No	0.199	2.962
	EHF3_42_EHF3_12	EHF3_42	EHF3_12	8.000	143.448	0.005	168,030.599	43,250.384	Free Surface	2.261	0.364	0.284	0.243	0.235	0.941	592,605.092	No	0.243	2.261
	EHF3_9-EHF1_8	EHF3_9	EHF1_8	8.000	281.524	0.016	168,030.599	43,250.384	Free Surface	3.462	0.268	0.157	0.178	0.235	1.711	1,072,536.676	No	0.178	3.462
	EHF4_1-TOE_2592	EHF4_1	TOE_2592	8.000	38.176	0.025	168,030.599	43,250.384	Free Surface	4.053	0.239	0.126	0.160	0.235	2.127	1,338,228.266	No	0.160	4.053
	EHF7_1-EHF3_42	EHF7_1	EHF3_42	8.000	167.606	0.006	168,030.599	43,250.384	Free Surface	2.369	0.352	0.266	0.235	0.235	1.005	631,917.381	No	0.235	2.369
	EHF7_6-EHF7_1	EHF7_6	EHF7_1	8.000	274.487	0.005	168,030.599	43,250.384	Free Surface	2.338	0.355	0.271	0.237	0.235	0.987	620,813.832	No	0.237	2.338
	EHF9_10-EHF9_9	EHF9_10	EHF9_9	8.000			141,523.147		Free Surface		0.276	0.167	0.184	0.215	1.356	849,449.276	No	0.184	2.791
	EHF9_19-EHF10_18	EHF9_19	EHF10_18	8.000			141,523.147		Free Surface		0.318	0.219	0.212	0.215	1.033	647,250.479	No	0.212	2.297
	EHF9_1-GVF1_0	EHF9_1	GVF1_0	8.000			141,523.147		Free Surface		0.193	0.082	0.129	0.215	2.714	1,728,730.317	Yes	0.667	0.627
	EHF9_2-EHF9_1	EHF9_2	EHF9_1	8.000			141,523.147		Free Surface		0.187	0.076	0.125	0.215	2.905	1,854,576.605	No	0.125	4.855
	EHF9_3-EHF9_2	EHF9_3	EHF9_2	8.000			141,523.147		Free Surface		0.185	0.074	0.123	0.215	2.974	1,900,766.814	No	0.123	4.940
	EHF9_4-EHF9_3	EHF9_4	EHF9_3	8.000			141,523.147		Free Surface		0.186	0.076	0.124	0.215	2.934	1,873,883.793	No	0.124	4.891
	EHF9_5-EHF9_4	EHF9_5	EHF9_4	8.000			141,523.147		Free Surface		0.185	0.075	0.124	0.215	2.950	1,884,590.663	No	0.124	4.911
	EHF9_6-EHF9_5	EHF9_6	EHF9_5	8.000			141,523.147		Free Surface		0.282	0.173	0.188	0.215	1.304	816,722.607	No	0.188	2.714
	EHF9_7-EHF9_6	EHF9_7	EHF9_6	8.000			141,523.147		Free Surface		0.204	0.091	0.136	0.215	2.452	1,555,938.102	No	0.136	4.289
L	EHF9_8-EHF9_7	EHF9_8	EHF9_7	8.000	131.348	0.012	141,523.147	35,999.986	Free Surface	3.018	0.261	0.149	0.174	0.215	1.511	947,924.207	No	0.174	3.018

			To ID	(in)	(ft) Slo	(gpd)	(gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	(ft)	Adjusted Velocity
	EHF9_9-EHF9_8	EHF9_9	EHF9_8	8.000	126.463 0.0	3 141,523.147	35,999.986	Free Surface	3.025	0.261	0.149	0.174	0.215	1.516	951,220.660	No	0.174	3.025
	EP_1-EP_2	EP_1	EP_2	8.000	2,935.010 0.02	192,758.604	50,014.061	Free Surface	3.952	0.269	0.158	0.179	0.253	1.949	1,221,889.131	Yes	0.223	2.917
	EP_2-EP_3	EP_2	EP_3	8.000	1,331.650 0.0	4 595,213.240	187,950.169	Free Surface	4.681	0.550	0.586	0.367	0.455	1.515	1,015,980.200	No	0.367	4.681
	EP_3-I25_19	EP_3	I25_19	8.000	574.890 0.0	7 595,213.240	187,950.169	Free Surface	4.941	0.527	0.546	0.351	0.455	1.646	1,091,092.294	Yes	0.574	2.880
	EVF1_7-EVF2_6	EVF1_7	EVF2_6	10.000	216.280 0.00	3 181,739.717	47,000.142	Free Surface	1.842	0.323	0.226	0.269	0.230	0.734	803,361.857	No	0.269	1.842
	EVF1A1_51-LCFA_1	EVF1A1_51	LCFA_1	21.000	93.148 0.00	2,017,447.492	803,440.497	Free Surface	3.277	0.418	0.365	0.731	0.642	0.778	5,527,552.587	Yes	0.751	3.164
	EVF1A1_52-TOE_2790	EVF1A1_52	TOE_2790	21.000	200.800 0.00	1 2,202,611.950	891,970.224	Free Surface	2.290	0.594	0.661	1.039	0.672	0.434	3,330,501.695	No	1.039	2.290
Ħ	EVF1A2 1-EVF1A2 50	EVF1A2_1	EVF1A2_50	21.000	186.858 0.00	1 2,017,447.492	803,440.497	Free Surface	2.401	0.532	0.554	0.931	0.642	0.490	3,639,275.758	Yes	0.965	2.295
Ħ	EVF1A2 50-EVF1A1 51	EVF1A2_50	EVF1A1_51	21.000	494.431 0.00	1 2,017,447.492	803,440.497	Free Surface	2.198	0.571	0.622	1.000	0.642	0.428	3,242,109.775	No	1.000	2.198
Ħ	EVF2 1A-EVF2 8	EVF2_1A	EVF2_8	12.000	143.991 0.00	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,587,423.739	Yes	0.121	0.000
Ħ	EVF2 2-EVF2 8	EVF2 2	EVF2 8	12.000	94.559 0.00	3 181,739.717	47,000.142	Free Surface	1.956	0.239	0.125	0.239	0.218	0.839	1,455,021.234	No	0.239	1.956
Ħ	EVF2 3-EVF2 2	EVF2 3	EVF2_2	12.000	95.123 0.00	8 181,739.717	47,000.142	Free Surface	2.600	0.195	0.084	0.195	0.218	1.241	2,176,055.790	No	0.195	2.600
Ħ	EVF2 4A-KEF1 3	EVF2 4A	KEF1 3	12.000	276.789 0.00		62,249.737	Free Surface	1.538	0.341	0.250	0.341	0.249	0.543	938,867.719	No	0.341	1.538
Ħ	EVF2 4-EVF2 3	EVF2 4	EVF2_3	10.000	287.309 0.00			Free Surface		0.336	0.243	0.280	0.230	0.683	748,295.666	Yes	0.548	0.740
Ħ	EVF2_5A-EVF2_4	EVF2 5A	EVF2 4	10.000	177.162 0.00		47,000.142	Free Surface		0.316	0.216	0.263	0.230	0.769	841,291.145	No	0.263	1.904
H	EVF2_5-EVF2_4A	EVF2 5	EVF2 4A	12.000	187.149 0.00			Free Surface		0.263	0.152	0.263	0.218	0.694	1,198,908.685	No	0.263	1.704
H		EVF2 6A	EVF2 5	12.000	46.711 0.00		47,000.142	Free Surface		0.234	0.120	0.234	0.218	0.869	1,508,900.022	No	0.234	2.007
H	EVF2_6A-EVF2_5	EVF2_0A EVF2_6		10.000	220.000 0.00			Free Surface		0.325	0.120	0.234	0.210	0.727	796,540.917	No	0.271	1.831
띩	EVF2_6-EVF2_5A	EVF2_6 EVF2_7	EVF2_5A EVF2_6A	12.000	46.512 0.00		47,000.142	Free Surface		0.323	0.226	0.268	0.230	0.727	1,159,743.687	No	0.271	1.664
H	EVF2_7-EVF2_6A																	
닖	EVF2_8-EVF2_7	EVF2_8	EVF2_7	12.000	65.379 0.00			Free Surface		0.251	0.138	0.251	0.218	0.758	1,312,395.588	No	0.251	1.817
닖	EVF3_47-EVF3_48	EVF3_47	EVF3_48	21.000	497.618 0.00			Free Surface		0.542	0.572	0.949	0.642	0.473	3,526,083.241	No	0.949	2.344
닖	EVF3_48-EVF1A2_1	EVF3_48	EVF1A2_1	21.000		1 2,017,447.492				0.536	0.562	0.939	0.642	0.483	3,588,728.736	No	0.939	2.376
닖	EVF4_46-EVF3_47	EVF4_46	EVF3_47	21.000	505.900 0.00		,			0.538	0.566	0.942	0.642	0.479	3,566,357.378	Yes	0.945	2.354
빝	FMF4_4_4-TOE_2970	FMF4_4_4	TOE_2970	12.000		431,189.730	128,115.312			0.362	0.280	0.362	0.340	0.888	1,539,983.914	No	0.362	2.602
빝	FMF6_1-FMF6_4_6	FMF6_1	FMF6_4_6	8.000	115.487 0.00		80,115.810	Free Surface		0.245	0.132	0.163	0.313	3.512	2,207,498.480	No	0.163	6.777
Ш	FMF6_2-FMF6_1	FMF6_2	FMF6_1	8.000	150.000 0.0	2 290,449.406	80,115.810	Free Surface	3.626	0.385	0.314	0.257	0.313	1.462	924,118.990	No	0.257	3.626
	FMF6_4_6-TOE_2973	FMF6_4_6	TOE_2973	12.000	142.272 0.00	431,189.730	128,115.312	Free Surface	2.705	0.352	0.265	0.352	0.340	0.938	1,624,287.031	No	0.352	2.705
	FMF7_3-FMF6_2	FMF7_3	FMF6_2	8.000	270.000 0.00	9 290,449.406	80,115.810	Free Surface	3.337	0.410	0.352	0.273	0.313	1.297	824,426.197	No	0.273	3.337
	FMF7_4-FMF7_3	FMF7_4	FMF7_3	8.000	430.000 0.00	9 290,449.406	80,115.810	Free Surface	3.293	0.414	0.359	0.276	0.313	1.273	809,976.682	No	0.276	3.293
	FMF7_5-FMF7_4	FMF7_5	FMF7_4	8.000	352.996 0.0	0 290,449.406	80,115.810	Free Surface	3.385	0.405	0.345	0.270	0.313	1.325	841,091.527	No	0.270	3.385
	FMF8_10-FMF8_9	FMF8_10	FMF8_9	8.000	91.023 0.00	5 290,449.406	80,115.810	Free Surface	2.536	0.506	0.510	0.337	0.313	0.867	569,349.967	No	0.337	2.536
	FMF8_11-FMF8_10	FMF8_11	FMF8_10	8.000	71.269 0.00	290,449.406	80,115.810	Free Surface	2.533	0.506	0.511	0.338	0.313	0.865	568,446.303	No	0.338	2.533
	FMF8_1-FMF8_6	FMF8_1	FMF8_6	8.000	90.764 0.00	6 290,449.406	80,115.810	Free Surface	6.727	0.246	0.133	0.164	0.313	3.476	2,184,769.012	No	0.164	6.727
	FMF8_2-FMF8_1	FMF8_2	FMF8_1	8.000	74.020 0.0	1 290,449.406	80,115.810	Free Surface	3.489	0.396	0.331	0.264	0.313	1.384	876,399.929	No	0.264	3.489
F	FMF8 3-FMF8 2	FMF8_3	FMF8_2	8.000	130.706 0.0	2 290,449.406	80,115.810	Free Surface	3.591	0.388	0.319	0.259	0.313	1.442	911,811.000	No	0.259	3.591
Ħ	FMF8 4-FMF8 3	FMF8_4	FMF8_3	8.000	103.656 0.00	9 290,449.406	80,115.810	Free Surface	3.325	0.411	0.354	0.274	0.313	1.291	820,637.465	No	0.274	3.325
Ħ	FMF8 6-FMF7 5	FMF8 6	FMF7 5	8.000	160.553 0.0	7 290,449.406	80,115.810	Free Surface	4.164	0.348	0.260	0.232	0.313	1.780	1,118,294.473	No	0.232	4.164
Ħ	FMF8 8-FMF8 4	FMF8 8	FMF8 4	8.000	206.870 0.0	7 290,449.406	80,115.810	Free Surface	4.111	0.351	0.264	0.234	0.313	1.748	1,098,701.288	No	0.234	4.111
Ħ	FMF8 9-FMF8 8	FMF8 9	FMF8 8	8.000	200.000 0.00		80,115.810	Free Surface	2.647	0.489	0.482	0.326	0.313	0.924	602,849.761	No	0.326	2.647
Ħ	FMF9 10-FMF9 11	FMF9 10	FMF9 11	8.000	279.830 0.0	2 136,463.830	34,616.147	Free Surface	2.936	0.259	0.147	0.173	0.211	1.475	925,419.375	No	0.173	2.936
Ħ	FMF9 11-FMF9 12	FMF9 11	FMF9 12	8.000	252.130 0.00		34,616.147	Free Surface		0.294	0.188	0.196	0.211	1.160	726,669.964	No	0.196	2.470
Ħ	FMF9 12-FMF9 13	FMF9_12	FMF9 13	8.000	39.140 0.00		34,616.147	Free Surface		0.293	0.187	0.195	0.211	1.166	730,217.431	No	0.195	2.479
Ħ	FMF9 13-FMF9 3	FMF9 13	FMF9 3	8.000	54.240 0.00		34,616.147	Free Surface		0.284	0.177	0.190	0.211	1.234	772,698.419	No	0.190	2.581
H	FMF9 15-FMF9 23	FMF9 15	FMF9_23	8.000	49.960 0.00		, ,	Free Surface		0.299	0.195	0.200	0.211	1.117	699,828.864	No	0.200	2.405
H	FMF9_1-TOE_2710	FMF9 1	TOE_2710	10.000	71.040 0.00		216,750.158	Free Surface		0.497	0.496	0.415	0.453	1.184	1,353,395.699	Yes	0.447	3.485
H	FMF9_1-10E_2710	FMF9 22	FMF9 9	8.000	371.380 0.00			Free Surface		0.497	0.490	0.413	0.433	0.832	522,713.730	No	0.232	1.949
H	FMF9 23-FMF9 35	FMF9 23	FMF9 35	8.000	44.080 0.00		34,616.147	Free Surface		0.349	0.189	0.232	0.211	1.154	722,799,434	No	0.196	2.461
닖						,									,			
닖	FMF9_35-FMF9_22	FMF9_35	FMF9_22	8.000		136,463.830		Free Surface		0.314	0.214	0.209	0.211	1.020	638,801.265	No	0.209	2.252
닖	FMF9_3-FMF8_11	FMF9_3	FMF8_11	8.000		136,463.830				0.325	0.228	0.217	0.211	0.953	597,353.575	No	0.217	2.146
닖	FMF9_9-FMF9_10	FMF9_9	FMF9_10	8.000		136,463.830		Free Surface		0.288	0.180	0.192	0.211	1.208	756,648.937	No	0.192	2.543
닖	GVF1_0-GVF1_36	GVF1_0	GVF1_36	8.000		55 210,984.781		Free Surface		0.220	0.106	0.146	0.265	3.154	1,992,874.077	No	0.146	5.743
닖	GVF1_100-GVF1_101	GVF1_100	GVF1_101	8.000		2 484,274.444	147,000.905			0.430	0.385	0.287	0.409	1.971	1,259,413.660	No	0.287	5.217
닖	GVF1_101-GVF1_102	GVF1_101	GVF1_102	8.000		3 484,274.444	147,000.905			0.506	0.510	0.337	0.409	1.444	948,739.808	No	0.337	4.227
닏	GVF1_102-GVF1_103	GVF1_102	GVF1_103	8.000		2 484,274.444	147,000.905			0.518	0.531	0.345	0.409	1.382	912,285.351	No	0.345	4.104
닖	GVF1_103-GVF1_104	GVF1_103	GVF1_104	8.000	52.260 0.00		147,000.905			0.571	0.622	0.381	0.409	1.147	778,406.631	No	0.381	3.637
	GVF1_104-GVF1_105	GVF1_104	GVF1_105	8.000		484,274.444	147,000.905			0.413	0.357	0.275	0.409	2.135	1,357,921.256	No	0.275	5.513
	GVF1_105-GVF1_106	GVF1_105	GVF1_106	8.000		7 484,274.444	147,000.905			0.373	0.296	0.248	0.409	2.598	1,638,025.872	No	0.248	6.321
	GVF1_106-GVF1_107	GVF1_106	GVF1_107	8.000		484,274.444	147,000.905			0.397	0.332	0.264	0.409	2.303	1,459,036.051	No	0.264	5.811
	GVF1_107-GVF1_108	GVF1_107	GVF1_108	8.000	130.785 0.03	9 484,274.444	147,000.905	Free Surface	6.452	0.367	0.287	0.245	0.409	2.675	1,685,040.195	No	0.245	6.452

	ID	From ID	To ID	Diameter (in)	Length (ft)	lope	Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth (ft)	Adjusted Velocity
ЕП	GVF1_108-GVF1_109	GVF1_108	GVF1_109	8.000		.020 4	484,274.444	147,000.905	Free Surface	5.075	0.439	0.399	0.293	0.409	1.894	1,213,079.383	No	0.293	5.075
F	GVF1 109-GVF1 111	GVF1_109	GVF1_111	8.000	210.244	.098 4	484,274.444	147,000.905	Free Surface	8.941	0.289	0.183	0.193	0.409	4.232	2,650,918.354	No	0.193	8.941
F	GVF1 111-GVF1 113	GVF1_111	GVF1_113	8.000	223.339	.017 4	484,274.444	147,000.905	Free Surface	4.690	0.467	0.444	0.311	0.409	1.686	1,090,421.306	No	0.311	4.690
	GVF1 113-GVF1 114	GVF1_113	GVF1_114	8.000	39.937	.009 4	484,274.444	147,000.905	Free Surface	3.773	0.554	0.593	0.370	0.409	1.215	816,534.936	No	0.370	3.773
F	GVF1 114-GVF1 115	GVF1_114	GVF1_115	8.000	72.568	.010 4	484,274.444	147,000.905	Free Surface	3.893	0.540	0.569	0.360	0.409	1.275	850,846.058	No	0.360	3.893
F	GVF1 115-GVF1 116	GVF1_115	GVF1 116	8.000	41.819	.012 4	484,274.444	147,000.905	Free Surface	4.218	0.507	0.512	0.338	0.409	1.440	945,977.845	No	0.338	4.218
F	GVF1 116-GVF1 117	GVF1 116	GVF1_117	12.000	40.907	.003 7	735,107.740	241,600.229	Free Surface	2.807	0.513	0.521	0.513	0.449	0.777	1,410,003.553	No	0.513	2.807
Ħ	GVF1 117-ECF1 118	GVF1_117	ECF1 118	12.000	319.483	.006 8	887,581.330	302,350.926	Free Surface	3.786	0.470	0.450	0.470	0.496	1.107	1,974,006.450	No	0.470	3.786
Ħ	GVF1 36-GVF1 37	GVF1_36	GVF1_37	8.000	227.819	.009 2	210,984.781	54,999.339	Free Surface	2.999	0.350	0.263	0.233	0.265	1.278	802,756.597	No	0.233	2.999
Ħ	GVF1 37-GVF1 40	GVF1 37	GVF1 40	8.000	112.963	.007 2	210,984.781	54,999.339	Free Surface	2.767	0.371	0.294	0.248	0.265	1.140	718,352.275	No	0.248	2.767
	GVF1 40-GVF1 41	GVF1_40	GVF1_41	8.000	79.896	.009 2	210,984.781	54,999.339	Free Surface	2.960	0.353	0.268	0.236	0.265	1.254	788,361.419	No	0.236	2.960
	GVF1 41-GVF1 48	GVF1_41	GVF1_48	8.000	248.288 0	.014 2	210,984.781	54,999.339	Free Surface	3.553	0.309	0.208	0.206	0.265	1.622	1,015,806.873	No	0.206	3.553
	GVF1 48-GVF1 50	GVF1_48	GVF1_50	8.000	155.948	.014 2	210,984.781	54,999.339	Free Surface	3.538	0.310	0.209	0.207	0.265	1.612	1,009,879.222	No	0.207	3.538
	GVF1 50-GVF1 51	GVF1_50	GVF1_51	8.000	261.911	.017 2	210,984.781	54,999.339	Free Surface	3.758	0.297	0.192	0.198	0.265	1.754	1,098,295.807	No	0.198	3.758
Ħ	GVF1 51-GVF1 52	GVF1_51	GVF1_52	10.000	141.579	.004 3	334,096.791	94,599.324	Free Surface	2.524	0.402	0.339	0.335	0.315	0.889	984,481.446	No	0.335	2.524
	GVF1 52-GVF1 53	GVF1_52	GVF1_53	10.000	86.625	.005 3	334,096.791	94,599.324	Free Surface	2.613	0.391	0.324	0.326	0.315	0.934	1,032,056.782	No	0.326	2.613
F	GVF1_53-GVF1_56	GVF1_53	GVF1_56	10.000			334,096.791		Free Surface	2.942	0.358	0.275	0.299	0.315	1.106	1,215,168.899	No	0.299	2.942
F	GVF1_56-GVF1_57	GVF1_56	GVF1_57	10.000	59.986		334,096.791	94,599.324	Free Surface	2.464	0.409	0.351	0.341	0.315	0.858	952,430.183	No	0.341	2.464
F	GVF1_57-GVF1_58	GVF1_57	GVF1_58	10.000	135.171		334,096.791		Free Surface	2.467	0.409	0.350	0.340	0.315	0.860	954,010.335	No	0.340	2.467
	GVF1_58-GVF1_59	GVF1_58	GVF1_59	10.000	137.845	.006 3	334,096.791	94,599.324	Free Surface	2.813	0.370	0.293	0.309	0.315	1.037	1,142,103.592	No	0.309	2.813
	GVF1_59-GVF1_60	GVF1_59	GVF1_60	10.000	183.929	.005 3	334,096.791	94,599.324	Free Surface	2.682	0.384	0.312	0.320	0.315	0.969	1,069,948.622	No	0.320	2.682
	GVF1_60-GVF1_61	GVF1_60	GVF1_61	12.000	184.669	.003 3	334,096.791	94,599.324	Free Surface	2.100	0.351	0.265	0.351	0.298	0.729	1,261,822.207	No	0.351	2.100
	GVF1_61-GVF1_78	GVF1_61	GVF1_78	12.000	63.774	.005 3	334,096.791	94,599.324	Free Surface	2.619	0.299	0.195	0.299	0.298	0.994	1,715,481.944	No	0.299	2.619
	GVF1 78-GVF1 80	GVF1_78	GVF1_80	12.000	209.783	.002 3	334,096.791	94,599.324	Free Surface	1.941	0.372	0.295	0.372	0.298	0.652	1,132,388.242	No	0.372	1.941
	GVF1_80-GVF1_90	GVF1_80	GVF1_90	12.000	224.665	.002 3	334,096.791	94,599.324	Free Surface	1.971	0.368	0.289	0.368	0.298	0.666	1,156,110.201	No	0.368	1.971
Ħ	GVF1 90-GVF1 91	GVF1_90	GVF1_91	12.000	52.638	.002 3	334,096.791	94,599.324	Free Surface	2.077	0.354	0.269	0.354	0.298	0.717	1,242,996.882	No	0.354	2.077
	GVF1_91-GVF1_116	GVF1_91	GVF1_116	12.000	200.994	.018 3	334,096.791	94,599.324	Free Surface	4.198	0.214	0.100	0.214	0.298	1.909	3,328,739.672	No	0.214	4.198
	GVF1_95-GVF1_96	GVF1_95	GVF1_96	8.000	76.100	.018 4	484,274.444	147,000.905	Free Surface	4.868	0.454	0.422	0.302	0.409	1.781	1,146,508.437	No	0.302	4.868
	GVF1_96-GVF1_97	GVF1_96	GVF1_97	8.000	154.304	.030 4	484,274.444	147,000.905	Free Surface	5.850	0.395	0.329	0.263	0.409	2.326	1,472,658.535	No	0.263	5.850
	GVF1_97-GVF1_98	GVF1_97	GVF1_98	8.000	114.319	.033 4	484,274.444	147,000.905	Free Surface	6.016	0.387	0.316	0.258	0.409	2.421	1,530,300.191	No	0.258	6.016
	GVF1_98-GVF1_99	GVF1_98	GVF1_99	8.000	92.578	.048 4	484,274.444	147,000.905	Free Surface	6.913	0.349	0.261	0.233	0.409	2.950	1,853,624.894	No	0.233	6.913
	GVF1_99-GVF1_100	GVF1_99	GVF1_100	8.000	81.192	.048 4	484,274.444	147,000.905	Free Surface	6.903	0.349	0.262	0.233	0.409	2.944	1,849,699.823	No	0.233	6.903
	HWY52_10-HWY52_11	HWY52_10	HWY52_11	24.000	846.399	.004 7,	,746,233.748	3,985,945.859	Free Surface	5.369	0.669	0.787	1.337	1.244	0.869	9,841,403.736	No	1.337	5.369
	HWY52_11-HWY52_12	HWY52_11	HWY52_12	24.000	1,011.369	.004 7,	,938,880.091	4,104,231.735	Free Surface	5.402	0.680	0.805	1.359	1.260	0.863	9,862,350.656	Yes	1.559	4.676
	HWY52_12-TOE_2904	HWY52_12	TOE_2904	36.000	2,039.210	.001 7,	,938,880.091	4,104,231.735	Free Surface	2.672	0.619	0.705	1.858	1.113	0.375	11,264,072.713	Yes	2.061	2.373
	HWY52_1-HWY52_2	HWY52_1	HWY52_2	24.000	1,163.227	.004 5,	,652,682.822	2,739,246.169	Free Surface	5.050	0.540	0.569	1.081	1.055	0.955	9,932,906.547	No	1.081	5.050
E	HWY52_2-HWY52_3	HWY52_2	HWY52_3	24.000	395.061	.005 5,	,652,682.822	2,739,246.169	Free Surface	5.524	0.503	0.505	1.006	1.055	1.094	11,186,622.998	No	1.006	5.524
	HWY52_3-HWY52_4	HWY52_3	HWY52_4	24.000	1,124.165	.005 5,	,652,682.822	2,739,246.169	Free Surface	5.605	0.497	0.496	0.995	1.055	1.118	11,407,795.711	No	0.995	5.605
	HWY52_4-HWY52_5	HWY52_4	HWY52_5	24.000	2,511.550	.004 5,	,652,682.822	2,739,246.169	Free Surface	5.057	0.540	0.568	1.079	1.055	0.957	9,951,084.187	No	1.079	5.057
	HWY52_5-HWY52_6	HWY52_5	HWY52_6	24.000	331.960	.030 7,	,470,299.242	3,817,496.163	Free Surface	11.478	0.357	0.273	0.714	1.220	2.790	27,357,606.246	Yes	0.911	8.294
	HWY52_6-HWY52_7	HWY52_6	HWY52_7	24.000	1,494.240	.005 7,	,470,299.242	3,817,496.163	Free Surface	5.824	0.604	0.679	1.208	1.220	1.019	11,001,508.941	No	1.208	5.824
	HWY52_7-HWY52_8	HWY52_7	HWY52_8	24.000	982.740	.005 7,	,470,299.242	3,817,496.163	Free Surface	5.826	0.604	0.679	1.208	1.220	1.020	11,006,634.371	No	1.208	5.826
	HWY52_8-HWY52_9	HWY52_8	HWY52_9	24.000	1,745.531	.012 7,	,723,102.658	3,971,779.144	Free Surface	8.281	0.468	0.446	0.936	1.242	1.716	17,307,674.328	Yes	1.093	6.801
	HWY52_9-HWY52_10	HWY52_9	HWY52_10	24.000	691.522	.004 7,	,723,102.658	3,971,779.144	Free Surface	5.295	0.675	0.798	1.350	1.242	0.850	9,682,028.669	No	1.350	5.295
	125_10-125_11	I25_10	I25_11	18.000	688.030	.001 1,	,886,395.317	741,710.601	Free Surface	2.452	0.638	0.736	0.957	0.649	0.476	2,561,321.452	No	0.957	2.452
	125_11-125_12	I25_11	125_12	18.000	964.920	.001 1,	,886,395.317	741,710.601	Free Surface	2.522	0.623	0.711	0.934	0.649	0.498	2,654,227.110	No	0.934	2.522
	125_12-125_13	I25_12	I25_13	18.000	199.510	.001 1,	,886,395.317	741,710.601	Free Surface	2.449	0.639	0.738	0.958	0.649	0.475	2,557,714.201	No	0.958	2.449
	125_13-125_14	I25_13	I25_14	18.000				741,710.601			0.645	0.748	0.968	0.649	0.466	2,521,242.547	Yes	1.003	2.325
	125_14-125_15	I25_14	I25_15	18.000				967,976.276			0.758	0.924	1.137	0.730	0.423	2,554,527.990	No	1.137	2.539
	125_15-125_16	I25_15	I25_16	18.000				967,976.276			0.757	0.922	1.136	0.730	0.424	2,559,390.262	No	1.136	2.543
	125_16-125_17	I25_16	I25_17	18.000				967,976.276			0.760	0.925	1.140	0.730	0.421	2,549,137.288	No	1.140	2.534
	125_17-125_18	I25_17	I25_18	18.000				1,132,584.054			0.317	0.218	0.476	0.782	2.591	12,328,705.003		0.476	8.640
	125_18-125_19	I25_18	I25_19	18.000				1,132,584.054			0.333	0.239	0.500	0.782	2.361	11,243,987.478	Yes	0.649	5.691
	125_19-125_20	I25_19	125_20	18.000				1,449,385.374			0.598	0.669	0.897	0.871	0.945	4,950,031.529	No	0.897	4.644
	125_1-125_2	I25_1	125_2	8.000			224,899.684	59,018.378			0.351	0.264	0.234	0.274	1.356	852,383.725	Yes	0.255	2.837
	125_20-125_21	125_20	I25_21	18.000				1,449,385.374			0.599	0.670	0.898	0.871	0.943	4,943,382.511	No	0.898	4.639
	125_21-125_22	I25_21	125_22	18.000				1,449,385.374			0.507	0.512	0.761	0.871	1.296	6,467,408.972	No	0.761	5.696
	125_22-125_23	125_22	125_23	18.000				1,449,385.374			0.401	0.338	0.601	0.871	2.033	9,789,705.498	Yes	0.682	6.557
	125_23-125_24	125_23	125_24	18.000	1,028.875	.007 3,	,952,736.065	1,789,301.566	Free Surface	5.817	0.575	0.629	0.862	0.956	1.217	6,287,793.609	Yes	0.885	5.635

	ID	From ID	To ID	Diameter (in)	Length (ft) Slop	e Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth (ft)	Adjusted Velocity
	125_24-125_25	125_24	I25_25	24.000	898.605 0.00	1 3,952,736.065	1,789,301.566	Free Surface	2.939	0.629	0.721	1.258	0.875	0.499	5,480,374.998	No	1.258	2.939
	125_25-125_26	125_25	125_26	24.000	876.779 0.00	1 3,952,736.065	1,789,301.566	Free Surface	2.945	0.628	0.719	1.256	0.875	0.501	5,496,072.039	No	1.256	2.945
	125_26-125_27	125_26	125_27	24.000	1,011.620 0.00	3 4,216,173.029	1,932,146.632	Free Surface	4.290	0.487	0.479	0.975	0.905	0.867	8,805,912.290	Yes	1.005	4.128
	125_27-125_28	125_27	125_28	24.000	817.040 0.00	2 4,216,173.029	1,932,146.632	Free Surface	3.547	0.567	0.615	1.135	0.905	0.649	6,850,195.904	No	1.135	3.547
	125_28-125_29	125_28	125_29	24.000	690.810 0.00	1 4,216,173.029	1,932,146.632	Free Surface	3.218	0.615	0.698	1.230	0.905	0.556	6,042,595.868	No	1.230	3.218
	125_29-125_30	125_29	125_30	24.000	2,626.620 0.00	7 4,479,073.025	2,076,414.418	Free Surface	5.937	0.398	0.335	0.797	0.934	1.355	13,386,284.582	Yes	0.998	4.423
	125_2-125_3	125_2	125_3	8.000	354.910 0.02	5 858,146.771	290,414.771	Free Surface	6.341	0.579	0.635	0.386	0.544	1.982	1,350,907.908	Yes	0.430	5.572
٦	125_30-125_31	125_30	I25_31	24.000	1,812.250 0.00	2 4,691,727.019	2,194,299.974	Free Surface	3.361	0.650	0.756	1.299	0.957	0.557	6,209,171.960	No	1.299	3.361
	125_31-125_32	I25_31	125_32	24.000	395.150 0.00	2 4,691,727.019	2,194,299.974	Free Surface	3.374	0.647	0.752	1.295	0.957	0.560	6,240,031.494	No	1.295	3.374
	125_32-125_33	125_32	125_33	24.000	346.170 0.00	2 4,691,727.019	2,194,299.974	Free Surface	3.363	0.649	0.755	1.298	0.957	0.557	6,214,355.271	No	1.298	3.363
	125_33-125_34	125_33	125_34	24.000	1,017.760 0.00	2 4,691,727.019	2,194,299.974	Free Surface	3.365	0.649	0.755	1.298	0.957	0.558	6,217,881.876	No	1.298	3.365
	125_34-125_35	I25_34	125_35	24.000	1,013.810 0.00	2 4,691,727.019	2,194,299.974	Free Surface	3.362	0.649	0.756	1.299	0.957	0.557	6,209,983.139	No	1.299	3.362
٦	125_35-125_36	125_35	125_36	24.000	1,644.530 0.00	2 4,691,727.019	2,194,299.974	Free Surface	3.984	0.563	0.608	1.126	0.957	0.733	7,714,323.017	Yes	1.143	3.912
	I25_36-HWY52_1	125_36	HWY52_1	24.000	1,105.630 0.00	2 5,490,131.174	2,645,729.724	Free Surface	4.075	0.630	0.723	1.260	1.039	0.691	7,597,281.363	No	1.260	4.075
Ī	125_3-125_4	125_3	125_4	12.000	302.263 0.00	3 858,146.771	290,414.771	Free Surface	2.841	0.575	0.629	0.575	0.487	0.728	1,364,818.812	No	0.575	2.841
1	125_4-125_5	125_4	125_5	12.000	198.800 0.01	1,237,624.670	449,107.031	Free Surface	4.832	0.504	0.506	0.504	0.590	1.353	2,445,202.202	No	0.504	4.832
	125_5-125_6	125_5	125_6	12.000	307.689 0.00	9 1,237,624.670	449,107.031	Free Surface	4.807	0.506	0.510	0.506	0.590	1.342	2,428,226.428	No	0.506	4.807
Ī	125_6-125_7	125_6	125_7	12.000	370.130 0.00	9 1,237,624.670	449,107.031	Free Surface	4.658	0.518	0.531	0.518	0.590	1.280	2,329,279.156	No	0.518	4.658
	125_7-125_8	125_7	125_8	12.000	300.680 0.00	9 1,237,624.670	449,107.031	Free Surface	4.647	0.519	0.533	0.519	0.590	1.275	2,321,366.854	Yes	0.559	4.238
1	125_8-125_9	125_8	125_9	15.000	958.300 0.00	2 1,237,624.670	449,107.031	Free Surface	2.712	0.559	0.602	0.699	0.551	0.634	2,056,167.396	No	0.699	2.712
	I25_9-I25_10	125_9	I25_10	15.000	964.580 0.00	9 1,886,395.317	741,710.601	Free Surface	5.173	0.468	0.447	0.585	0.687	1.356	4,221,921.089	Yes	0.676	4.307
1	KEF1 10-KEF1 1	KEF1_10	KEF1_1	12.000	425.192 0.00	2 24,001.911	6,000.478	Free Surface	0.833	0.106	0.024	0.106	0.078	0.545	1,014,852.200	Yes	0.261	0.227
Ē	KEF1 1A-KEF1 2A	KEF1_1A	KEF1_2A	12.000	304.802 0.00	2 0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,118,928.838	No	0.000	0.000
1	KEF1 1-KEF1 80	KEF1_1	KEF1_80	12.000	111.462 0.00	2 429,452.694	127,500.432	Free Surface	2.147	0.416	0.363	0.416	0.340	0.675	1,184,548.524	No	0.416	2.147
i	KEF1 2A-KEF1 3A	KEF1_2A	KEF1_3A	12.000	190.988 0.00	2 0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,158,870.443	No	0.000	0.000
i	KEF1 2-KEF1 1	KEF1 2	KEF1 1	12.000	128.808 0.00	2 412,501.345	121,499.954	Free Surface	1.953	0.434	0.390	0.434	0.333	0.600	1,056,910.315	No	0.434	1.953
i	KEF1 3A-KEF1 4	KEF1 3A	KEF1 4	12.000	265.620 0.00	2 0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,138,143.873	No	0.000	0.000
i	KEF1 3-KEF1 2	KEF1 3	KEF1 2	12.000	39.537 0.00	3 412,501.345	121,499.954	Free Surface	2.442	0.367	0.288	0.367	0.333	0.826	1,434,221.176	Yes	0.400	2.172
i	KEF1 4-KEF1 5	KEF1 4	KEF1 5	12.000	97.079 0.00	2 0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,046,665.307	No	0.000	0.000
Ħ.	KEF1 5-KEF1 6	KEF1 5	KEF1 6	12.000	126.404 0.00	2 0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,134,362.985	No	0.000	0.000
Ħ.	KEF1 6-KEF1 7	KEF1 6	KEF1 7	12.000	300.782 0.00		0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	1,281,839.995	No	0.000	0.000
1	KEF1 7-KEF1 8	KEF1 7	KEF1 8	12.000	129.689 0.00	1 0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	850,629.580	No	0.000	0.000
1	KEF1 80-KEF1 81	KEF1 80	KEF1 81	12.000	67.889 0.00		127,500.432	Free Surface	2.235	0.404	0.343	0.404	0.340	0.716	1,251,614.374	No	0.404	2.235
1	KEF1 81-KEF1 82	KEF1 81	KEF1 82	12.000	250.893 0.00		127,500.432			0.409	0.351	0.409	0.340	0.699	1,223,144.117	No	0.409	2.198
1	KEF1 82-KEF1 83	KEF1 82	KEF1 83	12.000	254.412 0.00		127,500.432			0.437	0.395	0.437	0.340	0.616	1,086,419.681	No	0.437	2.015
╡ ,	KEF1 83-TOE 2859	KEF1 83	TOE_2859	12.000	374.323 0.00		127,500.432			0.314	0.214	0.314	0.340	1.165	2,011,085.908	No	0.314	3.151
1	KEF1 8-KEF1 9	KEF1 8	KEF1 9	12.000	250.713 0.00		0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	1,203,016.022	No	0.000	0.000
1	KEF1 9-KEF1 10	KEF1 9	KEF1 10	12.000	123.304 0.00		0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	1,388,512.128	Yes	0.023	0.000
1	KFF1 10-KFF1 9	KFF1 10	KFF1 9	12.000	223.577 0.00		59,250.218	Free Surface		0.327	0.231	0.327	0.244	0.565	975,375.446	No	0.327	1.563
1	KFF1 11-KFF1 10	KFF1 11	KFF1 10	12.000	287.986 0.00		0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	896,523.512	Yes	0.129	0.000
1	KFF1 14-KFF1 11	KFF1 14	KFF1 11	12.000	334.039 0.00		0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	957,955.485	No	0.000	0.000
1	KFF1 15-KFF1 14	KFF1 15	KFF1_14	12.000	345.637 0.00		0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	1,084,657.167	No	0.000	0.000
i	KFF1 16-KFF1 15	KFF1 16	KFF1 15	12.000	234.800 0.00		0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	1,243,115.538	No	0.000	0.000
Ħ	KFF1 9-KEF1 3	KFF1 9	KEF1 3	12.000	283.847 0.00			Free Surface		0.309	0.207	0.309	0.244	0.632	1,090,939.541	No	0.309	1.694
i	LCFA 10-LCFA 9	LCFA 10	LCFA 9	8.000	313.750 0.00		48,278.862	Free Surface		0.344	0.254	0.229	0.248	1.167	732,621.515	No	0.229	2.713
1	LCFA 11-LCFA 10	LCFA 11	LCFA 10	8.000	349.730 0.00			Free Surface		0.344	0.254	0.229	0.248	1.169	734,256.516	No	0.229	2.717
i	LCFA 12-LCFA 11	LCFA 12	LCFA 11	8.000	136.970 0.00		.,	Free Surface		0.368	0.289	0.246	0.248	1.023	644,264.831	No	0.246	2.472
=	LCFA 13-LCFA 12	LCFA_13	LCFA_12	8.000		8 186,414.715	-,	Free Surface		0.334	0.241	0.223	0.248	1.233	773,653.723	No	0.223	2.821
	LCFA_14-LCFA_13	LCFA_14	LCFA_13	8.000		7 186,414.715		Free Surface		0.355	0.270	0.237	0.248	1.098	690,180.006	No	0.237	2.598
	LCFA_15-LCFA_14	LCFA_15	LCFA_14	8.000		7 186,414.715		Free Surface		0.352	0.266	0.235	0.248	1.113	699,836.302	No	0.235	2.624
311	LCFA_16-LCFA_15	LCFA_16	LCFA_15	8.000		0 186,414.715		Free Surface		0.320	0.222	0.214	0.248	1.339	838,955.698	No	0.214	2.991
= 11	LCFA_17-LCFA_16	LCFA_17	LCFA_16	8.000		4 186,414.715		Free Surface		0.233	0.119	0.156	0.248	2.480	1,562,036.128	No	0.156	4.661
=11	LCFA_1-EVF1A1_52	LCFA_1	EVF1A1_52	21.000		2 2,202,611.950	891,970.224			0.440	0.401	0.771	0.672	0.768	5,492,249.176	Yes	0.905	2.715
1	LCFA_3-LCFA_1	LCFA_3	LCFA_1	8.000		9 316,240.035		Free Surface		0.319	0.221	0.213	0.327	2.287	1,433,080.656	Yes	0.492	1.772
1	LCFA_4-LCFA_3	LCFA_4	LCFA_3	8.000		4 316,240.035		Free Surface		0.563	0.608	0.215	0.327	0.769	519,716.515	No	0.375	2.416
1	LCFA_4-LCFA_5 LCFA_5-LCFA_4	LCFA_5	LCFA_4	8.000		4 316,240.035		Free Surface		0.553	0.590	0.368	0.327	0.797	535,566.343	No	0.368	2.472
		LCFA_6	LCFA_4 LCFA_5	8.000		5 283,966.466	78,029.251	Free Surface		0.333	0.390	0.322	0.309	0.797	603,400.714	No	0.322	2.634
=	I CEA SICEA S					200,300.400	10.025.20	i ice Juliace	2.034	U.+03	U.4/ I	0.022	0.309	0.320	000,400.714	INU	0.022	2.034
	LCFA_6-LCFA_5 LCFA_7-LCFA_6	LCFA_0	LCFA_6	8.000		7 283,966.466	78,029.251			0.442	0.404	0.295	0.309	1.096	702,592.425	No	0.295	2.949

	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth (ft)	Adjusted Velocity
	LCFA_9-LCFA_8	LCFA_9	LCFA_8	8.000	78.140	0.006	186,414.715	48,278.862	Free Surface	2.450	0.371	0.293	0.247	0.248	1.010	636,580.370	No	0.247	2.450
	LCFB_1-LCFA_7	LCFB_1	LCFA_7	8.000	119.310	0.004	118,674.618	29,750.389	Free Surface	1.956	0.314	0.214	0.209	0.197	0.885	554,638.832	No	0.209	1.956
	LCFB_2-LCFB_1	LCFB_2	LCFB_1	8.000	129.900	0.006	118,674.618	29,750.389	Free Surface	2.250	0.284	0.176	0.189	0.197	1.076	674,009.407	No	0.189	2.250
	LCFB_3-LCFB_2	LCFB_3	LCFB_2	8.000	219.450	0.007	118,674.618	29,750.389	Free Surface	2.336	0.276	0.167	0.184	0.197	1.134	710,650.679	No	0.184	2.336
	LCFB_4-LCFB_3	LCFB_4	LCFB_3	8.000	93.380	0.008	118,674.618	29,750.389	Free Surface	2.440	0.268	0.157	0.179	0.197	1.205	755,183.569	No	0.179	2.440
	NMS_10-NMS_9	NMS_10	NMS_9	10.000	29.440	0.040	512,999.807	157,499.941	Free Surface	6.475	0.276	0.167	0.230	0.394	2.813	3,079,396.698	No	0.230	6.475
	NMS_11-NMS_10	NMS_11	NMS_10	10.000	400.000	0.010	512,999.807	157,499.941	Free Surface	3.926	0.398	0.334	0.331	0.394	1.390	1,538,131.757	No	0.331	3.926
	NMS_12-NMS_11	NMS_12	NMS_11	10.000	400.000	0.008	512,999.807	157,499.941	Free Surface	3.618	0.423	0.373	0.352	0.394	1.235	1,375,746.867	No	0.352	3.618
	NMS_13-NMS_12	NMS_13	NMS_12	10.000	400.000	0.008	512,999.807	157,499.941	Free Surface	3.618	0.423	0.373	0.352	0.394	1.235	1,375,746.867	No	0.352	3.618
	NMS_14-NMS_13	NMS_14	NMS_13	10.000	89.260	0.009	512,999.807	157,499.941	Free Surface	3.772	0.410	0.352	0.342	0.394	1.312	1,456,163.333	No	0.342	3.772
	NMS_15-NMS_14	NMS_15	NMS_14	10.000	119.200	0.010	512,999.807	157,499.941	Free Surface	3.935	0.397	0.332	0.331	0.394	1.394	1,543,284.642	No	0.331	3.935
	NMS_16-NMS_15	NMS_16	NMS_15	10.000	374.790	0.007	512,999.807	157,499.941	Free Surface	3.443	0.439	0.399	0.366	0.394	1.149	1,286,027.298	No	0.366	3.443
	NMS_17-NMS_16	NMS_17	NMS_16	10.000	332.270	0.020	512,999.807	157,499.941	Free Surface	5.048	0.330	0.236	0.275	0.394	1.986	2,175,999.523	No	0.275	5.048
	NMS_18-NMS_17	NMS_18	NMS_17	10.000	332.270	0.033	512,999.807	157,499.941	Free Surface	6.039	0.290	0.184	0.242	0.394	2.553	2,793,529.425	No	0.242	6.039
	NMS_19-NMS_18	NMS_19	NMS_18	10.000	104.120	0.030	512,999.807	157,499.941	Free Surface	5.835	0.297	0.193	0.248	0.394	2.434	2,662,586.687	No	0.248	5.835
	NMS_1-FMF9_1	NMS_1	FMF9_1	10.000	114.510	0.060	512,999.807	157,499.941	Free Surface	7.476	0.249	0.136	0.208	0.394	3.433	3,767,473.447	No	0.208	7.476
	NMS_20-NMS_19	NMS_20	NMS_19	10.000	98.110	0.010	512,999.807	157,499.941	Free Surface	3.924	0.398	0.334	0.332	0.394	1.389	1,537,269.246	No	0.332	3.924
	NMS_2-NMS-1	NMS_2	NMS_1	10.000	87.230	0.040	512,999.807	157,499.941	Free Surface	6.471	0.276	0.167	0.230	0.394	2.811	3,076,616.155	No	0.230	6.471
	NMS_3-NMS_2	NMS_3	NMS_2	10.000	113.730	0.010	512,999.807	157,499.941	Free Surface	3.929	0.397	0.333	0.331	0.394	1.391	1,539,956.471	No	0.331	3.929
	NMS_4-NMS_3	NMS_4	NMS_3	10.000	270.690	0.010	512,999.807	157,499.941	Free Surface	3.922	0.398	0.334	0.332	0.394	1.388	1,536,170.126	No	0.332	3.922
	NMS_5-NMS_4	NMS_5	NMS_4	10.000	55.800	0.030	512,999.807	157,499.941	Free Surface	5.845	0.297	0.192	0.248	0.394	2.440	2,668,892.495	No	0.248	5.845
	NMS_6-NMS_5	NMS_6	NMS_5	10.000	56.570	0.030	512,999.807	157,499.941	Free Surface	5.841	0.297	0.192	0.248	0.394	2.437	2,666,397.603	No	0.248	5.841
	NMS_7-NMS_6	NMS_7	NMS_6	10.000	55.470	0.030	512,999.807	157,499.941	Free Surface	5.833	0.298	0.193	0.248	0.394	2.432	2,660,838.404	No	0.248	5.833
	NMS_8-NMS_7	NMS_8	NMS_7	10.000	400.000	0.010	512,999.807	157,499.941	Free Surface	3.926	0.398	0.334	0.331	0.394	1.390	1,538,131.757	No	0.331	3.926
	NMS_9-NMS_8	NMS_9	NMS_8	10.000	400.000	0.008	512,999.807	157,499.941	Free Surface	3.691	0.417	0.363	0.347	0.394	1.271	1,413,910.415	No	0.347	3.691
	OGF1_17-OGF1_18	OGF1_17	OGF1_18	10.000	85.519	0.016	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,932,538.745	No	0.000	0.000
7	OGF1 18-OGF1 25	OGF1_18	OGF1_25	10.000	68.819	0.014	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,816,667.672	No	0.000	0.000
=	OGF1 1-OGF1 2	OGF1_1	OGF1_2	10.000	389.725	0.011	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,579,556.344	No	0.000	0.000
	OGF1_25-OGF1_75	OGF1_25	OGF1_75	10.000	202.386	0.005	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,123,609.766	Yes	0.012	0.000
	OGF1_2-OGF1_3	OGF1_2	OGF1_3	10.000	76.361	0.005	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,099,236.929	No	0.000	0.000
╗	OGF1 3-OGF1 4	OGF1_3	OGF1_4	10.000	302.094	0.018	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	2,048,825.511	No	0.000	0.000
╗	OGF1 4-OGF1 5	OGF1_4	OGF1_5	10.000	93.410	0.011	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,583,489.455	No	0.000	0.000
=	OGF1_5-OGF1_17	OGF1_5	OGF1_17	10.000	49.146	0.013	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,741,483.745	No	0.000	0.000
<b>=</b>	OGF1 69-OGF1 70	OGF1_69	OGF1_70	10.000	90.809	0.005	238,514.304	63,400.296	Free Surface	2.445	0.321	0.223	0.267	0.264	0.978	1,070,666.651	No	0.267	2.445
<b>=</b>	OGF1 70-OGF1 71	OGF1_70	OGF1_71	10.000	96.964	0.005	238,514.304	63,400.296	Free Surface	2.407	0.324	0.228	0.270	0.264	0.957	1,047,841.622	No	0.270	2.407
=	OGF1 71-OGF1 72	OGF1 71	OGF1 72	10.000	93.080	0.002	238,514.304	63,400.296	Free Surface	1.598	0.440	0.400	0.366	0.264	0.533	596,524.643	No	0.366	1.598
	OGF1_72-OGF1_73	OGF1 72	OGF1_73	10.000	85.671	0.009	238,514.304	63,400.296	Free Surface	3.036	0.274	0.165	0.229	0.264	1.323	1,448,715.520	Yes	0.251	2.665
╗	OGF1 73-OGF1 74	OGF1_73	OGF1_74	10.000	191.425	0.004	238,514.304	63,400.296	Free Surface	2.369	0.328	0.233	0.273	0.264	0.936	1,024,951.498	No	0.273	2.369
╗	OGF1 74-OGF1 75	OGF1_74	OGF1_75	10.000	100.813	0.009	238,514.304	63,400.296	Free Surface	3.043	0.274	0.164	0.228	0.264	1.328	1,453,305.584	Yes	0.241	2.820
<b>=</b>	OGF1_75-TOE_2622	OGF1_75	TOE_2622	10.000	194.676	0.006	238,514.304	63,400.296	Free Surface	2.625	0.305	0.202	0.254	0.264	1.081	1,182,188.388	No	0.254	2.625
╗	OGF2_29-OGF2_31	OGF2_29	OGF2_31	8.000	229.146	0.011	57,000.939	14,250.235	Free Surface	2.203	0.172	0.064	0.115	0.135	1.376	884,315.641	No	0.115	2.203
╗	OGF2_31-OGF2_32	OGF2_31	OGF2_32	8.000	236.759	0.022	57,000.939	14,250.235	Free Surface	2.827	0.145	0.045	0.097	0.135	1.932	1,260,843.418	No	0.097	2.827
╗	OGF2_32-OGF2_33	OGF2_32	OGF2_33	8.000	236.902	0.020	57,000.939	14,250.235	Free Surface	2.742	0.148	0.047	0.099	0.135	1.854	1,207,535.197	No	0.099	2.742
╗	OGF2_33-OGF2_34	OGF2_33	OGF2_34	8.000	190.439	0.009	57,000.939	14,250.235	Free Surface	2.059	0.180	0.071	0.120	0.135	1.256	803,865.810	No	0.120	2.059
╗	OGF2_34-OGF2_46	OGF2_34	OGF2_46	8.000	282.567	0.009	57,000.939	14,250.235	Free Surface	2.063	0.180	0.071	0.120	0.135	1.259	805,885.247	No	0.120	2.063
╗	OGF2 46-OGF2 49	OGF2_46	OGF2_49	8.000	124.327	0.015	57,000.939	14,250.235	Free Surface	2.451	0.160	0.055	0.107	0.135	1.591	1,029,214.197	No	0.107	2.451
=	OGF2 49-OGF2 50	OGF2_49	OGF2_50	8.000	119.294	0.011	57,000.939	14,250.235	Free Surface	2.181	0.173	0.065	0.116	0.135	1.357	871,847.331	No	0.116	2.181
╗	OGF2_50-OGF2_65	OGF2_50	OGF2_65	8.000	185.079	0.002	57,000.939	14,250.235	Free Surface	1.266	0.254	0.141	0.169	0.135	0.644	404,119.324	Yes	0.215	0.905
	OGF2_65-OGF2_68	OGF2_65	OGF2_68	10.000	168.652	0.003	238,514.304		Free Surface	1.986	0.373	0.297	0.311	0.264	0.729	803,297.351	No	0.311	1.986
	OGF2 68-OGF1 69	OGF2_68	OGF1_69	10.000	289.307		238,514.304		Free Surface	3.152	0.267	0.156	0.223	0.264	1.394	1,526,638.745	Yes	0.245	2.758
	OTF1_101-OTF1_102	OTF1_101	OTF1_102	12.000	360.260		0.000		Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,263,957.034	No	0.000	0.000
	OTF1 102-OTF1 103	OTF1_102	OTF1_103	12.000	415.146		0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	776,382.060	Yes	0.275	0.000
	OTF1_103-TOE_2798	OTF1_103	TOE_2798	12.000			520,284.568	160,162.500			0.335	0.242	0.335	0.375	1.242	2,146,766.242	Yes	0.345	3.347
	OTF1_108-TOE_3005	OTF1_108	TOE_3005	16.000	25.799		694,293.725	225,696.875			0.109	0.025	0.146	0.400	7.228	27,512,267.951		0.444	2.637
Ħ	OTF1 30-OTF1 37	OTF1_30	OTF1_37	8.000	188.540		0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	505,707.818	No	0.000	0.000
	OTF1_37-OTF1_43	OTF1_37	OTF1_43	8.000	385.010		0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	567,011.375	Yes	0.158	0.000
7														2.200	2.500				
			OTF1 44	8,000	466.022	0.004	241,426,929	64.337.736	Free Surface	2.290	0.474	0.457	0.316	0.284	0.816	528,688,388	Yes	0.321	2,242
	OTF1_43-OTF1_44 OTF1_44-OTF1_65	OTF1_43 OTF1_44	OTF1_44 OTF1_65	8.000 8.000	466.022 469.331		241,426.929 241,426.929		Free Surface Free Surface		0.474 0.490	0.457 0.483	0.316 0.327	0.284 0.284	0.816 0.766	528,688.388 499,939.787	Yes No	0.321 0.327	2.242 2.197

	ID	From ID	To ID	Diameter (in)	Length (ft) SI	Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth (ft)	Adjusted Velocity
	OTF1_47-OTF1_48	OTF1_47	OTF1_48	10.000	474.640 0.		0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	978,277.047	No	0.000	0.000
	OTF1_48-OTF1_62	OTF1_48	OTF1_62	10.000	436.432 0.	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	842,696.068	Yes	0.107	0.000
	OTF1_60A-OTF1_61A	OTF1_60A	OTF1_61A	24.000	31.746 0.	04 2,295,434.228	936,914.047	Free Surface	3.929	0.330	0.235	0.660	0.660	0.999	9,764,428.122	No	0.660	3.929
	OTF1_61A-TOE_2825	OTF1_61A	TOE_2825	24.000	191.263 0.	05 2,295,434.228	936,914.047	Free Surface	4.200	0.314	0.214	0.629	0.660	1.097	10,711,431.840	No	0.629	4.200
	OTF1_62-OTF1_64	OTF1_62	OTF1_64	10.000	483.405 0.	03 111,997.398	27,999.349	Free Surface	1.566	0.257	0.144	0.214	0.179	0.708	775,872.865	No	0.214	1.566
	OTF1_64-OTF1_82	OTF1_64	OTF1_82	10.000	469.703 0.	03 111,997.398	27,999.349	Free Surface	1.622	0.250	0.137	0.209	0.179	0.743	815,396.316	Yes	0.210	1.606
	OTF1_65-OTF1_80	OTF1_65	OTF1_80	8.000	484.534 0.	04 241,426.929	64,337.736	Free Surface	2.356	0.464	0.440	0.309	0.284	0.850	549,097.814	Yes	0.311	2.344
	OTF1_80-OTF1_96	OTF1_80	OTF1_96	8.000	428.652 0.	04 241,426.929	64,337.736	Free Surface	2.333	0.468	0.445	0.312	0.284	0.838	542,038.596	No	0.312	2.333
F	OTF1 82-OTF1 87	OTF1_82	OTF1_87	10.000	444.471 0.	03 111,997.398	27,999.349	Free Surface	1.589	0.254	0.141	0.212	0.179	0.723	792,524.443	Yes	0.242	1.321
肩	OTF1 87-OTF1 96	OTF1_87	OTF1 96	10.000	387.699 0.	03 192,158.435	49,849.901	Free Surface	1.928	0.326	0.229	0.271	0.236	0.765	837,713.068	No	0.271	1.928
Ħ	OTF1 88-OTF1 89	OTF1 88	OTF1 89	8.000	321.471 0.	15 66,798.695	16,699.674	Free Surface	2.602	0.171	0.064	0.114	0.146	1.631	1,048,414.908	Yes	0.667	0.296
Ħ	OTF1 89-OTF1 90	OTF1_89	OTF1 90	8.000	329.236 -0		16,699.674	Pressurized	0.296	1.000		0.667	0.000	0.064		No	0.667	0.296
Ħ	OTF1 90-OTF1 92	OTF1 90	OTF1 92	8.000	164.601 0.	04 66,798.695	16,699.674	Free Surface		0.235	0.121	0.156	0.146	0.878	553,217.651	No	0.156	1.657
Ħ	OTF1 92-OTF1 93	OTF1_92	OTF1 93	8.000		05 66,798.695	16,699.674	Free Surface		0.226	0.112	0.151	0.146	0.943	595,084.768	No	0.151	1.745
Ħ	OTF1 93-OTF1 94	OTF1 93	OTF1 94	8.000		08 66,798.695	16,699.674	Free Surface		0.201	0.089	0.134	0.146	1.183	751,463.852	No	0.134	2.058
Ħ	OTF1 94-OTF1 95	OTF1 94	OTF1 95	8.000	179.276 0.	-	16,699.674	Free Surface		0.155	0.052	0.104	0.146	1.971	1,278,202.011	Yes	0.184	1.317
H	OTF1 95-OTF1 96	OTF1 95	OTF1 96	8.000	386.157 0.		45,974.863	Free Surface		0.397	0.332	0.265	0.243	0.846	535,724.847	No	0.265	2.134
H	OTF1 96-OTF1 97	OTF1_96	OTF1 97	12.000		33 520,284.568	,	Free Surface		0.228	0.114	0.228	0.375	2.628	4,566,521.855	No	0.228	5.975
H	OTF1_90-OTF1_97 OTF1_97-OTF1_98	OTF1_90	OTF1 98	12.000		06 520,284.568	160,162.500			0.220	0.114	0.220	0.375	1.086	1,882,825.195	No	0.359	3.170
H	OTF1 98-OTF1 103			12.000		07 520,284.568		Free Surface		0.335	0.242	0.335	0.375	1.242	2,146,751.017	No	0.335	3.485
H		OTF1_98 RMF1_114	OTF1_103 RMF1_118	12.000		27 709,007.958	231,369.033			0.333	0.242	0.333	0.373	2.388	4,121,788.264	No	0.333	6.074
닖	RMF1_114-RMF1_118	RMF1_114 RMF1_118	AIF1_119	12.000	371.334 0.			Free Surface		0.435	0.172	0.435	0.441	1.025	1,807,858.922	No	0.435	3.346
H	RMF1_118-AIF1_119									0.433	0.803	0.433			2,028,108.090	Yes	0.433	2.535
닖	SCC_01	SCC_21	TOE_2948	15.000		02 1,627,629.495		Free Surface					0.636	0.575				
닖	SCC_10	SCC_12	SCC_13	15.000		02 1,627,629.495		Free Surface		0.678	0.803	0.848	0.636	0.575	2,028,108.090	No	0.848	2.843
닖	SCC_11	SCC_11A	SCC_12	15.000		02 1,627,629.495		Free Surface		0.679	0.804	0.849	0.636	0.573	2,023,299.745	No	0.849	2.837
	SCC_12	SCC_11	SCC_11A	12.000		362,472.724		Free Surface		0.210	0.096	0.210	0.311	2.157	3,765,224.279	Yes	0.429	1.740
	SCC_13	SCC_10	SCC_11	12.000		04 362,472.724	104,244.441			0.330	0.235	0.330	0.311	0.892	1,541,006.959	No	0.330	2.481
	SCC_14	SCC_09	SCC_10	12.000	100.000 0.			Free Surface		0.264	0.153	0.264	0.311	1.373	2,372,834.360	No	0.264	3.380
닏	SCC_15	SCC_08	SCC_09	12.000		10 362,472.724	104,244.441			0.255	0.143	0.255	0.311	1.467	2,537,263.705	No	0.255	3.545
닏	SCC_16	SCC_07	SCC_08	12.000		08 362,472.724		Free Surface		0.277	0.167	0.277	0.311	1.254	2,166,091.507	No	0.277	3.167
닏	SCC_17	SCC_06	SCC_07	10.000	375.000 0.		94,245.085	Free Surface		0.344	0.255	0.287	0.314	1.192	1,307,562.782	No	0.287	3.099
빝	SCC_18	SCC_05	SCC_06	10.000	150.000 0.		94,245.085	Free Surface		0.349	0.261	0.291	0.314	1.161	1,274,578.305	No	0.291	3.043
	SCC_19	SCC_04	SCC_05	10.000		07 333,054.618	94,245.085	Free Surface		0.347	0.259	0.289	0.314	1.173	1,286,893.357	No	0.289	3.064
	SCC_2	SCC_20	SCC_21	15.000	225.000 0.	02 1,627,629.495	622,243.926	Free Surface	2.843	0.678	0.803	0.848	0.636	0.575	2,028,108.090	No	0.848	2.843
	SCC_20	SCC_03	SCC_04	10.000	220.000 0.	07 333,054.618	94,245.085	Free Surface	3.099	0.344	0.255	0.287	0.314	1.192	1,307,617.610	No	0.287	3.099
	SCC_21	SCC_02	SCC_03	10.000	577.000 0.	07 333,054.618	94,245.085	Free Surface	3.137	0.341	0.251	0.284	0.314	1.212	1,329,365.083	No	0.284	3.137
	SCC_22	SCC_01	SCC_02	8.000	443.000 0.	11 187,936.195	48,695.022	Free Surface	3.156	0.310	0.209	0.207	0.249	1.439	901,253.048	No	0.207	3.156
	SCC_3	SCC_19	SCC_20	15.000	415.000 0.	02 1,627,629.495	622,243.926	Free Surface	2.843	0.678	0.803	0.848	0.636	0.575	2,028,108.090	No	0.848	2.843
	SCC_4	SCC_18	SCC_19	15.000	485.000 0.	02 1,627,629.495	622,243.926	Free Surface	2.830	0.681	0.807	0.851	0.636	0.571	2,017,626.841	No	0.851	2.830
	SCC_5	SCC_17	SCC_18	15.000	275.000 0.	02 1,627,629.495	622,243.926	Free Surface	2.843	0.678	0.803	0.848	0.636	0.575	2,028,108.090	No	0.848	2.843
	SCC_6	SCC_16	SCC_17	15.000	513.000 0.	02 1,627,629.495	622,243.926	Free Surface	2.847	0.677	0.801	0.846	0.636	0.577	2,032,057.671	No	0.846	2.847
	SCC_7	SCC_15	SCC_16	15.000	512.000 0.	02 1,627,629.495	622,243.926	Free Surface	2.838	0.679	0.804	0.849	0.636	0.574	2,024,143.065	No	0.849	2.838
	SCC_8	SCC_14	SCC_15	15.000	500.000 0.	02 1,627,629.495	622,243.926	Free Surface	2.843	0.678	0.803	0.848	0.636	0.575	2,028,108.090	No	0.848	2.843
	SCC_9	SCC_13	SCC_14	15.000	500.000 0.	02 1,627,629.495	622,243.926	Free Surface	2.831	0.681	0.807	0.851	0.636	0.571	2,017,942.070	No	0.851	2.831
Ħ	SUN_10-SUN_11	SUN_10	SUN_11	8.000		24 224,841.521	58,999.658	Free Surface		0.279	0.170	0.186	0.274	2.110	1,321,950.703	No	0.186	4.369
Ħ	SUN 11-SUN 12	SUN_11	SUN_12	8.000	319.400 0.	53 224,841.521	58,999.658	Free Surface	5.765	0.229	0.115	0.153	0.274	3.096	1,951,946.703	Yes	0.173	4.831
Ħ	SUN 12-SUN 13	SUN_12	SUN_13	8.000	400.080 0.	04 224,841.521	58,999.658	Free Surface	2.349	0.440	0.401	0.294	0.274	0.875	561,059.875	No	0.294	2.349
Ħ	SUN_13-SUN_14	SUN_13	SUN_14	8.000		10 224,841.521	· ·	Free Surface		0.351	0.265	0.234	0.274	1.350	848,653.125	No	0.234	3.178
Ħ	SUN_14-SUN_15	SUN_14	SUN_15	8.000		23 224,841.521	58,999.658	Free Surface		0.282	0.174	0.188	0.274	2.067	1,294,902.337	No	0.188	4.305
Ħ	SUN_15-ECF1_44	SUN_15	ECF1_44	8.000		04 224,841.521		Free Surface		0.463	0.439	0.309	0.274	0.794	512,563.154	Yes	0.640	1.010
Ħ	SUN_1-SUN_2	SUN_1	SUN_2	8.000		17 224,841.521	58,999.658	Free Surface		0.305	0.202	0.203	0.274	1.776	1,112,216.324	No	0.203	3.861
H	SUN_2-SUN_3	SUN_2	SUN_3	8.000		15 224,841.521		Free Surface		0.316	0.217	0.211	0.274	1.653	1,035,587.450	No	0.211	3.668
H	SUN_3-SUN_4	SUN_3	SUN_4	8.000		08 224,841.521	58,999.658	Free Surface		0.374	0.298	0.249	0.274	1.198	755,521.919	No	0.249	2.921
H	SUN_4-SUN_5	SUN_4	SUN_5	8.000		06 224,841.521		Free Surface		0.400	0.230	0.249	0.274	1.051	666,364.813	No	0.249	2.666
H				8.000		05 224,841.521	58,999.658	Free Surface		0.433	0.390	0.289	0.274	0.902	577,144.885	No	0.289	2.399
H	SUN_5-SUN_6	SUN_5	SUN_6			05 224,841.521												
닖	SUN_6-SUN_7	SUN_6	SUN_7	8.000				Free Surface		0.433	0.388	0.288	0.274	0.905	578,835.635	No	0.288	2.404
	SUN_7-SUN_8	SUN_7	SUN_8	8.000		05 224,841.521	58,999.658	Free Surface		0.433	0.389	0.289	0.274	0.903	577,374.239	No	0.289	2.400
H	SUN_8-SUN_9	SUN_8	SUN_9	8.000		224,841.521		Free Surface		0.287	0.179	0.191	0.274	2.004	1,255,309.417		0.191	4.210
الب	SUN_9-SUN_10	SUN_9	SUN_10	8.000	3/3./00 0.	20 224,841.521	58,999.658	Free Surface	4.085	0.293	0.187	0.195	0.274	1.922	1,203,402.692	No	0.195	4.085

	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth (ft)	Adjusted Velocity
F	TOE 2576-TOE 2577	TOE_2576	TOE_2577	18.000	282.794	0.005	1,355,387.386	500,421.412	Free Surface	3.919	0.342	0.252	0.514	0.547	1.127	5,370,802.322	No	0.514	3.919
	TOE 2577-TOE 2578	TOE_2577	TOE_2578	18.000	270.433	0.015	1,355,387.386	500,421.412	Free Surface	5.655	0.263	0.151	0.394	0.547	1.881	8,957,466.948	No	0.394	5.655
	TOE 2578-TOE 2579	TOE_2578	TOE_2579	18.000	293.969	0.015	1,355,387.386	500,421.412	Free Surface	5.647	0.263	0.152	0.395	0.547	1.877	8,939,632.045	No	0.395	5.647
	TOE 2579-TOE 2981	TOE_2579	TOE_2981	18.000	91.682	0.009	1,355,387.386	500,421.412	Free Surface	4.742	0.298	0.194	0.447	0.547	1.472	6,999,656.252	No	0.447	4.742
	TOE 2580-TOE 2978	TOE_2580	TOE_2978	18.000	103.702	0.005	1,355,387.386	500,421.412	Free Surface	3.703	0.357	0.273	0.536	0.547	1.039	4,964,591.669	No	0.536	3.703
F	TOE 2581-TOE 2979	TOE_2581	TOE 2979	18.000	84.929	0.004	1,421,643.166	529,672.121	Free Surface	3.734	0.368	0.288	0.551	0.560	1.031	4,932,785.490	No	0.551	3.734
Ħ	TOE 2582-TOE 2980	TOE_2582	TOE_2980	18.000	25.848		1,421,643.166	529,672.121	Free Surface	3.784	0.364	0.283	0.546	0.560	1.051	5,024,681.737	Yes	0.553	3.717
Ħ	TOE 2583-TOE 2584	TOE_2583	TOE_2584	18.000	397.733		1,421,643.166	529,672.121	Free Surface	3.509	0.385	0.314	0.577	0.560	0.944	4,528,752.063	No	0.577	3.509
	TOE 2584-CHF3A 15	TOE_2584	CHF3A_15	18.000	394.000		1,421,643.166	529,672.121			0.379	0.304	0.568	0.560	0.974	4,669,916.990	No	0.568	3.588
	TOE 2585-CHF1A C1	TOE_2585	CHF1A C1	18.000	230.196		1,473,345.957	552,671.792			0.300	0.196	0.450	0.571	1.583	7,529,828.380	No	0.450	5.116
	TOE 2586-TOE 2587	TOE_2586	TOE_2587	18.000	230.190		1,635,716.886	625,921.684			0.339	0.247	0.508	0.603	1.387	6,611,064.070	No	0.508	4.797
	TOE 2587-TOE 2588	TOE_2587	TOE_2588	18.000	93.140	0.020		625.921.684			0.267	0.156	0.400	0.603	2.206	10,504,890.108		0.400	6.687
	TOE 2588-TOE 2589	TOE_2588	TOE_2589	18.000	492.495		1,635,716.886	625,921.684			0.254	0.142	0.382	0.603	2.419	11,530,311.680		0.382	7.145
	TOE 2589-TOE 2590	TOE 2589	TOE_2590	18.000	115.180		1,751,846.743	679,171.424			0.268	0.157	0.401	0.625	2.349	11,185,690.250		0.401	7.132
	TOE 2590-TOE 2591	TOE_2590	TOE_2591	18.000	23.959		1,751,846.743	679,171.424			0.209	0.096	0.314	0.625	3.797	18,266,219.977		0.698	3.365
	TOE 2591-TOE 2743	TOE_2591	TOE_2743	30.000	231.417		8,103,185.591	4,205,550.096			0.531	0.553	1.327	1.189	0.810	14,662,594.587	No	1.327	4.737
H	TOE 2592-TOE 2593	TOE_2592	TOE_2593	8.000	52.704	0.006			Free Surface		0.347	0.258	0.231	0.235	1.036	650,612.893	No	0.231	2.419
	TOE 2593-GVF1 95	TOE_2593	GVF1 95	8.000	189.327	0.015			Free Surface		0.271	0.230	0.231	0.235	1.666	1,044,475.552	No	0.181	3.397
	TOE 2594-TOE 2595	TOE_2594	TOE_2595	15.000	178.668	0.003		302,350.926			0.408	0.350	0.510	0.253	0.830	2,538,906.603	No	0.510	2.916
	TOE_2594-TOE_2595 TOE 2595-TOE 2596	TOE_2595	TOE_2595	15.000	210.662			•	Free Surface		0.463	0.330	0.579	0.463	0.651	2,024,920.664	No	0.579	2.469
	TOE_2595-TOE_2596 TOE 2596-TOE 2597		TOE_2596 TOE_2597	30.000	111.976		887,581.330	302,350.926			0.463	0.436	0.579	0.463	0.821	14,399,580.685		0.579	2.469
	TOE_2596-TOE_2597 TOE 2597-TOE 2598	TOE_2596 TOE_2597	TOE_2597	30.000	103.462		887,581.330		Free Surface		0.100	0.062	0.421	0.381	0.632	10,964,496.126		0.421	2.077
		TOE_2597			231.956	0.001		302,350.926			0.192	0.001	0.307	0.463	2.222		No	0.307	
	TOE_2598-TOE_2591		TOE_2591	15.000				•								6,724,468.009		0.588	5.877
	TOE_2609-TOE_2747	TOE_2609	TOE_2747	18.000			1,074,330.451	379,477.297 379,477,297			0.392	0.325	0.588	0.485	0.688	3,305,231.616	No		2.585
	TOE_2610-TOE_2609	TOE_2610	TOE_2609	18.000	80.972		1,074,330.451	,			0.245	0.131	0.367	0.485	1.717	8,195,229.564	Yes	0.403	4.355
	TOE_2612-TOE_2610	TOE_2612	TOE_2610	18.000	148.443		1,074,330.451	379,477.297			0.240	0.127	0.361	0.485	1.774	8,473,788.030	No	0.361	5.083
	TOE_2615-TOE_2619	TOE_2615	TOE_2619	30.000	285.463		8,186,849.815				0.604	0.679	1.511	1.195	0.639	12,051,538.778		1.511	4.084
	TOE_2619-TOE_2994	TOE_2619	TOE_2994	30.000	191.828		8,186,849.815				0.549	0.584	1.372	1.195	0.768	14,024,341.801	No	1.372	4.590
	TOE_2620-TOE_2989	TOE_2620	TOE_2989	12.000	238.521	0.004		,	Free Surface		0.257	0.144	0.257	0.251	0.955	1,651,578.715	No	0.257	2.315
	TOE_2621-TOE_2620	TOE_2621	TOE_2620	12.000	178.316			63,400.296	Free Surface		0.190	0.079	0.190	0.251	1.716	3,014,402.982	Yes	0.224	2.816
	TOE_2622-TOE_2621	TOE_2622	TOE_2621	12.000	277.449		238,514.304		Free Surface		0.243	0.129	0.243	0.251	1.065	1,845,198.621	No	0.243	2.505
	TOE_2623-TOE_2622	TOE_2623	TOE_2622	10.000	399.765		0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	2,444,846.898	No	0.000	0.000
	TOE_2624-TOE_2623	TOE_2624	TOE_2623	10.000	400.696		0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	2,458,872.660	No	0.000	0.000
	TOE_2625-TOE_2624	TOE_2625	TOE_2624	10.000	334.859		0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	1,951,446.396	No	0.000	0.000
	TOE_2626-OGF2_29	TOE_2626	OGF2_29	8.000	159.127		57,000.939		Free Surface		0.135	0.039	0.090	0.135	2.229	1,465,679.145	No	0.090	3.141
	TOE_2628-CSF1_C3A	TOE_2628	CSF1_C3A	18.000	133.826		968,433.703	· · · · · · · · · · · · · · · · · · ·	Free Surface		0.316	0.217	0.475	0.459	0.938	4,462,273.317	No	0.475	3.121
	TOE_2629-TOE_2628	TOE_2629	TOE_2628	15.000	253.572	0.006	968,433.703	335,401.794	Free Surface	3.799	0.358	0.274	0.447	0.485	1.167	3,534,157.522	No	0.447	3.799
	TOE_2630-TOE_2984	TOE_2630	TOE_2984	15.000	284.795		968,433.703	335,401.794	Free Surface	2.700	0.462	0.437	0.578	0.485	0.713	2,215,971.138	No	0.578	2.700
	TOE_2631-TOE_2630	TOE_2631	TOE_2630	15.000	274.927	0.006	968,433.703	•	Free Surface		0.361	0.278	0.451	0.485	1.149	3,481,166.216	Yes	0.464	3.609
	TOE_2635-TOE_2636	TOE_2635	TOE_2636	10.000		0.002	0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	718,678.955	No	0.000	0.000
	TOE_2636-TOE_2639	TOE_2636	TOE_2639	10.000		0.001	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	532,974.852	Yes	0.136	0.000
	TOE_2637-TOE_2638	TOE_2637	TOE_2638	12.000		0.025	709,007.958	. ,	Free Surface		0.286	0.178	0.286	0.441	2.309	3,984,985.969	No	0.286	5.929
	TOE_2638-TOE_2639	TOE_2638	TOE_2639	12.000	49.033	0.014	709,007.958	231,369.033	Free Surface	4.823	0.332	0.237	0.332	0.441	1.729	2,988,489.806	No	0.332	4.823
	TOE_2639-RMF1_114	TOE_2639	RMF1_114	12.000	110.713	0.013		231,369.033	Free Surface	4.604	0.343	0.253	0.343	0.441	1.620	2,802,550.445	No	0.343	4.604
	TOE_2640-TOE_2637	TOE_2640	TOE_2637	12.000	271.203	0.018	709,007.958	231,369.033	Free Surface	5.210	0.313	0.213	0.313	0.441	1.927	3,327,509.254	Yes	0.474	2.987
	TOE_2646-ARF1_37	TOE_2646	ARF1_37	8.000	44.839	0.002	225,620.011	59,250.218	Free Surface	1.594	0.601	0.673	0.400	0.274	0.485	335,186.855	No	0.400	1.594
	TOE_2647-TOE_2646	TOE_2647	TOE_2646	8.000	316.906	0.005	225,620.011	59,250.218	Free Surface	2.456	0.427	0.379	0.285	0.274	0.932	595,196.711	No	0.285	2.456
	TOE_2648-TOE_2650	TOE_2648	TOE_2650	15.000	410.019	0.004	1,580,829.504	600,990.974	Free Surface	3.525	0.551	0.588	0.689	0.626	0.832	2,687,541.477	No	0.689	3.525
	TOE_2649-TOE_2648	TOE_2649	TOE_2648	15.000	133.522	0.004	1,580,829.504	600,990.974	Free Surface	3.557	0.547	0.581	0.684	0.626	0.843	2,719,066.029	No	0.684	3.557
	TOE_2650-TOE_2656	TOE_2650	TOE_2656	15.000	392.350	0.018	1,653,317.864	633,928.081	Free Surface	6.545	0.355	0.271	0.444	0.641	2.018	6,109,130.732	No	0.444	6.545
	TOE_2651-TOE_2652	TOE_2651	TOE_2652	15.000	16.899	0.004	1,653,317.864	633,928.081	Free Surface	3.794	0.539	0.566	0.674	0.641	0.909	2,918,726.550	Yes	0.689	3.691
	TOE_2652-TOE_2653	TOE_2652	TOE_2653	15.000	381.367	0.004	1,653,317.864	633,928.081	Free Surface	3.594	0.563	0.608	0.704	0.641	0.836	2,718,097.714	No	0.704	3.594
	TOE_2653-TOE_2654	TOE_2653	TOE_2654	15.000	404.066	0.004	1,653,317.864	633,928.081	Free Surface	3.583	0.564	0.611	0.706	0.641	0.832	2,707,267.370	No	0.706	3.583
	TOE 2654-TOE 2655	TOE_2654	TOE_2655	15.000			1,728,326.206	668,322.468	Free Surface	5.426	0.422	0.372	0.528	0.656	1.514	4,645,683.290	No	0.528	5.426
	TOE_2655-TOE_2745	TOE_2655	TOE_2745	30.000			5,577,852.907				0.468	0.446	1.170	0.978	0.710	12,505,252.071		1.674	2.471
Ħ	TOE_2656-TOE_2651	TOE_2656	TOE_2651	15.000			1,653,317.864	633,928.081			0.324	0.226	0.404	0.641	2.420	7,301,159.433	Yes	0.439	6.652
H	TOE_2657-TOE_2659	TOE_2657	TOE_2659	8.000			388,704.998	113,160.917			0.434	0.391	0.289	0.365	1.555	994,603.317	No	0.289	4.138
H	TOE_2659-TOE_2660	TOE_2659	TOE_2660	8.000			388,704.998	113,160.917			0.440	0.400	0.293	0.365	1.515	971,164.311	No	0.293	4.065
	TOE 2660-TOE 2661	TOE_2660	TOE 2661	8.000				113,160.917			0.470		0.313	0.365	1.338	865,777.808	No	0.313	3.734
	. 32_2000 102_2001			5.500	332.700	5.515	555,. 54.000	,		J U-1	5.775	5	5.510	0.000		300,. 77.000	. 10	5.510	5 0-∓

The Committee   The Committe		ID	From ID	To ID	Diameter	Length	Slope	Total Flow	Peakable Flow	Flow Type	Velocity	d/D	q/Q	Water	Critical	Froude	Full Flow		Adjusted Depth	Adjusted
TOTE_PRINGE_PR		TOE 0004 TOE 0000	TOF 2664	TOE 2662	(in)	(11)		(gpd)	(gpd)		(ft/s)	0.471		Depth	Depth	Number	(gpd)	Adjustment	(ft)	Velocity
TOP_SYMMETRY_155   TOP_GOND   ECFL_155   0,000   379.446   0.01   381.746   391.116.0917   Free Surface 3.04   0.02   0.051   2.076.0007   1.080.0	닖								-,											
TOC_2624-TOC_2866	닖																			
TOE_2771-TOE_2772   TOE_2771   TOE_2772   TOE_2771   TOE_2772	닖							· ·												
ToE_271-10E_2712 TOE_2711 TO	닖																			
TOE_2711-TOE_2715   TOE_2715	닖																			
TOE_2779-TOE_2779 TOE_2779 T	닖																			
TOE_2714-TOE_2714 TOE_2714 T	닖																			
TOE_2774*T	닖																			
Tot_27151706_2715   Tot_2715	Щ																			
TOE_2711-TOE_2711 TOE_2711 T	Щ																			
TOE_2774.TOE_2774   TOE_2775	Щ																			
TOC_2718-TOC_2719   TOC_2710	Щ			_																
TOE_27728-TOE_27721 TOE_27721 TOE_27721 TOE_27721 TOE_27721 TOE_27722 TOE_27721 TOE_27722 TOE_27724 TOE_27722 TOE_27724 TOE_27722 TOE_27724 TOE_27722 TOE_27724 TOE_																				
TOE_2729-10E_2727   TOE_2772		TOE_2718-TOE_2719	TOE_2718	TOE_2719		404.424	0.004		337,750.433	Free Surface	3.206	0.804				0.670	991,356.795	No		3.206
TOE_2723-10C_2723 TOE_2721 TOE_2722 T		TOE_2719-TOE_2720	TOE_2719	TOE_2720	10.000	399.685	0.009	974,143.245	337,750.433	Free Surface	4.415	0.600	0.671	0.500	0.550	1.203	1,451,641.644	No	0.500	4.415
TOE_2723-TOE_2724 TOE_2722 TOE_2724 TOE_2722 TOE_2724 TOE_2724 TOE_2725 TOE_2724 TOE_2725 TOE_2726 TOE_2726 TOE_2725 TOE_2726 T		TOE_2720-TOE_2721	TOE_2720	TOE_2721	10.000	400.184	0.004	974,143.245	337,750.433	Free Surface	3.194	0.807	0.986	0.673	0.550	0.664	987,655.294	No	0.673	3.194
TORE_2728-10E_2728		TOE_2721-TOE_2722	TOE_2721	TOE_2722	10.000				337,750.433	Free Surface	6.572	0.437				2.199	2,459,871.545	No	0.364	6.572
TORE_27726-10   TORE_27726		TOE_2722-TOE_2723	TOE_2722	TOE_2723	10.000	130.770	0.025	974,143.245	337,750.433	Free Surface	6.525	0.440	0.400	0.366	0.550	2.176	2,435,995.502	No	0.366	6.525
TOC_2778-TOC_2778   TOC_2778   TOC_2772   TOC_2772   TOC_2778		TOE_2723-TOE_2724	TOE_2723	TOE_2724	10.000	402.800	0.029	974,143.245	337,750.433	Free Surface	6.848	0.424	0.374	0.353	0.550	2.334	2,601,206.353	Yes	0.364	6.594
TOC_2728-TOC_2728 TOC_2728 TOC_2728 TOC_2728 TOC_2729 T		TOE_2724-TOE_2725	TOE_2724	TOE_2725	10.000	396.385	0.007	974,143.245	337,750.433	Free Surface	3.916	0.665	0.780	0.554	0.550	0.987	1,248,116.180	No	0.554	3.916
Tole_2728-TDC_2728   Tole_2728   Tole_27		TOE_2725-TOE_2726	TOE_2725	TOE_2726	10.000	403.987	0.007	974,143.245	337,750.433	Free Surface	4.054	0.645	0.748	0.537	0.550	1.047	1,303,194.099	No	0.537	4.054
Tote 2728-TDE 2728   Tote 27		TOE_2726-TOE_2727	TOE_2726	TOE_2727	10.000	395.385	0.025	974,143.245	337,750.433	Free Surface	6.538	0.439	0.399	0.366	0.550	2.182	2,442,479.847	No	0.366	6.538
TOE 2728-FOE 2728   TOE 2729   TOE 2720		TOE_2727-TOE_2728	TOE_2727	TOE_2728	10.000	165.621	0.048	974,143.245	337,750.433	Free Surface	8.276	0.368	0.289	0.307	0.550	3.064	3,372,033.353	No	0.307	8.276
TOE_2728-TOE_2927 TOE_2728 T	Ħ	TOE 2728-TOE 2729	TOE_2728	TOE_2729	10.000	61.077	0.044	974,143.245	337,750.433	Free Surface	7.985	0.378	0.303	0.315	0.550	2.912	3,209,925.693	No	0.315	7.985
TOE 2731-TOE 2930   TOE 2731   TOE 2800   8.000   2365.78   0.016   307.582.755   88.023.80   Free Surface   4.770   0.380   0.290   0.246   0.322   1.822   1.059,992.645   Yes   0.296   3.770   1.722   TOE 2732-TOE 2733   TOE 2733   8.000   414.62   0.005   0.07.582.755   88.023.80   Free Surface   2.807   0.489   0.481   0.326   0.323   0.323   0.323   0.323   610.771   610. No   0.325   2.717   1.722   1.722   TOE 2733   70E, 2733   8.000   414.62   0.005   0.005   5.005   5.005   5.005   5.005   6.757   0.044   0.341   1.009   0.326   0.323   0.323   0.323   0.003   0.005   0.0	Ħ		TOE_2729	TOE_2730	10.000	275.532	0.024	974,143.245	337,750.433	Free Surface	6.394	0.447	0.411	0.372	0.550	2.112	2,369,718.404	Yes	0.376	6.312
TOE 2731-TOE 2930 TOE 2731 TOE 2960 8.000 328.578 0.016 307.582.755 85.62.808 Free Surface 4.070 0.389 0.290 0.246 0.323 1.682 1.056.902.645 Yes 0.296 3.175	Ħ		TOE 2730		10.000	316.366	0.009	974,143.245	337,750.433	Free Surface	4.524	0.588	0.650	0.490	0.550	1.251	1,497,819.128	No	0.490	4.524
TOE_2733-TOE_2731   TOE_2732   TOE_2731   TOE_2732   Store	Ħ				8.000	328.578	0.016	307,562.755	85,623.808	Free Surface	4.070	0.369	0.290	0.246	0.323	1.682	1,059,992.645	Yes	0.296	3.179
To E_2733-TOE_2722 TO E_2734 TO E_2735 TO E_2736 TO E_2737 TO E_2306 TO E_2736 TO E_2737 TO E_2306 TO E_2738 TO E_2737 TO E_2306 TO E_2738 TO E	Ħ		TOE 2732	TOE 2731	8.000	341.462	0.005	307,562.755	85,623.808	Free Surface	2.712	0.502	0.504	0.335	0.323	0.932	610,771.602	No	0.335	2.712
ToE_2734-TOE_2815   ToE_2735   ToE_2735   ToE_2734   30.000   429.824   0.007   8.103,185.914   4.205,550.098 Free Surface   4.375   0.540   0.588   3.50   1.189   0.785   4.257,589.874   No   1.350   4.375   1.005   1.0	Ħ									Free Surface	2.807	0.489	0.481			0.981		No	0.326	2.807
TOE_2738-TOE_2738	Ħ				30.000	429.624	0.007	8.103.185.591	4.205.550.096	Free Surface	6.757	0.404	0.343	1.009		1.369	23.658.516.928	No	1.009	6.757
TOE_2738-TOE_2738	Ħ											0.540							1.350	4.637
TOE_273*TOE_2905 TOE_2737 TOE_2905 30.00 480.00 .002 8,103.185.591 4,205.550.096 Free Surface 4.579 0.545 0.675 1.505 1.189 0.637 11,971.31,771 No 1.505 4.0505 1.002 2738 TOE_2738 TOE_2738 30.00 409.947 0.002 8,103.185.591 4,205.550.096 Free Surface 4.525 0.675 1.089 0.675 1.089 0.637 11,971.31,771 No 1.505 4.0505 1.002 2738 TOE_2738 TOE_2738 TOE_2738 30.00 499.467 0.002 8,103.185.591 4,205.550.096 Free Surface 4.525 0.575 0.628 1.437 1.189 0.639 1.299,064.525 No 1.437 4.295 TOE_2740 TOE_27	Ħ																	No		
TOE_2738-TOE_2738	Ħ																			
TOE_2739-TOE_2738	Ħ																			
TOE_2740-TOE_2739	H																			
□ TOE_2741-TOE_2740 TOE_2741 TOE_2741 TOE_2742	H																			
TOE_2742-TOE_2741 TOE_2742 TOE_2741 30.000 129.779 0.002 8.103.185.591 4.205.550.096 Free Surface 4.535 0.550 0.586 1.374 1.189 0.758 13,844,924.620 Ves 1.384 4.496 TOE_2743 TOE_2743 TOE_2743 TOE_2744 0.003 8.103.185.591 4.205.550.096 Free Surface 5.287 0.487 0.477 1.217 1.189 0.957 16,970.973.773 Ves 1.246 5.137 0.000 1.000 0.481.684.102 0.004 6.481.684.102 0.004 6.481.684.102 0.004 6.481.684.102 0.004 6.481.684.102 0.004 6.481.684.102 0.004 5.577.852.907 2.696.138.345 Free Surface 5.086 0.442 0.404 0.995 1.010 1.029 13,806.136.114 Ves 2.250 2.177 0.000 1.000 0.0	H																			
TOE_2743-TOE_2791   TOE_2744   TOE_2793   TOE_2744   TOE_2991   30,000   172,744   4,003 8,103,185,591   4,205,550,006   Free Surface   5,287   0,487   0,477   1,217   1,189   0,957   16,707,973,773   Yes   1,246   5,131     TOE_2745-TOE_2744   TOE_2745   TOE_2744   27,000   198,412   0,004   5,577,852,907   2,696,183,435   Free Surface   5,086   0,442   0,404   0,995   1,010   1,029   13,806,186114   Yes   2,250   2,171     TOE_2746-TOE_2744   TOE_2745   TOE_2744   18,000   293,280   0,006   1,417,627,590   527,889,401   Free Surface   4,265   0,333   0,293   0,499   0,559   1,246   5,935,788,422   No   0,499   4,265     TOE_2747-ECF5_204   TOE_2748   TOE_2749   12,000   299,977   0,011   1,629,352,103   623,027,285   Free Surface   5,044   0,603   0,677   0,603   0,680   1,269   3,683,450     TOE_2749-TOE_2750   TOE_2750   TOE_275	H																			
TOE_2744-TOE_2591 TOE_2744 TOE_2591 30.000 436.895 0.000 6,481,864.102 3,224,027.746 Pressurized 2.043 1.000 7.118 2.500 0.386 0.228 910,610.783 No 2.500 2.043 1.000 TOE_2745-TOE_2744 TOE_2745 TOE_2745 TOE_2744 18.000 293.260 0.006 1,417,627.95 5.905 \$27,889.401 Free Surface 4.265 0.333 0.239 0.499 0.559 1.246 5,935,798.422 No 0.499 4.265	H																			
TOE_2745_TOE_2744 TOE_2745 TOE_2744	H																			
TOE_2746-TOE_2744 TOE_2746 TOE_2744 18.000 293.260 0.006 1,417,627.590 527,889.401 Free Surface 4.265 0.333 0.239 0.499 0.559 1.246 5,935,798.422 No 0.499 4.265 TOE_2747-EOE_752	H																			
TOE_2748-TOE_2749 TOE_2749 TOE_2749 TOE_2749 TOE_2750 12.000 290.977 0.011 1,629.352.103 623,027.285 Free Surface 5.411 0.573 0.626 0.573 0.680 1.390 _c,602.387.719.525 No 0.479 1.000 _c,602.387.719.525 No 0.479 _c,602.387.719	H																			
TOE_2748-TOE_2748	H																			
TOE_2749-TOE_2750  TOE_2750  TOE_2750  TOE_2750  12.000  393.950  0.009  1,629,352.103  623,027.285  Free Surface  5.094  0.603  0.677  0.603  0.680  1.262  2,407,531.959  No  0.603  5.094  TOE_2750-TOE_2751  TOE_2750  TOE_2751  12.000  263.499  0.020  1,629,352.103  623,027.285  Free Surface  6.849  0.475  0.488  0.475  0.680  1.988  3,553,960.140  No  0.475  6.849	H								,											
TOE_2750-TOE_2751 TOE_2750 TOE_2751 TOE_2752 TOE_2751 TOE_2752 TOE_2753 TOE_2752 TOE_2753 TOE_2753 TOE_2753 TOE_2753 TOE_2754 TOE_2754 TOE_2755 TOE	H			_																
TOE_2751-TOE_2752 TOE_2751 TOE_2752 TOE_2753 TOE_2753 15.000 391.732 0.015 1,629,352.103 623,027.285 Free Surface 6.040 0.373 0.296 0.466 0.636 1.812 5,499,118.473 No 0.466 6.040 TOE_2752-TOE_2753 TOE_2752 TOE_2753 15.000 398.557 0.010 1,629,352.103 623,027.285 Free Surface 5.245 0.414 0.360 0.518 0.636 1.480 4,531,817.796 No 0.518 5.245 TOE_2753-TOE_2754 TOE_2753 TOE_2754 15.000 349.938 0.011 1,629,352.103 623,027.285 Free Surface 5.486 0.401 0.338 0.501 0.636 1.578 4,818,135.047 No 0.501 5.486	H							, ,												
TOE 2752-TOE 2753 TOE 2754 TOE 2753 TOE 2754 TOE 2755 TOE 2755 TOE 2755 TOE 2759 TOE 2755 TOE 2757 TOE 2757 TOE 2757 TOE 2757 TOE 2750 TOE 2757 TOE 2750 TO																				
TOE_2753-TOE_2754 TOE_2755 TOE_2754 TOE_2755 TOE	닖																			
TOE_2754-TOE_2755 TOE_2755 TOE_2756 TOE_2755 TOE_2756 TOE_2755 TOE_2756 TOE_2755 TOE_2755 TOE_2756 TOE_2755 TOE_2755 TOE_2756 TOE_2755 TOE																				
TOE_2755-TOE_2759 TOE_2755 TOE_2759 15.000 312.151 0.010 1,629,352.103 623,027.285 Free Surface 5.172 0.419 0.366 0.524 0.636 1.450 4,445,843.679 No 0.524 5.172 TOE_2756-TOE_2757 TOE_2750 TOE_2757 TOE_2750 TOE_2757 TOE_2750 15.000 72.934 0.010 1,703,330.127 656,832.713 Free Surface 6.148 0.380 0.307 0.476 0.651 1.823 5,542,104.941 No 0.476 6.148 0.100 TOE_2758-TOE_2750 TOE_2758 TOE_2751 18.000 414.191 0.002 1,703,330.127 656,832.713 Free Surface 2.761 0.532 0.554 0.797 0.615 0.609 3,074,643.302 No 0.797 0.520 1.533 4,698,940.442 No 0.520 1.545  TOE_2759-TOE_2750 TOE_2750 T	닖																			
TOE_2756-TOE_2757 TOE_2756 TOE_2757 TOE_2750 TOE	닖																			
TOE_2757-TOE_2760 TOE_2758-TOE_2761 TOE_2758-TOE_2761 TOE_2758-TOE_2761 TOE_2759-TOE_2756 TOE_2759-TOE_2760 TOE_2759-TOE_2760 TOE_2750-TOE_2817 TOE_2761-TOE_2762 TOE_2761-TOE_2762 TOE_2761-TOE_2762 TOE_2761-TOE_2762 TOE_2762-TOE_2764 TOE_2762-TOE_2764 TOE_2762-TOE_2764 TOE_2764-TOE_2764 TOE_2764-TOE_2764 TOE_2766-TOE_2764 TOE_2766-TOE_2764 TOE_2766-TOE_2764 TOE_2766-TOE_2764 TOE_2766-TOE_2764 TOE_2766-TOE_2764 TOE_2766-TOE_2764 TOE_2766-TOE_2766 TOE_2766-TOE_2764 TOE_2766-TOE	닖																			5.172
TOE_2758-TOE_2761 TOE_2758-TOE_2766 TOE_2759-TOE_2766 TOE_2759-TOE_2766 TOE_2760-TOE_2817 TOE_2761-TOE_2761 TOE_2761-TOE_2762 TOE_2761-TOE_2762 TOE_2761-TOE_2762 TOE_2762-TOE_2764 TOE_2762-TOE																				5.365
TOE_2759-TOE_2756 TOE_2760-TOE_2817 TOE_2760-TOE_2817 TOE_2761-TOE_2762 TOE_2761-TOE_2762 TOE_2762-TOE_2764 TOE_2762-TOE																				6.148
TOE_2760_TOE_2817 TOE_2760 TOE_2817 15.000 413.357 0.019 1,703,330.127 656,832.713 Free Surface 6.766 0.354 0.269 0.443 0.651 2.089 6,324,722.609 No 0.443 6.766 TOE_2761_TOE_2762 TOE_2761 TOE_2762 18.000 69.865 0.004 1,703,330.127 656,832.713 Free Surface 3.614 0.431 0.386 0.647 0.615 0.909 4,411,329.400 Yes 0.718 3.154 TOE_2762_TOE_2764 TOE_2762_TOE_2764 18.000 489.494 0.002 1,703,330.127 656,832.713 Free Surface 2.796 0.526 0.545 0.789 0.615 0.621 3,126,773.703 No 0.789 2.796																				2.761
TOE_2761-TOE_2762 TOE_2761 TOE_2762 TOE_2764 TOE_2762 18.000 69.865 0.004 1,703,330.127 656,832.713 Free Surface 3.614 0.431 0.386 0.647 0.615 0.909 4,411,329.400 Yes 0.718 3.154 TOE_2762-TOE_2764 TOE_2762-TOE_																				5.450
TOE_2762-TOE_2764 TOE_2762 TOE_2764 18.000 489.494 0.002 1,703,330.127 656,832.713 Free Surface 2.796 0.526 0.545 0.789 0.615 0.621 3,126,773.703 No 0.789 2.796																		No		6.766
		TOE_2761-TOE_2762	TOE_2761	TOE_2762	18.000	69.865	0.004	1,703,330.127	656,832.713	Free Surface	3.614	0.431	0.386	0.647	0.615	0.909	4,411,329.400	Yes	0.718	3.154
TOE_2763_TOE_2765 TOE_2765 TOE_2765 TOE_2765 18.000 466.966 0.002 1,703,330.127 656,832.713 Free Surface 2.964 0.502 0.504 0.754 0.615 0.679 3,378,307.134 Yes 0.803 2.736		TOE_2762-TOE_2764	TOE_2762	TOE_2764	18.000							0.526	0.545	0.789	0.615	0.621	3,126,773.703	No	0.789	2.796
		TOE_2763-TOE_2765	TOE_2763	TOE_2765	18.000	466.966	0.002	1,703,330.127	656,832.713	Free Surface	2.964	0.502	0.504	0.754	0.615	0.679	3,378,307.134	Yes	0.803	2.736

	BUILDOUT PIPE TABLE	From ID	To ID	Diameter	Length	Slana	Total Flow	Peakable Flow	Flow Type	Velocity	4/D	a/O	Water	Critical	Froude	Full Flow	Backwater	Adjusted Depth	Adjusted
				(in)	(ft)	Slope	(gpd)	(gpd)	• • • • • • • • • • • • • • • • • • • •	(ft/s)	d/D	q/Q	Depth	Depth	Number	(gpd)	Adjustment	(ft)	Velocity
	TOE_2764-TOE_2763	TOE_2764	TOE_2763	18.000			1,703,330.127	656,832.713			0.488	0.479	0.732	0.615	0.718	3,552,946.925	Yes	0.743	3.020
	TOE_2765-TOE_2766	TOE_2765	TOE_2766	18.000			1,703,330.127	656,832.713			0.568	0.617	0.853	0.615	0.536	2,759,106.316	No	0.853	2.542
	TOE_2766-TOE_2767	TOE_2766	TOE_2767	18.000	181.632		1,703,330.127	656,832.713			0.515	0.526	0.773	0.615	0.646	3,237,177.498	No	0.773	2.870
	TOE_2767-TOE_2768	TOE_2767	TOE_2768	18.000			1,703,330.127	656,832.713			0.389	0.320	0.583	0.615	1.109	5,326,808.805	No	0.583	4.148
	TOE_2768-TOE_2914	TOE_2768	TOE_2914	18.000	287.466	0.013	1,703,330.127	656,832.713	Free Surface	5.776	0.305	0.202	0.458	0.615	1.771	8,422,695.282	Yes	0.602	3.974
	TOE_2769-TOE_2770	TOE_2769	TOE_2770	18.000	498.501	0.002	1,703,330.127	656,832.713	Free Surface	3.020	0.495	0.492	0.743	0.615	0.698	3,464,114.064	Yes	0.745	3.007
	TOE_2770-TOE_2771	TOE_2770	TOE_2771	18.000	403.879	0.002	1,703,330.127	656,832.713	Free Surface	2.993	0.499	0.498	0.748	0.615	0.689	3,422,652.098	No	0.748	2.993
	TOE_2771-TOE_2772	TOE_2771	TOE_2772	18.000	100.158	0.006	1,710,973.771	660,333.351	Free Surface	4.259	0.382	0.310	0.574	0.617	1.150	5,514,173.479	Yes	0.649	3.617
	TOE_2772-TOE_2773	TOE_2772	TOE_2773	18.000	361.279	0.002	1,710,973.771	660,333.351	Free Surface	3.137	0.482	0.470	0.723	0.617	0.737	3,639,557.647	Yes	0.852	2.553
	TOE_2773-TOE_2774	TOE_2773	TOE_2774	18.000	259.869	0.004	1,710,973.771	660,333.351	Free Surface	3.716	0.424	0.374	0.635	0.617	0.945	4,574,583.703	Yes	1.411	1.535
	TOE_2774-TOE_2775	TOE_2774	TOE_2775	18.000	352.134	-0.000	1,710,973.771	660,333.351	Pressurized	1.498	1.000		1.500	0.000	0.216		No	1.500	1.498
	TOE_2775-TOE_2776	TOE_2775	TOE_2776	18.000	499.799	0.002	1,710,973.771	660,333.351	Free Surface	2.627	0.555	0.595	0.833	0.617	0.563	2,875,663.264	Yes	0.892	2.416
	TOE_2776-TOE_2777	TOE_2776	TOE_2777	18.000	505.125	0.001	1,710,973.771	660,333.351	Free Surface	2.240	0.634	0.730	0.951	0.617	0.436	2,343,226.326	No	0.951	2.240
	TOE_2777-TOE_2778	TOE_2777	TOE_2778	18.000	448.684	0.001	1,710,973.771	660,333.351	Free Surface	2.310	0.618	0.702	0.927	0.617	0.459	2,437,004.677	Yes	0.938	2.278
	TOE_2778-TOE_2779	TOE_2778	TOE_2779	18.000	451.433	0.001	1,710,973.771	660,333.351	Free Surface	2.248	0.632	0.727	0.948	0.617	0.439	2,354,025.025	Yes	1.092	1.921
	TOE_2779-TOE_2780	TOE_2779	TOE_2780	18.000	471.667	0.001	1,710,973.771	660,333.351	Free Surface	2.228	0.637	0.735	0.956	0.617	0.432	2,327,876.216	Yes	1.343	1.587
	TOE_2780-TOE_2781	TOE_2780	TOE_2781	18.000	294.427	0.001	1,710,973.771	660,333.351	Free Surface	2.277	0.625	0.715	0.938	0.617	0.448	2,392,881.049	Yes	1.500	1.498
	TOE_2781-TOE_2782	TOE_2781	TOE_2782	18.000	388.136	0.000	1,710,973.771	660,333.351	Pressurized	1.498	1.000	1.378	1.500	0.522	0.216	1,241,461.108	No	1.500	1.498
	TOE_2782-TOE_2783	TOE_2782	TOE_2783	21.000	379.111	0.001	1,710,973.771	660,333.351	Free Surface	2.249	0.492	0.486	0.860	0.589	0.483	3,521,797.912	Yes	0.935	2.026
	TOE_2783-TOE_2786	TOE_2783	TOE_2786	21.000	499.183	0.002	1,710,973.771	660,333.351	Free Surface	2.817	0.414	0.358	0.724	0.589	0.672	4,775,511.323	Yes	1.409	1.275
	TOE_2784-TOE_2785	TOE_2784	TOE_2785	21.000	128.890	0.001	1,909,905.766	752,722.277	Free Surface	2.317	0.524	0.541	0.917	0.624	0.478	3,532,789.790	Yes	0.917	2.316
	TOE_2785-TOE_2788	TOE_2785	TOE_2788	21.000	278.260	0.001	1,909,905.766	752,722.277	Free Surface	2.315	0.524	0.541	0.917	0.624	0.477	3,528,657.765	Yes	0.987	2.114
	TOE_2786-TOE_2784	TOE_2786	TOE_2784	21.000	505.223	0.000	1,909,905.766	752,722.277	Pressurized	1.229	1.000	1.286	1.750	0.547	0.164	1,484,689.154	No	1.750	1.229
m	TOE 2787-EVF4 46	TOE_2787	EVF4_46	21.000	494.801	0.000	1,909,905.766	752,722.277	Pressurized	1.229	1.000	1.350	1.750	0.534	0.164	1,414,443.287	No	1.750	1.229
F	TOE_2788-TOE_2787	TOE_2788	TOE_2787	21.000	503.608	0.002	1,909,905.766	752,722.277	Free Surface	2.880	0.442	0.404	0.774	0.624	0.660	4,728,573.115	Yes	1.437	1.398
	TOE_2789-TOE_2791	TOE_2789	TOE_2791	24.000	498.890	0.001	2,295,434.228	936,914.047	Free Surface	2.327	0.489	0.481	0.978	0.660	0.469	4,769,872.434	Yes	0.987	2.298
	TOE_2790-TOE_2789	TOE 2790	TOE 2789	21.000	174.406	0.001	2,295,434.228	936,914.047	Free Surface	2.441	0.583	0.642	1.020	0.686	0.468	3,573,648.055	No	1.020	2.441
	TOE_2791-TOE_2792	TOE_2791	TOE_2792	24.000	177.562	0.001	2,295,434.228	936,914.047	Free Surface	2.270	0.498	0.497	0.997	0.660	0.452	4,616,077.651	No	0.997	2.270
	TOE_2792-TOE_2793	TOE_2792	TOE 2793	24.000	420.700	0.001	2,295,434.228	936,914.047	Free Surface	2.688	0.437	0.396	0.875	0.660	0.581	5,794,430.136	No	0.875	2.688
Ħ	TOE_2793-TOE_2794	TOE_2793	TOE_2794	24.000	381.015		2,295,434.228	936,914.047	Free Surface	2.977	0.405	0.345	0.810	0.660	0.673	6,659,926.961	Yes	0.867	2.721
F	TOE_2794-TOE_2795	TOE 2794	TOE 2795	24.000	455.331	0.001	2,295,434.228	936,914.047	Free Surface	2.504	0.462	0.436	0.924	0.660	0.523	5,262,886.803	Yes	1.013	2.225
F	TOE 2795-OTF1 60A	TOE_2795	OTF1 60A	24.000	214.510		2,295,434.228	936,914.047	Free Surface	2.002	0.551	0.587	1.102	0.660	0.374	3,909,765.156	No	1.102	2.002
F	TOE 2798-TOE 2799	TOE_2798	TOE_2799	12.000	220.498	0.002		225,696.875			0.555	0.595	0.555	0.436	0.629	1,166,983.883	No	0.555	2.398
F	TOE 2799-OTF1 108	TOE_2799	OTF1 108	16.000	33.367	0.002	694,293.725	225,696.875			0.359	0.276	0.478	0.400	0.708	2,519,550.956	No	0.478	2.384
	TOE_2800-TOE_2825	TOE 2800	TOE 2825	36.000	57.809		•	4,482,993.352			0.240	0.127	0.721	1.157	2.496	67,464,814.133		0.836	8.216
	TOE_2801-TOE_2612	TOE_2801	TOE_2612	18.000	141.337		1,074,330.451	379,477.297			0.229	0.115	0.343	0.485	1.956	9,366,308.345	No	0.343	5.458
	TOE_2802-TOE_2801	TOE_2802	TOE_2801	18.000	250.167		1,074,330.451	379,477.297			0.323	0.226	0.485	0.485	0.999	4,754,776.317	No	0.485	3.364
	TOE_2803-TOE_2802	TOE_2803	TOE_2802	18.000	194.718		1,074,330.451	379,477.297			0.337	0.245	0.505	0.485	0.921	4,389,857.843	No	0.505	3.176
	TOE_2804-TOE_2803	TOE 2804	TOE 2803	18.000	232.012		1,074,330.451	379,477.297			0.341	0.250	0.511	0.485	0.903	4,303,159.363	No	0.511	3.131
	TOE 2805-VPF1 718	TOE_2805	VPF1 718	18.000			1,325,402.121	487,251.177			0.290	0.183	0.435	0.540	1.523	7,240,963.795	No	0.435	4.827
	TOE_2806-TOE_2805	TOE_2806	TOE_2805	18.000	276.239		1,325,402.121	487,251.177			0.280	0.172	0.420	0.540	1.624	7,723,387.698	No	0.420	5.055
	TOE_2807-TOE_2806	TOE_2807	TOE 2806	18.000	443.273		1,325,402.121	487,251.177			0.355	0.172	0.533	0.540	1.027	4,903,668.343	No	0.533	3.647
	TOE_2808-TOE_2819	TOE 2808	TOE_2819	18.000	416.583		1.325.402.121	487,251,177			0.283	0.174	0.424	0.540	1.597	7,596,070.360	No	0.424	4.995
	TOE 2809-VRGC2 526	TOE_2809	VRGC2_526	10.000	56.047	0.036	593,284.015	187,225.850			0.306	0.203	0.424	0.425	2.669	2,920,079.797	No	0.424	6.497
	TOE 2817-TOE 2818	TOE_2817	TOE_2818	15.000	417.201		1,703,330.127	656,832.713			0.327	0.232	0.233	0.423	2.435	7,350,359.292	Yes	0.534	5.273
	TOE_2818-TOE_2758	TOE 2818	TOE_2010	18.000	341.416		1,703,330.127	656,832.713			0.439	0.232	0.409	0.615	0.880	4,279,919.147	Yes	0.728	3.100
	TOE 2819-TOE 2807	TOE 2819	TOE_2730	18.000	434.564			487,251.177			0.439	0.228	0.487	0.540	1.223	5,823,534.025	No	0.487	4.129
	TOE_2825-TOE_2826	TOE_2819	TOE_2826	36.000				5,419,907.399			0.324	0.228	1.151	1.257		32,111,628.908		1.221	5.740
	TOE_2826-TOE_2827	TOE_2826	TOE_2827	36.000				5,419,907.399			0.520	0.535	1.561	1.257	0.660	18,745,463.271		1.561	4.173
		_						5,419,907.399			0.520	0.383	1.288					1.316	5.202
	TOE_2827-TOE_2828	TOE_2827	TOE_2828	36.000				5,419,907.399				0.553		1.257	0.954	26,183,894.176			
	TOE_2828-TOE_2921	TOE_2828	TOE_2921	36.000							0.531		1.594	1.257	0.635	18,121,603.712		1.594	4.067
	TOE_2829-TOE_2830	TOE_2829	TOE_2830	36.000				5,419,907.399			0.434	0.390	1.301	1.257	0.936	25,723,528.003		1.369	4.937
	TOE_2830-TOE_2831	TOE_2830	TOE_2831	36.000	278.883			5,419,907.399			0.513	0.522	1.538	1.257	0.679	19,223,088.990		1.538	4.252
	TOE_2831-TOE_2832	TOE_2831	TOE_2832	36.000				5,419,907.399			0.530	0.552	1.591	1.257	0.637	18,173,766.148		1.591	4.076
	TOE_2832-TOE_2833	TOE_2832	TOE_2833	36.000				5,419,907.399			0.459	0.432	1.378	1.257	0.838	23,208,726.628		1.390	4.842
	TOE_2833-TOE_2834	TOE_2833	TOE_2834	36.000				5,419,907.399			0.517	0.529	1.551	1.257	0.668	18,949,299.698		1.551	4.207
	TOE_2834-TOE_2835	TOE_2834	TOE_2835	36.000				5,419,907.399			0.471	0.451	1.413	1.257	0.799	22,215,470.195		1.413	4.738
	TOE_2835-TOE_2836	TOE_2835	TOE_2836	36.000				5,419,907.399			0.489	0.482	1.468	1.257	0.743	20,807,629.358		1.468	4.513
Ш	TOE_2836-TOE_2837	TOE_2836	TOE_2837	36.000	394.145	0.002	10,027,614.339	5,419,907.399	Free Surface	4.290	0.509	0.516	1.527	1.257	0.688	19,449,660.489	Yes	1.643	3.915

FULL	BUILDOUT PIPE TABLE															1 1			
	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth (ft)	Adjusted Velocity
	TOE_2837-TOE_2839	TOE_2837	TOE_2839	36.000	242.437	0.001	10,027,614.339	5,419,907.399	Free Surface	3.351	0.623	0.711	1.869	1.257	0.468	14,105,792.535	No	1.869	3.351
	TOE_2838-TOE_2840	TOE_2838	TOE_2840	36.000	279.046	0.002	10,027,614.339	5,419,907.399	Free Surface	4.075	0.530	0.552	1.591	1.257	0.637	18,166,539.006	No	1.591	4.075
	TOE_2839-TOE_2838	TOE_2839	TOE_2838	36.000	223.808	0.002	10,027,614.339	5,419,907.399	Free Surface	4.134	0.524	0.542	1.573	1.257	0.651	18,517,468.952	No	1.573	4.134
	TOE_2840-TOE_2841	TOE_2840	TOE_2841	36.000	262.834	0.002	10,027,614.339	5,419,907.399	Free Surface	4.611	0.481	0.468	1.443	1.257	0.767	21,420,316.629	No	1.443	4.611
	TOE_2841-TOE_2843	TOE_2841	TOE_2843	36.000	36.626	0.004	10,027,614.339	5,419,907.399	Free Surface	5.605	0.414	0.359	1.243	1.257	1.021	27,897,440.007	No	1.243	5.605
	TOE_2842-TOE_2844	TOE_2842	TOE_2844	36.000	444.636	0.003	10,027,614.339	5,419,907.399	Free Surface	5.205	0.438	0.398	1.315	1.257	0.917	25,221,921.417	No	1.315	5.205
F	TOE 2843-TOE 2842	TOE_2843	TOE_2842	36.000	93.563	0.006	10,027,614.339	5,419,907.399	Free Surface	6.780	0.360	0.277	1.079	1.257	1.340	36,226,643.146	Yes	1.097	6.630
	TOE 2844-TOE 2845	TOE_2844	TOE 2845	36.000	17.372	0.020	10,027,614.339	5,419,907.399	Free Surface	10.373	0.264	0.153	0.793	1.257	2.431	65,508,663.780	Yes	1.345	5.054
	TOE 2845-TOE 2846	TOE 2845	TOE 2846	36.000	184.327	0.002	10,027,614.339	5,419,907.399	Free Surface	4.350	0.504	0.506	1.511	1.257	0.703	19,812,880.516	No	1.511	4.350
	TOE 2846-TOE 2847	TOE_2846	TOE_2847	36.000	229.186	0.002	10,027,614.339	5,419,907.399	Free Surface	4.613	0.481	0.468	1.443	1.257	0.767	21,429,504.184	No	1.443	4.613
	TOE 2847-TOE 2848	TOE 2847	TOE 2848	36.000	80.877	0.004	10,027,614.339	5,419,907.399	Free Surface	6.089	0.390	0.321	1.169	1.257	1.150	31,240,984.972	No	1.169	6.089
F	TOE 2848-TOE 2849	TOE_2848	TOE 2849	36.000	459.682	0.005	10,027,614.339	5,419,907.399	Free Surface	6.272	0.381	0.308	1.143	1.257	1.200	32,541,157.345	No	1.143	6.272
m	TOE 2849-TOE 2920	TOE 2849	TOE 2920	36.000			10,027,614.339				0.315	0.216	0.946	1.257	1.727	46,476,512.118	No	0.946	8.115
H	TOE 2850-TOE 2851	TOE_2850	TOE_2851	36.000			10,027,614.339				0.323	0.226	0.969	1.257	1.649	44,388,011.310	Yes	0.991	7.620
H	TOE 2851-TOE 2853	TOE 2851	TOE 2853	36.000			10,027,614.339				0.391	0.323	1.172	1.257	1.144	31,079,112.582	No	1.172	6.066
H	TOE 2852-TOE 2860	TOE_2852	TOE 2860	36.000			10,225,395.611				0.518	0.530	1.553	1.270	0.680	19,287,627.371	No	1.553	4.283
	TOE 2853-TOE 2852	TOE 2853	TOE_2852	36.000			10,225,395.611				0.405	0.345	1.216	1.270	1.086	29,614,860.035	Yes	1.335	5.206
	TOE 2854-TOE 2853	TOE_2854	TOE_2853	12.000		0.004			Free Surface		0.403	0.275	0.359	0.340	0.900	1,559,749.936	No	0.359	2.623
	TOE 2855-TOE 2854	TOE 2855	TOE_2854	12.000		0.004			Free Surface		0.432	0.273	0.432	0.340	0.630	1,109,717.588	No	0.432	2.023
			TOE_2855	12.000		0.002			Free Surface		0.391	0.323	0.391	0.340	0.763	1,329,421.551	No	0.391	2.336
	TOE_2856-TOE_2855 TOE 2857-TOE 2856	TOE_2856 TOE 2857	TOE_2856	12.000		0.003			Free Surface		0.385	0.323	0.385	0.340	0.786	1,368,340.727	No	0.385	2.385
	TOE_2857-TOE_2856 TOE_2858-TOE_2857	TOE_2858	TOE_2857	12.000	348.353				Free Surface		0.365	0.314	0.365	0.340	1.485	2,563,756.376	No	0.365	3.749
				12.000	396.442		429,452.694		Free Surface		0.277	0.100	0.277	0.340			No	0.346	2.758
	TOE_2859-TOE_2858	TOE_2859	TOE_2858				10.225.395.611								0.966	1,671,256.976			
	TOE_2860-TOE_2861	TOE_2860	TOE_2861	36.000			10,225,395.611	-,- ,			0.536	0.562	1.608	1.270	0.637	18,209,827.948	No	1.608	4.101
	TOE_2861-TOE_2862	TOE_2861	TOE_2862	36.000			-, -,	-,- ,			0.359	0.276	1.077	1.270	1.372	37,066,579.448	Yes	1.503	4.465
	TOE_2862-TOE_2863	TOE_2862	TOE_2863	36.000			10,225,395.611				0.588	0.651	1.763	1.270	0.534	15,716,935.916	No	1.763	3.663
	TOE_2863-TOE_2864	TOE_2863	TOE_2864	36.000			10,225,395.611				0.474	0.456	1.422	1.270	0.805	22,417,712.211	No	1.422	4.794
	TOE_2864-TOE_2865	TOE_2864	TOE_2865	36.000			10,225,395.611				0.433	0.390	1.300	1.270	0.955	26,243,125.882	Yes	1.379	4.989
	TOE_2865-TOE_2866	TOE_2865	TOE_2866	36.000			10,225,395.611	-,- ,			0.532	0.555	1.597	1.270	0.645	18,407,998.604	No	1.597	4.135
	TOE_2866-TOE_2867	TOE_2866	TOE_2867	36.000			10,225,395.611				0.532	0.554	1.595	1.270	0.646	18,447,596.010	No	1.595	4.142
	TOE_2867-TOE_2868	TOE_2867	TOE_2868	36.000			10,270,275.327				0.434	0.390	1.302	1.273	0.958	26,315,252.924	Yes	1.341	5.195
	TOE_2868-TOE_2869	TOE_2868	TOE_2869	36.000			10,270,275.327				0.507	0.512	1.521	1.273	0.711	20,061,486.848	No	1.521	4.417
	TOE_2869-TOE_2870	TOE_2869	TOE_2870	36.000	396.171	0.002	10,270,275.327	5,576,407.980	Free Surface	4.234	0.524	0.541	1.573	1.273	0.667	18,967,088.030	No	1.573	4.234
	TOE_2870-TOE_2871	TOE_2870	TOE_2871	36.000	396.576	0.002	10,270,275.327	5,576,407.980	Free Surface	4.305	0.517	0.530	1.552	1.273	0.684	19,389,949.386	No	1.552	4.305
	TOE_2871-TOE_2872	TOE_2871	TOE_2872	36.000	400.375	0.002	10,270,275.327	5,576,407.980	Free Surface	4.117	0.536	0.562	1.609	1.273	0.639	18,277,493.798	No	1.609	4.117
	TOE_2872-TOE_2873	TOE_2872	TOE_2873	36.000	381.197	0.002	10,270,275.327	5,576,407.980	Free Surface	4.533	0.497	0.494	1.490	1.273	0.739	20,770,239.554	Yes	1.557	4.288
	TOE_2873-TOE_2874	TOE_2873	TOE_2874	36.000	56.391	0.001	10,270,275.327	5,576,407.980	Free Surface	3.807	0.571	0.623	1.714	1.273	0.566	16,497,998.692	No	1.714	3.807
	TOE_2874-TOE_2875	TOE_2874	TOE_2875	36.000	68.032	0.002	10,270,275.327	5,576,407.980	Free Surface	4.484	0.501	0.502	1.503	1.273	0.727	20,469,178.536	No	1.503	4.484
	TOE_2875-TOE_2876	TOE_2875	TOE_2876	36.000	48.547	0.002	10,270,275.327	5,576,407.980	Free Surface	4.779	0.477	0.461	1.430	1.273	0.800	22,289,471.205	No	1.430	4.779
	TOE_2876-TOE_2877	TOE_2876	TOE_2877	36.000	329.140	0.002	10,270,275.327	5,576,407.980	Free Surface	4.540	0.496	0.494	1.489	1.273	0.741	20,809,040.903	Yes	1.498	4.504
	TOE_2877-TOE_2878	TOE_2877	TOE_2878	36.000	307.671	0.002	10,270,275.327	5,576,407.980	Free Surface	4.121	0.536	0.561	1.607	1.273	0.640	18,301,672.579	No	1.607	4.121
	TOE_2878-TOE_2879	TOE_2878	TOE_2879	36.000	361.008	0.002	10,270,275.327	5,576,407.980	Free Surface	4.282	0.520	0.534	1.559	1.273	0.678	19,248,269.871	No	1.559	4.282
	TOE_2879-TOE_2880	TOE_2879	TOE_2880	36.000	33.270	0.002	10,270,275.327	5,576,407.980	Free Surface	4.095	0.538	0.566	1.615	1.273	0.634	18,152,727.646	No	1.615	4.095
	TOE_2880-TOE_2881	TOE_2880	TOE_2881	36.000	195.334	0.003	10,270,275.327	5,576,407.980	Free Surface	5.282	0.441	0.403	1.324	1.273	0.926	25,515,851.106	Yes	1.423	4.808
	TOE_2881-TOE_2882	TOE_2881	TOE_2882	36.000	209.365	0.001	10,270,275.327	5,576,407.980	Free Surface	4.072	0.541	0.570	1.623	1.273	0.628	18,018,305.840	No	1.623	4.072
	TOE 2882-TOE 2883	TOE_2882	TOE_2883	36.000	151.038	0.002	10,382,329.450	5,648,907.633	Free Surface	4.260	0.526	0.545	1.579	1.280	0.669	19,050,775.400	No	1.579	4.260
	TOE 2883-TOE 2884	TOE_2883	TOE_2884	36.000	399.934	0.002	10,382,329.450	5,648,907.633	Free Surface	4.397	0.513	0.523	1.540	1.280	0.702	19,868,163.099	No	1.540	4.397
	TOE_2884-TOE_2885	TOE_2884	TOE_2885	36.000			10,382,329.450				0.519	0.533	1.558	1.280	0.687	19,488,193.635	No	1.558	4.333
	TOE 2885-TOE 2886	TOE_2885	TOE_2886	36.000			10,382,329.450				0.478	0.464	1.435	1.280	0.803	22,398,228.728	Yes	1.438	4.797
	TOE 2886-TOE 2887	TOE_2886	TOE_2887	36.000			11,297,666.428				0.514	0.523	1.541	1.338	0.763	21,593,423.325	No	1.541	4.780
H	TOE 2887-TOE 2888	TOE_2887	TOE_2888	36.000			11,297,666.428				0.478	0.462	1.433	1.338	0.876	24,442,188.395	Yes	1.582	4.626
	TOE_2888-TOE_2889	TOE_2888	TOE_2889	36.000			11,297,666.428				0.623	0.712	1.870	1.338	0.527	15,873,859.216	No	1.870	3.772
	TOE 2889-TOE 2890	TOE_2889	TOE_2890	36.000			11,366,341.682				0.459	0.431	1.376	1.342	0.952	26,369,429.043	No	1.376	5.558
	TOE_2899-TOE_2891	TOE_2890	TOE_2891	36.000			11,366,341.682				0.472	0.451	1.415	1.342	0.932	25,116,262.417	No	1.415	5.361
	TOE_2891-TOE_2891	TOE_2890	TOE_2892	36.000			11,366,341.682				0.472	0.433	1.202	1.342	1.234	33,624,471.351	Yes	1.336	5.777
																		1.721	4.193
	TOE_2892-TOE_2893	TOE_2892	TOE_2893	36.000			11,366,341.682				0.574	0.626	1.721	1.342	0.622	18,146,591.314	No		
	TOE_2893-TOE_2894	TOE_2893	TOE_2894	36.000			11,366,341.682				0.503	0.504	1.508	1.342	0.800	22,532,603.400	No	1.508	4.943
	TOE_2894-TOE_2895	TOE_2894	TOE_2895	36.000			11,366,341.682				0.530	0.550	1.589	1.342	0.724	20,647,696.857	No	1.589	4.628
Ш	TOE_2895-TOE_2896	TOE_2895	TOE_2896	36.000	398.573	0.002	11,366,341.682	0,291,891.871	ree Surface	4.706	0.523	0.538	1.568	1.342	0.743	21,109,294.782	Yes	1.602	4.579

	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth (ft)	Adjusted Velocity
	TOE_2896-TOE_2897	TOE_2896	TOE_2897	36.000		0.002		6,291,891.871	Free Surface	4.205	0.572	0.624	1.717	1.342	0.624	18,213,943.362	No	1.717	4.205
	TOE_2897-TOE_2898	TOE_2897	TOE_2898	36.000	409.240	0.005	11,366,341.682	6,291,891.871	Free Surface	6.599	0.403	0.341	1.208	1.342	1.222	33,302,844.467	Yes	1.387	5.501
	TOE_2898-TOE_2899	TOE_2898	TOE_2899	36.000	347.870	0.002	11,366,341.682	6,291,891.871	Free Surface	4.394	0.552	0.589	1.656	1.342	0.669	19,284,262.044	No	1.656	4.394
	TOE_2899-TOE_2900	TOE_2899	TOE_2900	36.000	334.864	0.002	11,366,341.682	6,291,891.871	Free Surface	4.930	0.504	0.506	1.511	1.342	0.797	22,454,145.401	No	1.511	4.930
	TOE_2900-TOE_2901	TOE_2900	TOE_2901	36.000	38.258	0.003	11,366,341.682	6,291,891.871	Free Surface	5.535	0.460	0.433	1.381	1.342	0.946	26,224,849.365	Yes	1.397	5.451
	TOE_2901-TOE_2902	TOE_2901	TOE_2902	36.000	295.270	0.002	11,366,341.682	6,291,891.871	Free Surface	4.960	0.501	0.502	1.504	1.342	0.804	22,636,020.216	No	1.504	4.960
	TOE_2902-TOE_2903	TOE_2902	TOE_2903	36.000	388.341	0.002	11,366,341.682	6,291,891.871	Free Surface	4.708	0.522	0.538	1.567	1.342	0.743	21,119,930.531	No	1.567	4.708
	TOE_2903-TOE_2904	TOE_2903	TOE_2904	36.000	413.543	0.002	11,366,341.682	6,291,891.871	Free Surface	4.438	0.548	0.582	1.643	1.342	0.679	19,538,514.789	Yes	1.953	3.609
	TOE_2904-TOE_2951	TOE_2904	TOE_2951	36.000	71.017	0.002	17,535,370.237	10,542,430.430	Free Surface	4.775	0.749	0.911	2.248	1.684	0.569	19,248,349.176	Yes	2.374	4.523
	TOE_2905-TOE_2906	TOE_2905	TOE_2906	30.000	394.000	0.001	8,103,185.591	4,205,550.096	Free Surface	3.584	0.670	0.790	1.676	1.189	0.518	10,258,167.458	No	1.676	3.584
	TOE_2906-TOE_2736	TOE_2906	TOE_2736	30.000	373.680	0.002	8,103,185.591	4,205,550.096	Free Surface	4.404	0.563	0.608	1.407	1.189	0.724	13,323,799.684	No	1.407	4.404
	TOE_2914-TOE_2769	TOE_2914	TOE_2769	18.000	286.272	0.002	1,703,330.127	656,832.713	Free Surface	2.999	0.498	0.496	0.747	0.615	0.691	3,431,902.076	No	0.747	2.999
	TOE_2915-TOE_2977	TOE_2915	TOE_2977	8.000	33.639	0.014	213,269.634	55,624.299	Free Surface	3.504	0.315	0.215	0.210	0.266	1.583	992,018.765	No	0.210	3.504
	TOE_2916-TOE_2915	TOE_2916	TOE_2915	8.000	94.519	0.030	213,269.634	55,624.299	Free Surface	4.619	0.258	0.146	0.172	0.266	2.327	1,460,098.057	No	0.172	4.619
	TOE_2917-TOE_2916	TOE_2917	TOE_2916	8.000	398.787	0.034	213,269.634	55,624.299	Free Surface	4.831	0.250	0.137	0.167	0.266	2.475	1,555,054.568	No	0.167	4.831
	TOE_2920-TOE_2850	TOE_2920	TOE_2850	36.000	73.831	0.009	10,027,614.339	5,419,907.399	Free Surface	7.921	0.321	0.223	0.963	1.257	1.669	44,938,739.234	Yes	0.966	7.886
	TOE_2921-TOE_2829	TOE_2921	TOE_2829	36.000	174.848	0.003		5,419,907.399	Free Surface	5.570	0.416	0.363	1.249	1.257	1.011	27,657,927.613	No	1.249	5.570
	TOE_2941-TOE_2942	TOE_2941	TOE_2942	12.000	359.851	0.010	438,630.099	130,749.071	Free Surface	3.695	0.284	0.176	0.284	0.343	1.443	2,491,257.696	No	0.284	3.695
	TOE_2942-TOE_2943	TOE_2942	TOE_2943	12.000	401.258		438,630.099	130,749.071	Free Surface	4.989	0.229	0.116	0.229	0.343	2.186	3,797,565.592	No	0.229	4.989
	TOE_2943-TOE_2944	TOE_2943	TOE_2944	12.000	199.566	0.022	438,630.099	130,749.071	Free Surface	4.879	0.233	0.119	0.233	0.343	2.120	3,679,975.286	No	0.233	4.879
	TOE_2944-TOE_2945	TOE_2944	TOE_2945	15.000	219.323	0.003	952,404.278	328,808.036			0.447	0.412	0.559	0.480	0.748	2,311,912.994	Yes	0.598	2.542
	TOE_2945-TOE_2946	TOE_2945	TOE_2946	15.000	379.787	0.001	952,404.278	328,808.036	Free Surface	2.214	0.533	0.557	0.667	0.480	0.534	1,710,026.283	No	0.667	2.214
	TOE_2946-TOE_2947	TOE_2946	TOE_2947	15.000	248.186	0.002	952,404.278	328,808.036	Free Surface	2.446	0.493	0.488	0.616	0.480	0.621	1,952,390.266	Yes	0.633	2.363
	TOE_2947-TOE_2948	TOE_2947	TOE_2948	15.000	228.183	0.002	952,404.278	328,808.036	Free Surface	2.350	0.509	0.515	0.636	0.480	0.585	1,850,658.630	Yes	0.899	1.559
	TOE_2948-TOE_2949	TOE_2948	TOE_2949	18.000	340.001	0.001	2,324,530.602	951,051.962	Free Surface	2.455	0.773	0.943	1.159	0.724	0.401	2,465,361.598	No	1.159	2.455
	TOE_2949-VPF1_1	TOE_2949	VPF1_1	18.000	305.002	0.001	2,324,530.602	951,051.962	Free Surface	2.742	0.695	0.830	1.043	0.724	0.496	2,800,940.995	No	1.043	2.742
	TOE_2950-WWTP1	TOE_2950	WWTP1	36.000	82.011	0.002	17,535,370.237	10,542,430.430	Free Surface	4.640	0.771	0.941	2.313	1.684	0.537	18,643,236.672	No	2.313	4.640
	TOE_2951-TOE_2950	TOE_2951	TOE_2950	36.000	215.000	0.001	17,535,370.237	10,542,430.430	Free Surface	4.505	0.794	0.971	2.383	1.684	0.504	18,065,131.090	No	2.383	4.505
	TOE_2960-TOE_2748	TOE_2960	TOE_2748	12.000	375.067		1,629,352.103	623,027.285			0.506	0.510	0.506	0.680	1.764	3,192,365.157	No	0.506	6.321
	TOE_2962-TOE_2960	TOE_2962	TOE_2960	12.000	141.655	0.002	974,143.245	337,750.433	Free Surface	2.214	0.809	0.988	0.809	0.520	0.419	985,693.500	No	0.809	2.214
	TOE_2964-TOE_2960	TOE_2964	TOE_2960	12.000	14.142	0.021	626,383.849	199,653.045			0.281	0.172	0.281	0.413	2.110	3,642,905.269	Yes	0.423	3.063
	TOE_2965-TOE_2964	TOE_2965	TOE_2964	12.000	260.000		573,681.088	179,866.012			0.410	0.353	0.410	0.395	0.929	1,626,880.922	No	0.410	2.927
	TOE_2966-TOE_2965	TOE_2966	TOE_2965	12.000	274.110		573,681.088	179,866.012			0.254	0.142	0.254	0.395	2.343	4,053,687.141	Yes	0.282	4.879
	TOE_2967-TOE_2966	TOE_2967	TOE_2966	12.000	400.000		573,681.088	179,866.012			0.403	0.342	0.403	0.395	0.960	1,677,847.751	No	0.403	2.994
	TOE_2968-TOE_2969	TOE_2968	TOE_2969	12.000	29.106		573,681.088	179,866.012			0.283	0.175	0.283	0.395	1.899	3,278,251.079	No	0.283	4.854
	TOE_2969-TOE_2967	TOE_2969	TOE_2967	12.000	121.875		573,681.088	179,866.012			0.364	0.283	0.364	0.395	1.168	2,026,442.109	No	0.364	3.435
	TOE_2970-TOE_2971	TOE_2970	TOE_2971	12.000	280.000	0.004	573,681.088	179,866.012			0.430	0.384	0.430	0.395	0.849	1,494,744.776	No	0.430	2.750
	TOE_2971-TOE_2972	TOE_2971	TOE_2972	12.000	245.041		573,681.088	179,866.012			0.403	0.342	0.403	0.395	0.958	1,675,804.058	No	0.403	2.991
	TOE_2972-TOE_2968	TOE_2972	TOE_2968	12.000	140.000	0.006	573,681.088	179,866.012			0.378	0.303	0.378	0.395	1.087	1,890,719.351	No	0.378	3.266
	TOE_2973-FMF4_4_4	TOE_2973	FMF4_4_4	12.000	88.704		431,189.730	128,115.312			0.373	0.296	0.373	0.340	0.837	1,454,573.210	No	0.373	2.497
	TOE_2977-TOE_2733	TOE_2977	TOE_2733	8.000	117.630	0.033	255,520.276		Free Surface		0.276	0.167	0.184	0.293	2.446	1,532,743.993	Yes	0.255	3.220
	TOE_2978-TOE_2581	TOE_2978	TOE_2581	18.000	246.826		1,421,643.166		Free Surface		0.342	0.252	0.513	0.560	1.186	5,652,198.509	No	0.513	4.121
	TOE_2979-TOE_2582	TOE_2979	TOE_2582	18.000	266.276		1,421,643.166	529,672.121			0.366	0.286	0.549	0.560	1.039	4,971,130.152	No	0.549	3.755
	TOE_2980-TOE_2583	TOE_2980	TOE_2583	18.000	370.537		1,421,643.166		Free Surface		0.374	0.297	0.560	0.560	0.999	4,784,926.938	No	0.560	3.652
	TOE_2981-CHF3C_8	TOE_2981	CHF3C_8	18.000	183.500		1,355,387.386	500,421.412			0.298	0.194	0.447	0.547	1.472	7,001,296.122	No	0.447	4.742
	TOE_2982-TOE_2983	TOE_2982	TOE_2983	18.000	41.744	0.020	0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	10,460,971.448	Yes	0.064	0.000
	TOE_2983-TOE_2576	TOE_2983	TOE_2576	18.000	147.819		1,355,387.386				0.219	0.105	0.329	0.547	2.682	12,866,766.566		0.361	6.399
	TOE_2984-TOE_2629	TOE_2984	TOE_2629	15.000			968,433.703	335,401.794			0.311	0.210	0.389	0.485	1.528	4,607,657.122	No	0.389	4.600
	TOE_2985-CFF1_31	TOE_2985	CFF1_31	12.000			433,406.789	128,900.111			0.310	0.208	0.310	0.341	1.205	2,080,710.568	No	0.310	3.237
	TOE_2986-TOE_2985	TOE_2986	TOE_2985	12.000	26.296		433,406.789	128,900.111			0.288	0.181	0.288	0.341	1.384	2,389,490.090	No	0.288	3.575
	TOE_2987-TOE_2991	TOE_2987	TOE_2991	12.000			324,683.336	91,399.646			0.301	0.197	0.301	0.294	0.955	1,648,076.623	No	0.301	2.524
	TOE_2988-TOE_2987	TOE_2988	TOE_2987	12.000			324,683.336		Free Surface		0.293	0.187	0.293	0.294	1.004	1,732,883.867	No	0.293	2.616
	TOE_2989-TOE_2988	TOE_2989	TOE_2988	12.000			324,683.336	91,399.646			0.291	0.185	0.291	0.294	1.016	1,753,840.209	No	0.291	2.639
	TOE_2990-CCF6_614	TOE_2990	CCF6_614	8.000			253,583.000	68,250.214			0.354	0.269	0.236	0.292	1.500	943,244.669	No	0.236	3.546
	TOE_2991-TOE_2986	TOE_2991	TOE_2986	12.000			324,683.336	91,399.646			0.279	0.170	0.279	0.294	1.107	1,910,305.541	No	0.279	2.805
	TOE_2992-TOE_2962	TOE_2992	TOE_2962	10.000			974,143.245	337,750.433			0.569	0.619	0.474	0.550	1.329	1,573,887.284	Yes	0.542	4.015
	TOE_2994-TOE_3005	TOE_2994	TOE_3005	30.000	7.270			4,257,296.477			0.253	0.140	0.632	1.195	3.421	58,496,005.541		0.687	11.549
	TOE_2997-VPFE_717	TOE_2997	VPFE_717	10.000	165.628		630,506.946	201,201.044			0.453	0.421	0.377	0.438	1.332	1,497,533.844	No	0.377	4.066
Ш	TOE_3003-OGF1_1	TOE_3003	OGF1_1	10.000	177.139	0.023	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	2,342,920.940	No	0.000	0.000

ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth	Critical Depth	Froude Number	Full Flow (gpd)	Adjustment	Adjusted Depth (ft)	Adjusted Velocity
TOE_3005-TOE_2800	TOE_3005	TOE_2800	36.000	9.211	0.018	8,549,908.332	4,482,993.352	Free Surface	9.703	0.248	0.134	0.743	1.157	2.357	63,615,880.152	No	0.743	9.703
VPF1_103-VPF1_15A	VPF1_103	VPF1_15A	21.000	270.656	0.005	3,857,722.921	1,738,219.026	Free Surface	5.099	0.490	0.482	0.857	0.900	1.099	8,000,391.679	No	0.857	5.099
VPF1_11-VPF1_12	VPF1_11	VPF1_12	21.000	383.454	0.009	1,943,821.023	768,667.391	Free Surface	5.151	0.292	0.186	0.511	0.629	1.498	10,474,621.665	No	0.511	5.151
VPF1_126-VPF1_127	VPF1_126	VPF1_127	8.000	217.056	0.021	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,220,115.230	No	0.000	0.000
VPF1_127-VPF1_128	VPF1_127	VPF1_128	8.000	198.724	0.022	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,256,557.008	No	0.000	0.000
VPF1_128-VPF1_129	VPF1_128	VPF1_129	8.000	186.503	0.004	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	565,925.610	No	0.000	0.000
VPF1 129-VPF1 130	VPF1_129	VPF1_130	8.000	116.246	0.011	83,998.048	20,999.512	Free Surface	2.481	0.208	0.094	0.138	0.165	1.404	890,184.725	No	0.138	2.48
VPF1 12-VPF1 13	VPF1 12	VPF1 13	21.000	277.540	0.005	1,943,821.023	768,667.391	Free Surface	4.311	0.332	0.238	0.581	0.629	1.168	8,177,844.604	No	0.581	4.31
VPF1 130-ECF21 131	VPF1 130	ECF21 131	8.000	243.303	0.043	83,998.048	20,999.512	Free Surface	4.000	0.149	0.048	0.099	0.165	2.694	1,753,907.078	No	0.099	4.00
VPF1 13-VPF1 14	VPF1 13	VPF1 14	21.000	378.543	0.011	1,943,821.023	768,667.391	Free Surface	5.532	0.277	0.168	0.485	0.629	1.655	11,576,833.934	Yes	0.595	4.16
VPF1 14-VPF1 15	VPF1 14	VPF1 15	21.000			1,943,821.023	768,667.391	Free Surface	2.396	0.517	0.529	0.905	0.629	0.498	3,672,178.088	No	0.905	2.39
VPF1 15A-VPF1 16	VPF1 15A	VPF1 16	21.000				1,778,969.570			0.522	0.538	0.914	0.909	0.990	7,314,011.896	No	0.914	4.79
VPF1 15-VPF1 58	VPF1 15	VPF1_58	21.000			1,943,821.023				0.488	0.480	0.855	0.629	0.556	4,045,882.904	No	0.855	2.57
VPF1 16-VPF1 17	VPF1 16	VPF1 17	24.000				1,778,969.570			0.276	0.166	0.551	0.873	2.424	23,675,095.698	Yes	0.734	5.82
VPF1 17-VPF1 18A	VPF1 17	VPF1 18A	24.000				1,778,969.570			0.558	0.600	1.116	0.873	0.624	6,557,887.935	No	1.116	3.37
VPF1_17-VPF1_18A	VPF1 18A	VPF1 19A	24.000				1,778,969.570			0.513	0.523	1.027	0.873	0.733	7,524,934.513	No	1.027	3.74
			24.000							0.516	0.523	1.032					1.032	3.74
VPF1_19A-VPF1_20A	VPF1_19A	VPF1_20A					1,778,969.570						0.873	0.725	7,460,076.687	No		
VPF1_1-VPF1_58	VPF1_1	VPF1_58	18.000				951,051.962			0.628	0.719	0.941	0.724	0.605	3,233,695.771	Yes	1.120	2.54
VPF1_20A-VPF1_21A	VPF1_20A	VPF1_21A	24.000				1,778,969.570			0.527	0.546	1.054	0.873	0.697	7,202,514.822	No	1.054	3.62
VPF1_21A-ECF21_22A	VPF1_21A	ECF21_22A	24.000				1,778,969.570			0.415	0.360	0.829	0.873	1.103	10,937,602.961	No	0.829	4.94
VPF1_32A-VPF1_11	VPF1_32A	VPF1_11	21.000			1,943,821.023				0.252	0.139	0.441	0.629	1.995	13,988,184.722	No	0.441	6.33
VPF1_58-VPF1_103	VPF1_58	VPF1_103	21.000				1,738,219.026			0.651	0.757	1.139	0.900	0.637	5,092,850.578	No	1.139	3.60
VPF1_718-VPF1_7	VPF1_718	VPF1_7	18.000	341.600	0.011	1,909,789.377	752,667.557	Free Surface	5.557	0.341	0.250	0.511	0.653	1.601	7,633,266.557	No	0.511	5.55
VPF1_7-VPF1_8	VPF1_7	VPF1_8	18.000	284.327	0.012	1,909,789.377	752,667.557	Free Surface	5.719	0.334	0.240	0.501	0.653	1.668	7,944,680.409	No	0.501	5.7
VPF1_8-VPFE_10A	VPF1_8	VPFE_10A	18.000	430.730	0.005	1,909,789.377	752,667.557	Free Surface	4.068	0.430	0.384	0.645	0.653	1.025	4,974,554.461	No	0.645	4.06
VPFE_10A-VPF1_32A	VPFE_10A	VPF1_32A	18.000	393.415	0.007	1,909,789.377	752,667.557	Free Surface	4.853	0.377	0.302	0.565	0.653	1.321	6,331,436.904	No	0.565	4.85
VPFE_717-VPF1_718	VPFE_717	VPF1_718	10.000	222.961	0.026	630,506.946	201,201.044	Free Surface	5.862	0.344	0.255	0.287	0.438	2.254	2,472,239.579	No	0.287	5.86
VRF1D_702-VRF1D_703	VRF1D_702	VRF1D_703	10.000	264.156	0.036	524,492.316	161,700.419	Free Surface	6.257	0.287	0.180	0.240	0.398	2.659	2,909,236.636	No	0.240	6.25
VRF1D 703-VRF1D 704	VRF1D 703	VRF1D 704	10.000	273.597	0.022	524,492.316	161,700.419	Free Surface	5.293	0.324	0.228	0.270	0.398	2.104	2,304,210.739	No	0.270	5.29
VRF1D 704-VRF1D 705		VRF1D 705	10.000	119.786	0.022	524,492.316	161,700.419	Free Surface	5.244	0.327	0.231	0.272	0.398	2.077	2,274,792.718	No	0.272	5.24
VRF1D 705-VRF1D 707	VRF1D 705	VRF1D 707	10.000	128.235	0.023	524,492.316	161.700.419	Free Surface	5.327	0.323	0.226	0.269	0.398	2.123	2,325,003.942	No	0.269	5.32
VRF1D 707-VRF1D 708		VRF1D 708	10.000	101.257	0.019		161,700,419	Free Surface	4.963	0.340	0.249	0.283	0.398	1.922	2,106,963.549	No	0.283	4.96
VRF1D 708-VRF1D 709		VRF1D 709	10.000		0.009	524,492.316		Free Surface		0.412	0.356	0.343	0.398	1.328	1,475,150.080	No	0.343	3.83
VRF1D 709-VRF1D 710		VRF1D 710	10.000		0.005			Free Surface		0.493	0.487	0.411	0.398	0.943	1,075,888.658	No	0.411	3.03
VRF1D 710-VRF1D 711		VRF1D 711	10.000		0.005	524,492.316		Free Surface		0.492	0.486	0.410	0.398	0.947	1,079,993.881	No	0.410	3.04
VRF1D 711-VRF1D 712			10.000	117.552				Free Surface		0.480	0.466	0.400	0.398	0.992	1,126,029.256	No	0.400	3.13
			10.000	119.736		524,492.316		Free Surface		0.502	0.503	0.400	0.398	0.932	1,042,469.353	No	0.418	2.96
VRF1D_712-VRF1D_713		VRF1D_713																
VRF1D_713-VRF1D_714			10.000		0.005			Free Surface		0.500	0.501	0.417	0.398	0.915	1,047,485.961	No	0.417	2.97
VRF1D_714-VRF1D_715		VRF1D_715	10.000	144.757		524,492.316		Free Surface		0.437	0.395	0.364	0.398	1.188	1,328,573.212	No	0.364	3.54
VRF1D_715-VRF1D_716			10.000	186.765		524,492.316		Free Surface		0.336	0.243	0.280	0.398	1.970	2,159,085.065	No	0.280	5.05
VRF1D_716-TOE_2997		TOE_2997	10.000	174.246		630,506.946		Free Surface		0.435	0.393	0.363	0.438	1.437	1,606,160.052	Yes	0.370	4.17
VRF1G_186-VRF1G_188		VRF1G_188	10.000	386.298		515,119.440		Free Surface		0.336	0.244	0.280	0.394	1.929	2,114,433.309	No	0.280	4.95
VRF1G_188-VRF1G_204		VRF1G_204	10.000	200.334		515,119.440	158,274.660	Free Surface		0.435	0.392	0.363	0.394	1.175	1,313,083.968	No	0.363	3.50
VRF1G_204-VRF1G_205		VRF1G_205	12.000	221.868		515,119.440		Free Surface		0.377	0.302	0.377	0.373	0.980	1,704,187.884	No	0.377	2.94
VRF1G_205-VRGC2_206		VRGC2_206	12.000		0.004	515,119.440	158,274.660	Free Surface		0.382	0.309	0.382	0.373	0.957	1,665,730.837	No	0.382	2.89
VRGC1_698-VRGC1_699		VRGC1_699	10.000	204.736			161,700.419	Free Surface	4.241	0.382	0.309	0.318	0.398	1.537	1,696,275.750	No	0.318	4.24
VRGC1_699-TOE_2673	VRGC1_699	TOE_2673	10.000	399.007	0.019	524,492.316	161,700.419	Free Surface	4.949	0.341	0.250	0.284	0.398	1.914	2,098,929.430	No	0.284	4.9
VRGC2_206-VRGC2_544	VRGC2_206	VRGC2_544	12.000	381.521	0.019	515,119.440	158,274.660	Free Surface	4.894	0.261	0.149	0.261	0.373	2.002	3,462,149.029	No	0.261	4.89
VRGC2_526-VRGC2_527	VRGC2_526	VRGC2_527	12.000	333.897	0.013	593,284.015	187,225.850	Free Surface	4.465	0.308	0.206	0.308	0.402	1.667	2,877,737.546	No	0.308	4.46
VRGC2_527-VRGC2_543	VRGC2_527	VRGC2_543	12.000	365.877	0.022	781,949.951	259,976.062	Free Surface	5.810	0.311	0.210	0.311	0.464	2.159	3,726,120.442	No	0.311	5.8
VRGC2_543-VRGC2_544			12.000			781,949.951	259,976.062			0.501	0.502	0.501	0.464	0.863	1,558,894.535	No	0.501	3.07
VRGC2 544-VRGC2 545			12.000				418,250.723			0.454	0.423	0.454	0.572	1.555	2,758,815.575	No	0.454	5.20
VRGC2 545-VRGC2 580			15.000				418,250.723			0.432	0.387	0.540	0.534	0.978	3,009,008.765	No	0.540	3.5
VRGC2 580-VRGC2 581			15.000				418,250.723			0.407	0.348	0.509	0.534	1.096	3,349,445.450	No	0.509	3.84
VRGC2 581-VRGC2 582			15.000				418,250.723			0.377	0.302	0.471	0.534	1.272	3,863,889.723	No	0.471	4.26
VRGC2_581-VRGC2_582 VRGC2_582-VRGC2_583			15.000				487,251.177			0.370	0.293	0.463	0.571	1.493	4,530,794.078	No	0.463	4.95
			18.000							0.370	0.293	0.463	0.571	2.504		No	0.463	
VRGC2_583-TOE_2808							487,251.177								12,001,043.659			6.91
VRGC4_365-VRGC4_366			10.000			530,102.646		Free Surface		0.508	0.513	0.423	0.400	0.899	1,032,620.091	No	0.423	2.94
VRGC4 366-VRGC4 389	VRGC4_366	VRGC4_389	10.000	168.981	0.007	530,102.646	163,750.978	Free Surface	3.514	0.443	0.406	0.369	0.400	1.166	1,306,936.124	Yes	0.373	3.46

	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth	Critical Depth	Froude Number	Full Flow (gpd)	Adjustment	Adjusted Depth (ft)	Adjusted Velocity
	VRGC4_389-VRGC4_415		VRGC4_415	10.000			530,102.646	163,750.978			0.452	0.421	0.377	0.400	1.121	1,260,514.724	No	0.377	3.421
	VRGC4_415-VRGC4_416			10.000	398.517		530,102.646	163,750.978			0.523	0.539	0.436	0.400	0.851	983,702.686	No	0.436	2.843
	VRGC4_416-VRGC4_417			10.000	383.546	0.006	530,102.646	163,750.978			0.464	0.440	0.387	0.400	1.067	1,203,978.104	No	0.387	3.307
	VRGC4_417-VRGC4_418			10.000	400.664		530,102.646	163,750.978			0.254	0.141	0.212	0.400	3.423	3,754,304.275	No	0.212	7.528
	VRGC4_418-VRGC4_419			10.000	405.006		593,284.015	187,225.850			0.456	0.427	0.380	0.425	1.236	1,390,518.069	No	0.380	3.788
	VRGC4_419-VRGC4_420			10.000	192.748		593,284.015	187,225.850			0.374	0.297	0.311	0.425	1.813	1,997,285.306	No	0.311	4.940
	VRGC4_420-TOE_2809		TOE_2809	10.000	333.343		593,284.015	187,225.850			0.370	0.292	0.309	0.425	1.843	2,028,905.449	No	0.309	4.996
	VRGC6_183-VRGC6_184			10.000			515,119.440	158,274.660			0.460	0.433	0.383	0.394	1.055	1,189,139.609	No	0.383	3.252
	VRGC6_184-VRGC6_185			10.000			515,119.440	158,274.660			0.362	0.281	0.302	0.394	1.669	1,835,191.860	No	0.302	4.469
	VRGC6_185-VRF1G_186			10.000			515,119.440	158,274.660			0.318	0.219	0.265	0.394	2.152	2,355,518.068	No	0.265	5.350
	WCR10_1-I25_23	WCR10	125_23	8.000			632,671.368	202,023.284			0.551	0.588	0.368	0.469	1.603	1,076,226.721	Yes	0.565	3.104
4	WCR3_1	WCR3_80	TOE_2886	15.000			1,573,643.285	597,748.095			0.307	0.205	0.384	0.624	2.552	7,693,555.671	No	0.384	7.622
	WCR3_10	WCR3_86A	WCR3_86B	15.000	312.840		1,455,603.645	544,748.915			0.399	0.336	0.499	0.599	1.421	4,336,086.901	No	0.499	4.927
	WCR3_11	WCR3_87	WCR3_86A	15.000	256.720		1,455,603.645	544,748.915			0.400	0.338	0.501	0.599	1.412	4,311,121.273	No	0.501	4.906
	WCR3_12	WCR3_88	WCR3_87	15.000	216.760		1,455,603.645	544,748.915			0.401	0.339	0.502	0.599	1.405	4,290,297.352	No	0.502	4.889
	WCR3_13	WCR3_89	WCR3_88	15.000	287.980		1,455,603.645				0.401	0.338	0.501	0.599	1.409	4,300,756.138	No	0.501	4.898
	WCR3_14	WCR3_90	WCR3_89	15.000	252.970		1,455,603.645	544,748.915			0.346	0.258	0.433	0.599	1.869	5,652,464.771	No	0.433	5.973
	WCR3_15	WCR3_91	WCR3_90	15.000	235.590		1,455,603.645	544,748.915			0.439	0.398	0.548	0.599	1.185	3,654,629.780	No	0.548	4.346
	WCR3_16	WCR3_92	WCR3_91	15.000	257.920		1,455,603.645				0.438	0.398	0.548	0.599	1.187	3,660,060.214	No	0.548	4.351
	WCR3_17	WCR3_93	WCR3_92	15.000	197.900		1,455,603.645				0.436	0.395	0.546	0.599	1.197	3,689,681.258	No	0.546	4.377
	WCR3_18	WCR3_94	WCR3_93	15.000	235.700		1,455,603.645	544,748.915			0.319	0.221	0.399	0.599	2.187	6,598,520.663	No	0.399	6.678
닖	WCR3_19	WCR3_94A	WCR3_94	15.000	300.050		1,455,603.645				0.445	0.409	0.557	0.599	1.152	3,560,944.034	No	0.557	4.264
	WCR3_2	WCR3_81	WCR3_80	15.000	41.840		1,558,131.645	590,748.258			0.272	0.162	0.340	0.621	3.186	9,613,005.398	No	0.340	8.913
=	WCR3_20	WCR3_95	WCR3_94A	15.000	130.720		1,328,024.988	488,394.536			0.404	0.344	0.505	0.571	1.265	3,866,044.802	No	0.505	4.420
4	WCR3_21	WCR3_96	WCR3_95	15.000	399.710		1,328,024.988	488,394.536			0.417	0.363	0.521	0.571	1.193	3,657,549.957	No	0.521	4.244
4	WCR3_22	WCR3_97	WCR3_96	15.000	343.810		1,328,024.988	488,394.536			0.417	0.363	0.521	0.571	1.194	3,660,503.753	No	0.521	4.247
4	WCR3_23	WCR3_98	WCR3_97	15.000	374.890		1,328,024.988	488,394.536			0.363	0.281	0.454	0.571	1.557	4,719,404.348	No	0.454	5.111
4	WCR3_24	WCR3_99	WCR3_98	15.000	241.920		1,081,832.029	382,643.856 382.643.856			0.373	0.296	0.466	0.513	1.204	3,653,339.553	No	0.466	4.012
	WCR3_25	WCR3_100	WCR3_99	15.000	236.560		1,081,832.029				0.269 0.372	0.158 0.295	0.336 0.465	0.513	2.272	6,858,104.151	No	0.336 0.465	6.310 4.025
	WCR3_26	WCR3_100A	WCR3_100	15.000 15.000	235.090 244.690		1,081,832.029	382,643.856 382,643.856			0.372	0.295	0.466	0.513	1.209 1.204	3,670,450.588	No No	0.466	4.025
	_		WCR3_100A	15.000	243.950		1,081,832.029 1,081,832.029	382,643.856			0.373	0.295	0.466	0.513 0.513	1.204	3,655,666.350 3,661,206.717	No	0.466	4.014
	WCR3_28		WCR3_100B	15.000	138.520		1,081,832.029	382,643.856			0.372	0.288	0.459	0.513	1.238	3,755,620.152	No	0.459	4.018
H	WCR3_29 WCR3_3	WCR3_102 WCR3_82	WCR3_101 WCR3_81	15.000	68.170		1,558,131.645	590,748.258			0.457	0.428	0.439	0.621	1.175	3,643,391.080	No	0.439	4.414
H	WCR3_3	WCR3_02 WCR3_103	WCR3_01 WCR3 102	15.000	184.390		1,081,832.029	382,643.856			0.437	0.426	0.395	0.513	1.661	5,009,549.547	No	0.395	5.039
#	WCR3_30 WCR3_31	WCR3_103	WCR3_102	15.000	335.280		1,081,832.029	382,643.856			0.373	0.216	0.393	0.513	1.205	3,656,794.225	No	0.466	4.015
H	WCR3_31 WCR3_32	WCR3_I14	WCR3_103	15.000	141.390		1,081,832.029	382,643.856			0.373	0.224	0.400	0.513	1.604	4,839,268.180	No	0.400	4.916
#	_	WCR3_I14	WCR3_113	15.000	103.030		1,081,832.029	382,643.856			0.327	0.224	0.402	0.513	1.553	4,685,873.845	No	0.409	4.803
H	WCR3_33 WCR3_34	WCR3_I13A WCR3_I13A	WCR3_114 WCR3_113A	15.000	287.860		1,081,832.029	382,643.856			0.426	0.231	0.409	0.513	0.933	2,866,383.922	No	0.409	3.361
H	WCR3_34 WCR3_35	WCR3_113	WCR3_I13A	15.000	300.000		1,081,832.029	382,643.856			0.426	0.377	0.532	0.513	0.934	2,868,177.966	No	0.532	3.362
H	WCR3_35 WCR3_36	WCR3_I11	WCR3_113 WCR3_112	15.000	166.950		1,081,832.029	382,643.856			0.303	0.200	0.332	0.513	1.796	5,414,662.181	No	0.379	5.328
Ħ	WCR3_30 WCR3_37	WCR3_I11	WCR3_112	15.000	400.000		942,588.487	324,770.278			0.395	0.329	0.493	0.478	0.941	2,868,177.966	No	0.493	3.240
Ħ	WCR3_37 WCR3_38	WCR3_I9	WCR3_I11	15.000	400.000			324,770.278			0.395	0.329	0.493	0.478	0.941	2,868,177.966	No	0.493	3.240
Ħ	WCR3_39	WCR3 I8	WCR3_I9	15.000	400.000		942,588.487	324,770.278			0.395	0.329	0.493	0.478	0.941	2,868,177.966	No	0.493	3.240
Ħ	WCR3_39 WCR3_4	WCR3_83	WCR3_82	15.000	417.560		1,558,131.645	590,748.258			0.456	0.426	0.570	0.621	1.178	3,653,434.289	No	0.570	4.423
7	WCR3 40	WCR3 17	WCR3 18	15.000	400.000		942,588.487	324,770.278			0.371	0.294	0.464	0.478	1.057	3,206,720.452	No	0.464	3.514
Ħ	WCR3 41	WCR3 I6	WCR3 I7	15.000	361.260		942,588.487	324,770.278			0.371	0.294	0.464	0.478	1.058	3,210,003.073	No	0.464	3.517
Ħ	WCR3_42	WCR3_I5	WCR3_I6	15.000			787,385.645	262,144.701			0.337	0.245	0.421	0.435	1.064	3,214,358.542	No	0.421	3.350
Ħ	WCR3 43	WCR3_I4	WCR3_I5	15.000			787,385.645	262,144.701			0.258	0.146	0.323	0.435	1.784	5,388,368.141	No	0.323	4.850
Ħ	WCR3_44	WCR3-I_3	WCR3_I4	15.000			787,385.645	262,144.701			0.338	0.246	0.422	0.435	1.062	3,206,836.644	No	0.422	3.344
Ħ	WCR3_45	WCR3_I2	WCR3-I_3	15.000			787,385.645	262,144.701			0.338	0.246	0.422	0.435	1.061	3,205,318.432	No	0.422	3.343
Ħ	WCR3_46	WCR3_11A	WCR3_I2	15.000			787,385.645	262,144.701			0.357	0.273	0.446	0.435	0.952	2,883,409.647	No	0.446	3.097
Ħ	WCR3_47	WCR3_I1	WCR3_11A	15.000			787,385.645	262,144.701			0.329	0.234	0.412	0.435	1.113	3,359,566.322	No	0.412	3.458
Ħ	_	WCR3_H134	WCR3_I1	15.000			787,385.645	262,144.701			0.324	0.227	0.405	0.435	1.152	3,474,771.708	No	0.405	3.543
Ħ	_	WCR3 H135		12.000			337,909.622	95,895.324			0.235	0.121	0.235	0.300	1.608	2,791,092.806	No	0.235	3.717
Ħ	WCR3_5	WCR3_84	WCR3_83	15.000			1,558,131.645	590,748.258			0.456	0.426	0.570	0.621	1.179	3,656,511.879	No	0.570	4.426
Ħ	_	WCR3_H136		12.000			337,909.622		Free Surface		0.280	0.171	0.280	0.300	1.145	1,976,071.522	No	0.280	2.907
	_			12.000			337,909.622	95,895.324			0.280	0.171	0.280	0.300	1.146	1,977,911.463	No		2.909
٦	WCR3_51	WCR3_H137	WCR3 H136	12.000	207.040	0.000	001,000.022	90,090.024	riee Suriace	2.303	0.200	0.171	0.200	0.300	1.140	1,311,311.403	INU	0.280	2.000

	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth (ft)	Adjusted Velocity
	WCR3_53	WCR3_H139	WCR3_H138	12.000	246.720	0.006	337,909.622	95,895.324	Free Surface	2.880	0.282	0.173	0.282	0.300	1.130	1,950,247.003	No	0.282	2.880
	WCR3_54	WCR3_H140	WCR3_H139	12.000	227.850	0.011	337,909.622	95,895.324	Free Surface	3.544	0.243	0.129	0.243	0.300	1.506	2,609,441.060	No	0.243	3.544
	WCR3_55	WCR3_H141	WCR3_H140	12.000	53.120	0.004	337,909.622	95,895.324	Free Surface	2.510	0.311	0.210	0.311	0.300	0.932	1,609,638.959	No	0.311	2.510
	WCR3_56	WCR3_H146	WCR3_H141	10.000	257.260	0.016	155,995.637	39,958.545	Free Surface	3.331	0.191	0.079	0.159	0.212	1.764	1,965,314.469	No	0.159	3.331
	WCR3_57	WCR3_H164	WCR3_H146	10.000	335.000	0.004	155,995.637	39,958.545	Free Surface	2.055	0.268	0.157	0.223	0.212	0.908	994,340.556	No	0.223	2.055
	WCR3_58	WCR3_H165	WCR3_H164	10.000	120.000	0.004	155,995.637	39,958.545	Free Surface	2.053	0.268	0.157	0.223	0.212	0.907	992,859.780	No	0.223	2.053
3	WCR3_59	WCR3_H171	WCR3_H165	10.000	285.000	0.004	155,995.637	39,958.545	Free Surface	1.931	0.280	0.171	0.233	0.212	0.832	911,110.620	No	0.233	1.931
7	WCR3 6	WCR3_85	WCR3_84	15.000	467.190	0.008	1,558,131.645	590,748.258	Free Surface	4.807	0.428	0.381	0.535	0.621	1.330	4,089,979.476	No	0.535	4.807
<b>=</b>	WCR3 60	WCR3_184	WCR3_H171	10.000	159.830	0.008	155,995.637	39,958.545	Free Surface	2.604	0.226	0.112	0.189	0.212	1.259	1,387,190.371	No	0.189	2.604
7	WCR3 61	WCR3_H185	WCR3 184	10.000	293.160	0.010	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,503,211.876	No	0.000	0.000
<b>=</b>	WCR3 62		WCR3 H185	10.000	293.160	0.021	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	2,254,817.814	No	0.000	0.000
<b>=</b>	WCR3 63	WCR3 H187		10.000	51.940	0.021	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	2,238,406.245	No	0.000	0.000
Ħ.	WCR3 64		WCR3 H187	8.000	231.710		0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	682,553.736	No	0.000	0.000
=	WCR3 65	WCR3_H189		8.000	363.310		0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	717,648.209	No	0.000	0.000
1	WCR3 66		WCR3 H189	8.000	195.020		0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	718,766.867	No	0.000	0.000
4	WCR3 67	WCR3_H191		8.000	278.060		0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	678,741.415	No	0.000	0.000
=	WCR3_67 WCR3_68	WCR3_H191		8.000	256.990		0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	879,144.040	No	0.000	0.000
=	_	WCR3_H192A		8.000	280.180		0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	950,859.552	No	0.000	0.000
=	WCR3_69			15.000	387.790						0.454	0.424	0.568					0.568	
4	WCR3_7	WCR3_86	WCR3_85				1,558,131.645		Free Surface					0.621	1.187	3,677,459.401	No		4.445
4	WCR3_70		WCR3_H192A	8.000	121.000		0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	1,335,769.582	No	0.000	0.000
4	WCR3_71		WCR3_H193	8.000	327.200		0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	917,817.527	No	0.000	0.000
4	WCR3_72	WCR3_H133		10.000	175.710		536,938.266	166,249.377			0.358	0.274	0.298	0.403	1.783	1,958,924.643	No	0.298	4.739
4	WCR3_73		WCR3_H133	10.000	145.240		536,938.266		Free Surface		0.482	0.470	0.402	0.403	1.005	1,141,551.246	No	0.402	3.189
4	WCR3_74		WCR3_H132	10.000	65.280		536,938.266	166,249.377			0.417	0.364	0.348	0.403	1.326	1,474,616.508	No	0.348	3.853
	WCR3_75	WCR3_H130	WCR3_H131	8.000	235.650	0.014	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,003,891.681	Yes	0.074	0.000
]	WCR3_76	WCR3_H129	WCR3_H130	8.000	300.000	0.005	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	599,858.213	No	0.000	0.000
	WCR3_77	WCR3_H128	WCR3_H129	8.000	348.630	0.005	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	592,387.233	No	0.000	0.000
	WCR3_78	WCR3_H127	WCR3_H128	8.000	232.240	0.009	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	787,245.331	No	0.000	0.000
	WCR3_79	WCR3_H126	WCR3_H127	8.000	111.860	0.004	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	555,708.217	No	0.000	0.000
3	WCR3_8	WCR3_86C	WCR3_86	15.000	192.490	0.010	1,558,131.645	590,748.258	Free Surface	5.181	0.405	0.344	0.506	0.621	1.482	4,529,211.774	No	0.506	5.181
Ħ	WCR3 80	WCR3 H125	WCR3 H126	8.000	163.480	0.005	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	600,811.475	No	0.000	0.000
1	WCR3 9	WCR3 86B	WCR3_86C	15.000	303.380	0.009	1,558,131.645	590,748.258	Free Surface	4.989	0.416	0.362	0.520	0.621	1.404	4,301,936.044	No	0.520	4.989
Ħ,	WCR5 10-WCR5 11	WCR5_10	WCR5 11	12.000	165.680		1,302,017.644	477,057.420			0.431	0.386	0.431	0.606	1.914	3,371,276.495	No	0.431	6.214
=	WCR5 11-WCR5 12	WCR5_11	WCR5 12	12.000				477,057.420			0.431	0.386	0.431	0.606	1.913	3,369,443.514	No	0.431	6.212
=	WCR5_12-WCR5_13	WCR5_12	WCR5 13	12.000	277.850			477,057.420			0.464	0.439	0.464	0.606	1.665	2,963,283.964	No	0.464	5.649
=	WCR5 13-WCR5 14	WCR5_13	WCR5_14	12.000				477,057.420			0.517	0.529	0.517	0.606	1.353	2,460,284.883	No	0.517	4.915
=			WCR5 15	12.000	168.090			477,057.420			0.494	0.490	0.494	0.606	1.477	2,659,206.292	No	0.494	5.211
=	WCR5_14-WCR5_15	WCR5_14										0.490	0.494						
=	WCR5_15-WCR5_16	WCR5_15	WCR5_16	12.000	371.750			477,057.420			0.448			0.606	1.780	3,150,987.534	No	0.448	5.912
=	WCR5_16-WCR5_17	WCR5_16	WCR5_17	12.000				551,125.232			0.512	0.521	0.512	0.645	1.554	2,820,746.567	No	0.512	5.614
=	WCR5_17-WCR5_18	WCR5_17	WCR5_18	12.000				551,125.232			0.531	0.554	0.531	0.645	1.450	2,654,390.210	No	0.531	5.362
= 1	WCR5_18-WCR5_19	WCR5_18	WCR5_19	12.000	195.440		1,469,891.717				0.450	0.416	0.450	0.645	1.994	3,533,228.658	No	0.450	6.640
╡ `	WCR5_19-WCR5_20	WCR5_19	WCR5_20	12.000				551,125.232			0.503	0.505	0.503	0.645	1.612	2,912,664.328	Yes	0.506	5.701
4	WCR5_1-WCR5_2	WCR5_1	WCR5_2	10.000			684,293.211	221,854.956			0.617	0.701	0.514	0.458	0.800	976,028.614	No	0.514	2.997
=	WCR5_20-WCR5_21	WCR5_20	WCR5_21	12.000				551,125.232			0.610	0.689	0.610	0.645	1.114	2,134,740.756	No	0.610	4.534
=	WCR5_21-WCR5_22	WCR5_21	WCR5_22	12.000			1,469,891.717	551,125.232			0.483	0.472	0.483	0.645	1.737	3,113,575.077	Yes	0.587	4.749
] \	WCR5_22-WCR5_23	WCR5_22	WCR5_23	15.000			1,486,252.723		Free Surface	2.814	0.632	0.726	0.790	0.606	0.602	2,046,935.507	No	0.790	2.814
1	WCR5_23-WCR5_24	WCR5_23	WCR5_24	15.000	660.870	0.009	1,486,252.723	558,450.510	Free Surface	4.912	0.406	0.347	0.508	0.606	1.402	4,284,933.502	No	0.508	4.912
)	WCR5_24-WCR5_25	WCR5_24	WCR5_25	15.000	866.430	0.006	1,540,842.597	582,946.341	Free Surface	4.222	0.469	0.447	0.586	0.618	1.106	3,445,040.731	No	0.586	4.222
)	WCR5_25-WCR5_26	WCR5_25	WCR5_26	15.000	411.850	0.005	1,540,842.597	582,946.341	Free Surface	3.981	0.491	0.484	0.613	0.618	1.014	3,183,864.549	No	0.613	3.981
=1	WCR5_26-WCR5_27	WCR5_26	WCR5_27	15.000	353.460	0.005	1,540,842.597	582,946.341	Free Surface	3.979	0.491	0.484	0.613	0.618	1.013	3,181,856.484	No	0.613	3.979
= 1	WCR5 27-WCR5 28	WCR5_27	WCR5_28	15.000			1,540,842.597				0.492	0.486	0.615	0.618	1.009	3,170,590.774	No	0.615	3.969
=	WCR5 28-WCR5 29	WCR5_28	HWY52_5	15.000			1,540,842.597				0.363	0.281	0.454	0.618	1.807	5,476,835.631	Yes	0.534	4.767
i	WCR5 2-WCR5 3	WCR5_2	WCR5_3	10.000			684,293.211	221,854.956			0.456	0.426	0.380	0.458	1.429	1,607,899.348	No	0.380	4.378
Ħ	WCR5 3-WCR5 4	WCR5_3	WCR5_4	10.000			684,293.211	221,854.956			0.417	0.363	0.347	0.458	1.693	1,883,292.112	Yes	0.498	3.115
=	WCR5_3-WCR5_4 WCR5_4-WCR5_5	WCR5_4	WCR5_5	12.000				477,057.420			0.748	0.910	0.748	0.606	0.661	1,431,508.715	No	0.748	3.116
4																			
=	WCR5_5-WCR5_6	WCR5_5	WCR5_6	12.000				477,057.420			0.803	0.982	0.803	0.606	0.569	1,326,447.964	No	0.803	2.979
4	WCR5_6-WCR5_7	WCR5_6	WCR5_7	12.000				477,057.420			0.803	0.981	0.803	0.606	0.570	1,327,686.733	No	0.803	2.981
=	WCR5_7-WCR5_8	WCR5_7	WCR5_8	12.000				477,057.420			0.446	0.410	0.446	0.606	1.795	3,175,473.560	No	0.446	5.946
	WCR5 8-WCR5 9	WCR5_8	WCR5 9	12.000	559.300	0.021	1,302,017.644	477,057.420	ree Surface	6.585	0.413	0.357	0.413	0.606	2.082	3,648,356.247	No	0.413	6.585

ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth (ft)	Adjusted Velocity
WCR5_9-WCR5_10	WCR5_9	WCR5_10	12.000	822.970	0.022	1,302,017.644	477,057.420	Free Surface	6.638	0.410	0.353	0.410	0.606	2.106	3,688,762.390	No	0.410	6.638
WCR7_10-WCR7_11	WCR7_10	WCR7_11	8.000	541.220	0.007	361,078.922	103,770.681	Free Surface	3.194	0.501	0.501	0.334	0.351	1.099	720,126.831	No	0.334	3.194
WCR7_11-WCR7_12	WCR7_11	WCR7_12	8.000	386.680	0.005	361,078.922	103,770.681	Free Surface	2.763	0.562	0.607	0.375	0.351	0.881	594,654.285	No	0.375	2.763
WCR7_12-WCR7_13	WCR7_12	WCR7_13	10.000	582.070	0.010	725,093.946	237,674.791	Free Surface	4.321	0.481	0.468	0.401	0.472	1.364	1,548,573.905	No	0.401	4.321
WCR7_13-WCR7_14	WCR7_13	WCR7_14	10.000	686.300	0.009	725,093.946	237,674.791	Free Surface	4.063	0.505	0.508	0.421	0.472	1.244	1,426,141.262	No	0.421	4.063
WCR7_14-WCR7_15	WCR7_14	WCR7_15	10.000	269.660	0.007	725,093.946	237,674.791	Free Surface	3.769	0.536	0.562	0.447	0.472	1.110	1,291,106.520	No	0.447	3.769
WCR7_15-WCR7_16	WCR7_15	WCR7_16	10.000	495.150	0.008	725,093.946	237,674.791	Free Surface	3.969	0.514	0.524	0.429	0.472	1.201	1,382,468.177	No	0.429	3.969
WCR7_16-WCR7_17	WCR7_16	WCR7_17	10.000	307.790	0.006	725,093.946	237,674.791	Free Surface	3.554	0.562	0.606	0.468	0.472	1.014	1,195,701.456	Yes	0.473	3.512
WCR7_17-WCR7_18	WCR7_17	WCR7_18	10.000	565.400	0.003	725,093.946	237,674.791	Free Surface	2.781	0.693	0.826	0.578	0.472	0.677	877,454.384	No	0.578	2.781
WCR7_18-I25_36	WCR7_18	125_36	10.000	1,385.670	0.011	1,243,007.572	451,429.750	Free Surface	4.963	0.669	0.787	0.557	0.622	1.244	1,579,387.657	Yes	0.833	3.526
WCR7_1-WCR7_2	WCR7_1	WCR7_2	8.000	799.050	0.022	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,269,705.921	No	0.000	0.000
WCR7_2-WCR7_3	WCR7_2	WCR7_3	8.000	815.360	0.020	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,184,642.934	No	0.000	0.000
WCR7_3-WCR7_4	WCR7_3	WCR7_4	8.000	766.230	0.016	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,057,200.871	No	0.000	0.000
WCR7_4-WCR7_5	WCR7_4	WCR7_5	8.000	477.510	0.012	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	942,971.089	No	0.000	0.000
WCR7_5-WCR7_6	WCR7_5	WCR7_6	8.000	442.930	0.018	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,132,947.029	No	0.000	0.000
WCR7_6-WCR7_7	WCR7_6	WCR7_7	8.000	234.100	0.017	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,094,952.309	Yes	0.081	0.000
WCR7_7-WCR7_8	WCR7_7	WCR7_8	8.000	1,045.230	0.017	361,078.922	103,770.681	Free Surface	4.397	0.392	0.325	0.262	0.351	1.754	1,110,156.458	No	0.262	4.397
WCR7_8-WCR7_9	WCR7_8	WCR7_9	8.000	308.600	0.013	361,078.922	103,770.681	Free Surface	3.938	0.426	0.378	0.284	0.351	1.496	954,891.495	No	0.284	3.938
WCR7_9-WCR7_10	WCR7_9	WCR7_10	8.000	479.290	0.012	361,078.922	103,770.681	Free Surface	3.896	0.430	0.384	0.286	0.351	1.473	941,218.444	No	0.286	3.896

	ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
1	AIF1_119	5,068.710	0.000	0.000	0.000	5,058.112	Not Full	Yes	-0.518	10.598
2	ARF1_12	5,190.400	0.000	0.000	0.000	5,179.329	Not Full	Yes	-0.358	11.071
3	ARF1_16	5,191.000	0.000	0.000	0.000	5,181.049	Not Full	No	-0.438	9.951
4	ARF1_17	5,195.200	0.000	0.000	0.000	5,184.041	Not Full	No	-0.425	11.159
5	ARF1_2	5,190.990	0.000	0.000	0.000	5,173.838	Not Full	Yes	-0.565	17.152
6	ARF1_28	5,201.050	0.000	0.000	0.000	5,189.729	Not Full	No	-0.468	11.321
7	ARF1_29	5,202.190	0.000	0.000	0.000	5,190.764	Not Full	No	-0.442	11.426
8	ARF1_3	5,188.520	0.000	0.000	0.000	5,176.108	Not Full	No	-0.399	12.412
9	ARF1_31	5,204.680	0.000	0.000	0.000	5,193.926	Not Full	No	-0.421	10.754
10	ARF1_32	5,205.700	0.000	0.000	0.000	5,194.957	Not Full	No	-0.409	10.743
11	ARF1_33	5,208.560	0.000	0.000	0.000	5,197.200	Not Full	No	-0.427	11.360
12	ARF1_34	5,209.050	0.000	0.000	0.000	5,198.226	Not Full	No	-0.391	10.824
13	ARF1_35	5,209.820	0.000	0.000	0.000	5,198.956	Not Full	Yes	-0.380	10.864
14	ARF1_36	5,213.560	0.000	0.000	0.000	5,201.347	Not Full	No	-0.419	12.213
15	ARF1_37	5,213.040	0.000	0.000	0.000	5,202.257	Not Full	No	-0.399	10.783
16	ARF1_4	5,189.400	0.000	0.000	0.000	5,178.023	Not Full	No	-0.454	11.377
17	ARF2_1	5,214.270	0.000	0.000	0.000	5,205.591	Not Full	No	-0.416	8.679
18	ARF2_2	5,217.170	63,990.696	230,360.489	0.000	5,206.688	Not Full	No	-0.398	10.482
19	BFF1_61	5,112.000	0.000	0.000	0.000	5,100.440	Not Full	No	-0.667	11.560
20	BFF1_62	5,110.000	0.000	0.000	0.000	5,098.440	Not Full	No	-0.667	11.560
21	BFF1_63	5,110.000	18,090.713	68,340.934	0.000	5,096.849	Not Full	No	-0.527	13.151
22	CCF3_39E	5,127.025	30,779.988	116,281.396	0.000	5,116.716	Not Full	No	-0.533	10.309
23	CCF3_60	5,134.515	0.000	0.000	0.000	5,123.515	Not Full	No	-0.833	11.000
24	CCF3_60A	5,126.015	46,439.983	170,554.711	0.000	5,118.149	Not Full	No	-0.599	7.866
25	CCF4_41	5,130.900	39,690.705	147,206.502	0.000	5,119.321	Not Full	No	-0.426	11.579
26	CCF4_42	5,139.500	0.000	0.000	0.000	5,127.782	Not Full	No	-0.534	11.718
27	CCF4_43	5,148.430	0.000	0.000	0.000	5,136.712	Not Full	No	-0.535	11.718
28	CCF4_44	5,154.330	0.000	0.000	0.000	5,142.560	Not Full	No	-0.517	11.770
29	CCF4_45	5,160.270	0.000	0.000	0.000	5,148.500	Not Full	No	-0.516	11.770
30	CCF6_105	5,098.110	176,168.094	541,422.332	0.000	5,087.059	Not Full	No	-0.671	11.051
31	CCF6_106	5,098.070	0.000	0.000	0.000	5,082.134	Not Full	No	-0.666	15.936
32	CCF6_610	5,118.330	0.000	0.000	0.000	5,107.885	Not Full	No	-0.452	10.445
33	CCF6_611	5,120.270	0.000	0.000	0.000	5,109.714	Not Full	No	-0.443	10.556
34	CCF6_612	5,123.450	0.000	0.000	0.000	5,112.278	Not Full	No	-0.448	11.172
35	CCF6_613	5,124.860	0.000	0.000	0.000	5,113.860	Not Full	No	-0.427	11.000
36	CCF6_614	5,125.820	0.000	0.000	0.000	5,114.981	Not Full	No	-0.416	10.839
37	CCF6_615	5,110.580	0.000	0.000	0.000	5,095.869	Not Full	No	-0.841	14.711
38	CCF6_68	5,111.480	0.000	0.000	0.000	5,098.507	Not Full	No	-0.450	12.973
39	CCF6_69	5,113.690	0.000	0.000	0.000	5,102.379	Not Full	No	-0.447	11.311
40	CCF9_46	5,168.820	34,019.987	127,591.152	0.000	5,150.275	Not Full	No	-0.461	18.545
41	CFF1_17	5,094.225	0.000	0.000	0.000	5,082.907	Not Full	No	-0.888	11.318

		ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
42	П	CFF1_18	5,096.025	0.000	0.000	0.000	5,085.244	Not Full	No	-0.891	10.781
43	Ħ	CFF1_19	5,097.625	0.000	0.000	0.000	5,086.782	Not Full	No	-0.883	10.843
44	Ħ	CFF1 19B1	5,098.735	0.000	0.000	0.000	5,087.735	Not Full	No	-0.700	11.000
45	Ħ	CFF1 19B2	5,100.735	0.000	0.000	0.000	5,088.841	Not Full	No	-0.684	11.894
46	F	CFF1_20	5,101.125	0.000	0.000	0.000	5,089.673	Not Full	No	-0.692	11.452
47		CFF1_21	5,103.925	36,450.706	135,999.781	0.000	5,092.006	Not Full	No	-0.689	11.919
48		CFF1_22	5,106.175	0.000	0.000	0.000	5,093.667	Not Full	No	-0.698	12.508
49		CFF1_22A	5,112.405	0.000	0.000	0.000	5,100.622	Not Full	No	-0.616	11.783
50		CFF1_22B	5,106.965	0.000	0.000	0.000	5,095.282	Not Full	No	-0.616	11.683
51		CFF1_22C	5,104.765	60,750.697	220,059.749	0.000	5,093.048	Not Full	No	-0.550	11.717
52		CFF1_22D	5,107.255	0.000	0.000	0.000	5,095.055	Not Full	No	-0.833	12.200
53		CFF1_22E	5,106.875	0.000	0.000	0.000	5,096.885	Not Full	No	-0.833	9.990
54		CFF1_22F1	5,108.455	0.000	0.000	0.000	5,098.345	Not Full	No	-0.833	10.110
55		CFF1_23	5,105.785	0.000	0.000	0.000	5,095.094	Not Full	No	-0.711	10.691
56		CFF1_24	5,106.475	0.000	0.000	0.000	5,096.262	Not Full	No	-0.713	10.213
57		CFF1_25	5,107.655	0.000	0.000	0.000	5,097.658	Not Full	No	-0.707	9.997
58		CFF1_26	5,110.015	0.000	0.000	0.000	5,100.253	Not Full	No	-0.712	9.762
59		CFF1_27	5,113.825	0.000	0.000	0.000	5,103.578	Not Full	No	-0.717	10.247
60		CFF1_28	5,116.225	0.000	0.000	0.000	5,105.508	Not Full	No	-0.717	10.717
61		CFF1_29	5,122.135	0.000	0.000	0.000	5,109.244	Not Full	No	-0.771	12.891
62		CFF1_30	5,125.325	0.000	0.000	0.000	5,115.005	Not Full	No	-0.770	10.320
63		CFF1_31	5,128.455	0.000	0.000	0.000	5,116.608	Not Full	No	-0.717	11.847
64		CHF1A_22	5,068.620	79,109.250	274,976.358	0.000	5,055.912	Not Full	No	-1.088	12.708
65		CHF1A_23	5,070.640	0.000	0.000	0.000	5,052.602	Not Full	No	-1.108	18.038
66		CHF1A_24	5,052.800	0.000	0.000	0.000	5,042.484	Not Full	No	-1.016	10.316
67		CHF1A_25	5,050.970	0.000	0.000	0.000	5,039.332	Not Full	No	-0.968	11.638
68		CHF1A_A1A	5,049.900	0.000	0.000	0.000	5,038.444	Not Full	No	-0.966	11.456
69		CHF1A_C1	5,075.600	0.000	0.000	0.000	5,061.716	Not Full	No	-1.204	13.884
70		CHF1B_12	5,105.600	0.000	0.000	0.000	5,083.667	Not Full	No	-1.143	21.933
71		CHF1B_14A	5,122.490	0.000	0.000	0.000	5,102.134	Not Full	No	-1.106	20.356
72		CHF1B_15A	5,119.230	0.000	0.000	0.000	5,102.988	Not Full	No	-0.712	16.242
73		CHF1B_17	5,116.660	0.000	0.000	0.000	5,099.448	Not Full	No	-0.992	17.212
74		CHF1B_18	5,112.550	24,839.991	93,839.005	0.000	5,097.031	Not Full	No	-1.159	15.519
75		CHF1B_20	5,085.470	0.000	0.000	0.000	5,074.086	Not Full	No	-1.134	11.384
76		CHF3A_15	5,125.860	0.000	0.000	0.000	5,104.212	Not Full	No	-0.858	21.648
77		CHF3A_15B	5,119.230	0.000	0.000	0.000	5,103.526	Not Full	No	-0.854	15.704
78		CHF3C_8	5,125.190	0.000	0.000	0.000	5,116.331	Not Full	No	-0.959	8.859
79		CHF3C_9	5,124.720	0.000	0.000	0.000	5,114.852	Not Full	Yes	-0.938	9.868
80		CMF2_22G	5,109.075	0.000	0.000	0.000	5,099.925	Not Full	No	-0.833	9.150
81		CMF2_32	5,114.005	0.000	0.000	0.000	5,102.258	Not Full	No	-0.590	11.747
82		CMF2_33	5,113.055	0.000	0.000	0.000	5,103.076	Not Full	No	-0.542	9.979

	ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
83	CMF2_34	5,113.115	0.000	0.000	0.000	5,103.411	Not Full	No	-0.537	9.704
84	CMF2_35	5,114.465	0.000	0.000	0.000	5,104.147	Not Full	Yes	-0.551	10.318
85	CMF2_36	5,117.345	0.000	0.000	0.000	5,107.056	Not Full	No	-0.612	10.289
86	CMF2_37	5,118.695	0.000	0.000	0.000	5,108.410	Not Full	No	-0.608	10.285
87	CMF2_38	5,119.295	0.000	0.000	0.000	5,108.982	Not Full	No	-0.596	10.313
88	CMF2_39	5,120.035	0.000	0.000	0.000	5,109.777	Not Full	No	-0.591	10.258
89	CMF2_39A	5,121.225	0.000	0.000	0.000	5,110.414	Not Full	Yes	-0.534	10.811
90	CMF2_39B	5,120.725	0.000	0.000	0.000	5,114.227	Not Full	No	-0.631	6.498
91	CMF2_39C	5,124.225	0.000	0.000	0.000	5,115.026	Not Full	No	-0.532	9.199
92	CMF2_39D	5,128.225	0.000	0.000	0.000	5,115.776	Not Full	No	-0.533	12.449
93	COMPF1_101	5,102.060	141,209.227	449,090.255	0.000	5,084.704	Not Full	No	-0.656	17.356
94	CSF1_C2A	5,068.715	0.000	0.000	0.000	5,050.099	Not Full	Yes	-0.966	18.616
95	CSF1_C2C	5,068.425	0.000	0.000	0.000	5,050.301	Not Full	No	-1.104	18.124
96	CSF1_C3A	5,080.635	0.000	0.000	0.000	5,068.123	Not Full	No	-1.022	12.512
97	CSF1_C3B	5,076.545	0.000	0.000	0.000	5,066.962	Not Full	No	-0.993	9.583
98	CSF1_C4B	5,073.805	0.000	0.000	0.000	5,065.305	Not Full	No	-1.030	8.500
99	CSF1_C5B	5,073.395	0.000	0.000	0.000	5,063.436	Not Full	No	-1.049	9.959
100	CSF1_C6C	5,069.785	47,602.062	174,573.795	0.000	5,062.477	Not Full	Yes	-0.958	7.308
101	ECF1_100	5,047.600	0.000	0.000	0.000	5,025.402	Not Full	No	-1.568	22.198
102	ECF1_102	5,047.000	0.000	0.000	0.000	5,024.975	Not Full	No	-1.545	22.025
103	ECF1_108	5,032.950	116,639.956	382,161.456	0.000	5,017.997	Not Full	No	-1.833	14.953
104	ECF1_118	5,028.750	0.000	0.000	0.000	5,020.782	Not Full	No	-0.508	7.968
105	ECF1_119	5,026.890	0.000	0.000	0.000	5,018.238	Not Full	Yes	-0.492	8.652
106	ECF1_2271	5,029.400	46,545.102	170,919.906	0.000	5,010.488	Not Full	Yes	-1.282	18.912
107	ECF1_24	5,038.000	0.000	0.000	0.000	5,028.084	Not Full	No	-1.316	9.916
108	ECF1_25	5,035.470	0.000	0.000	0.000	5,026.572	Not Full	No	-1.498	8.898
109	ECF1_26	5,036.230	0.000	0.000	0.000	5,023.934	Not Full	No	-1.676	12.296
110	ECF1_27	5,033.480	0.000	0.000	0.000	5,022.208	Not Full	No	-1.862	11.272
111	ECF1_28	5,032.150	0.000	0.000	0.000	5,014.832	Not Full	No	-1.838	17.318
112	ECF1_29	5,030.800	0.000	0.000	0.000	5,011.601	Not Full	No	-1.769	19.199
113	ECF1_44	5,039.800	0.000	0.000	0.000	5,027.446	Not Full	No	-1.304	12.354
114	ECF1_97	5,040.000	0.000	0.000	0.000	5,027.059	Not Full	No	-1.341	12.941
115	ECF1A2_131	5,060.000	24,164.631	91,288.766	0.000	5,048.891	Not Full	No	-0.439	11.109
116	ECF1A2_132	5,059.800	0.000	0.000	0.000	5,046.778	Not Full	Yes	-0.352	13.022
117	ECF21_120	5,065.390	226,974.155	670,666.550	0.000	5,056.175	Not Full	No	-0.385	9.215
118	ECF21_121	5,065.000	0.000	0.000	0.000	5,054.936	Not Full	No	-0.344	10.064
119	ECF21_123	5,065.000	0.000	0.000	0.000	5,053.489	Not Full	No	-0.391	11.511
120	ECF21_124	5,065.000	0.000	0.000	0.000	5,051.967	Not Full	No	-0.383	13.033
121	ECF21_130	5,062.000	0.000	0.000	0.000	5,050.497	Not Full	No	-0.333	11.503
122	ECF21_131	5,050.560	0.000	0.000	0.000	5,033.260	Not Full	No	-0.507	17.300
123	ECF21_132	5,050.500	0.000	0.000	0.000	5,032.165	Not Full	No	-0.502	18.335

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		ID	Rim Elevation	Base Flow	Total Flow	Storm Flow	Grade	Status	Hydraulic	Surcharge Depth	Unfilled Depth
101		E0504 400	(ft)	(gpd)	(gpd)	(gpd)	(ft)	N - 4 F - II	Jump	(ft)	(ft)
124	H	ECF21_133	5,050.800	0.000	0.000	0.000	5,030.169	Not Full	Yes	-1.331	20.631
125	H	ECF21_22A	5,054.700	0.000	0.000	0.000	5,033.207	Not Full	No	-1.303	21.493
126	$\square$	ECF21_23	5,050.000	0.000	0.000	0.000	5,029.649	Not Full	No	-1.351	20.351
127	$\square$	ECF21_24	5,050.000	0.000	0.000	0.000	5,029.928	Not Full	No	-1.332	20.072
128	$\square$	ECF21_9	5,047.000	19,169.273	72,417.573	0.000	5,028.833	Not Full	No	-1.467	18.167
129	$\square$	ECF3_217	5,026.385	0.000	0.000	0.000	5,017.270	Not Full	Yes	-0.835	9.115
130	$\square$	ECF3_218	5,027.535	0.000	0.000	0.000	5,016.038	Not Full	No	-0.897	11.497
131	$\square$	ECF4_133	5,060.500	0.000	0.000	0.000	5,044.799	Not Full	No	-0.381	15.701
132	Ш	ECF4_134	5,053.280	0.000	0.000	0.000	5,043.298	Not Full	No	0.318	9.982
133	Ш	ECF4_135	5,056.270	25,839.350	97,616.123	0.000	5,042.114	Not Full	Yes	-0.406	14.156
134	Ш	ECF5_204	5,046.995	0.000	0.000	0.000	5,036.106	Not Full	No	-1.069	10.889
135	Ш	ECF5_205	5,049.085	0.000	0.000	0.000	5,035.178	Not Full	No	-1.069	13.907
136		ECF5_208	5,047.375	0.000	0.000	0.000	5,032.747	Not Full	No	-1.068	14.628
137		ECF5_209	5,042.395	0.000	0.000	0.000	5,032.282	Not Full	Yes	-0.893	10.113
138		ECF5_213	5,046.395	0.000	0.000	0.000	5,031.722	Not Full	No	-0.893	14.673
139		ECF5_214	5,041.285	60,294.217	218,478.826	0.000	5,031.141	Not Full	No	-0.904	10.144
140		ECF5_215	5,041.125	0.000	0.000	0.000	5,029.599	Not Full	No	-1.076	11.526
141		ECF5_216	5,036.155	0.000	0.000	0.000	5,023.099	Not Full	No	-1.076	13.056
142		EHF1_2	5,109.900	0.000	0.000	0.000	5,099.387	Not Full	No	-0.380	10.513
143		EHF1_3	5,108.400	0.000	0.000	0.000	5,100.547	Not Full	No	-0.420	7.853
144		EHF1_4	5,112.700	0.000	0.000	0.000	5,101.945	Not Full	Yes	-0.422	10.755
145		EHF1_5	5,115.000	0.000	0.000	0.000	5,103.569	Not Full	No	-0.498	11.431
146		EHF1_6	5,118.300	0.000	0.000	0.000	5,107.043	Not Full	No	-0.524	11.257
147		EHF1_7	5,127.100	0.000	0.000	0.000	5,114.648	Not Full	No	-0.518	12.452
148		EHF1_8	5,131.700	0.000	0.000	0.000	5,120.468	Not Full	No	-0.498	11.232
149		EHF10_11	5,145.910	0.000	0.000	0.000	5,131.882	Not Full	No	-0.495	14.028
150		EHF10_12	5,147.180	0.000	0.000	0.000	5,132.958	Not Full	No	-0.459	14.222
151		EHF10_13	5,149.870	0.000	0.000	0.000	5,135.144	Not Full	No	-0.492	14.726
152		EHF10_14	5,149.450	0.000	0.000	0.000	5,136.360	Not Full	No	-0.447	13.090
153		EHF10_15	5,150.380	0.000	0.000	0.000	5,137.591	Not Full	No	-0.445	12.789
154		EHF10_16	5,151.800	0.000	0.000	0.000	5,138.791	Not Full	No	-0.446	13.009
155		EHF10_17	5,152.630	0.000	0.000	0.000	5,139.553	Not Full	No	-0.434	13.077
156		EHF10_18	5,153.120	0.000	0.000	0.000	5,140.046	Not Full	Yes	-0.441	13.074
157		EHF11_146	5,162.560	38,879.985	144,403.146	0.000	5,146.423	Not Full	No	-0.444	16.137
158		EHF11_147	5,158.690	0.000	0.000	0.000	5,145.384	Not Full	No	-0.463	13.306
159		EHF11_148	5,153.110	0.000	0.000	0.000	5,143.257	Not Full	No	-0.470	9.853
160		EHF3_10	5,147.800	0.000	0.000	0.000	5,136.343	Not Full	No	-0.524	11.457
161		EHF3_11	5,159.100	0.000	0.000	0.000	5,146.547	Not Full	No	-0.519	12.553
162		EHF3_12	5,169.300	0.000	0.000	0.000	5,149.602	Not Full	No	-0.465	19.698
163		EHF3_42	5,168.000	0.000	0.000	0.000	5,150.646	Not Full	Yes	-0.421	17.354
164		EHF3_9	5,136.500	0.000	0.000	0.000	5,125.180	Not Full	No	-0.486	11.320

	., .,.	- MANHOLE I	Rim Elevation	Base Flow	Total Flow	Storm Flow	Grade	01.1	Hydraulic	Surcharge Depth	Unfilled Depth
		ID	(ft)	(gpd)	(gpd)	(gpd)	(ft)	Status	Jump	(ft)	(ft)
165		EHF4_1	5,109.600	0.000	0.000	0.000	5,098.761	Not Full	No	-0.506	10.839
166		EHF7_1	5,166.480	0.000	0.000	0.000	5,151.667	Not Full	No	-0.429	14.813
167		EHF7_6	5,164.680	46,710.702	171,490.918	0.000	5,153.270	Not Full	No	-0.427	11.410
168		EHF9_1	5,078.280	0.000	0.000	0.000	5,068.410	Not Full	No	-0.536	9.870
169		EHF9_10	5,140.060	0.000	0.000	0.000	5,128.206	Not Full	No	-0.481	11.854
170		EHF9_19	5,155.080	0.000	0.000	0.000	5,141.764	Not Full	No	-0.453	13.316
171		EHF9_2	5,102.420	0.000	0.000	0.000	5,085.916	Not Full	No	-0.541	16.504
172		EHF9_3	5,107.570	0.000	0.000	0.000	5,095.694	Not Full	No	-0.542	11.876
173		EHF9_4	5,118.840	0.000	0.000	0.000	5,103.565	Not Full	No	-0.541	15.275
174		EHF9_5	5,127.680	0.000	0.000	0.000	5,115.785	Not Full	No	-0.542	11.895
175		EHF9_6	5,127.520	0.000	0.000	0.000	5,117.180	Not Full	No	-0.477	10.340
176		EHF9_7	5,137.990	0.000	0.000	0.000	5,123.717	Not Full	No	-0.529	14.273
177		EHF9_8	5,137.740	0.000	0.000	0.000	5,125.596	Not Full	No	-0.491	12.144
178		EHF9_9	5,139.150	0.000	0.000	0.000	5,127.326	Not Full	No	-0.491	11.824
179		EP_1	5,194.550	54,015.820	196,760.362	0.000	5,181.981	Not Full	No	-0.486	12.569
180		EP_2	5,134.160	148,970.824	469,968.195	0.000	5,121.182	Not Full	No	-0.294	12.978
181		EP_3	5,114.460	0.000	0.000	0.000	5,101.966	Not Full	No	-0.310	12.494
182		EVF1_7	4,998.450	50,759.981	185,499.555	0.000	4,988.422	Not Full	No	-0.561	10.028
183		EVF1A1_51	5,012.830	0.000	0.000	0.000	4,997.174	Not Full	No	-1.006	15.656
184		EVF1A1_52	5,010.640	0.000	0.000	0.000	4,996.571	Not Full	No	-0.689	14.069
185		EVF1A2_1	5,014.410	0.000	0.000	0.000	4,997.999	Not Full	No	-0.801	16.411
186		EVF1A2_50	5,014.510	0.000	0.000	0.000	4,997.870	Not Full	No	-0.730	16.640
187		EVF2_1A	4,997.540	0.000	0.000	0.000	4,985.020	Not Full	No	-1.000	12.520
188		EVF2_2	4,996.690	0.000	0.000	0.000	4,985.221	Not Full	Yes	-0.759	11.469
189		EVF2_3	4,996.740	0.000	0.000	0.000	4,986.277	Not Full	No	-0.803	10.463
190		EVF2_4	4,998.320	0.000	0.000	0.000	4,986.423	Not Full	No	-0.551	11.897
191		EVF2_4A	4,994.440	16,469.274	62,218.057	0.000	4,983.355	Not Full	No	-0.655	11.085
192		EVF2_5	4,994.950	0.000	0.000	0.000	4,983.906	Not Full	No	-0.734	11.044
193		EVF2_5A	4,998.320	0.000	0.000	0.000	4,987.036	Not Full	No	-0.567	11.284
194		EVF2_6	4,997.130	0.000	0.000	0.000	4,987.734	Not Full	No	-0.560	9.396
195		EVF2_6A	4,995.080	0.000	0.000	0.000	4,984.117	Not Full	No	-0.763	10.963
196		EVF2_7	4,995.890	0.000	0.000	0.000	4,984.380	Not Full	No	-0.730	11.510
197		EVF2_8	4,996.820	0.000	0.000	0.000	4,984.684	Not Full	No	-0.746	12.136
198		EVF3_47	5,015.880	0.000	0.000	0.000	4,998.847	Not Full	No	-0.783	17.033
199		EVF3_48	5,014.910	0.000	0.000	0.000	4,998.337	Not Full	No	-0.793	16.573
200		EVF4_46	5,017.080	54,776.139	199,390.930	0.000	4,999.360	Not Full	No	-0.790	17.720
201		FMF4_4_4	5,116.700	0.000	0.000	0.000	5,105.366	Not Full	No	-0.634	11.334
202		FMF6_1	5,127.260	0.000	0.000	0.000	5,114.705	Not Full	No	-0.502	12.555
203		FMF6_2	5,129.260	0.000	0.000	0.000	5,116.780	Not Full	No	-0.407	12.480
204		FMF6_4_6	5,124.560	51,839.980	189,233.854	0.000	5,106.556	Not Full	Yes	-0.644	18.004
205		FMF7_3	5,131.760	0.000	0.000	0.000	5,119.537	Not Full	No	-0.390	12.223

	7 I/I - MANHOLE I									
	ID	Rim Elevation	Base Flow	Total Flow	Storm Flow	Grade	Status	Hydraulic	Surcharge Depth	Unfilled Depth
200		(ft)	(gpd)	(gpd)	(gpd)	(ft)	Not Full	Jump	(ft)	(ft) 12.621
206	FMF7_4	5,136.220	0.000 0.000	0.000 0.000	0.000 0.000	5,123.599 5,127.244		No No	-0.387	13.146
207	FMF7_5	5,140.390					Not Full		-0.393	
208	FMF8_1	5,148.970	0.000	0.000	0.000	5,136.236	Not Full	No	-0.501	12.734
209	FMF8_10	5,160.550	0.000	0.000	0.000	5,145.632	Not Full	No	-0.325	14.918
210	FMF8_11	5,159.940	49,139.981	179,894.282	0.000	5,146.082	Not Full	No	-0.325	13.858
211	FMF8_2	5,149.930	0.000	0.000	0.000	5,137.287	Not Full	No	-0.399	12.643
212	FMF8_3	5,151.500	0.000	0.000	0.000	5,138.942	Not Full	No	-0.405	12.558
213	FMF8_4	5,153.490	0.000	0.000	0.000	5,140.067	Not Full	No	-0.389	13.423
214	FMF8_6	5,146.040	0.000	0.000	0.000	5,130.135	Not Full	No	-0.432	15.905
215	FMF8_8	5,155.950	0.000	0.000	0.000	5,143.597	Not Full	No	-0.430	12.353
216	FMF8_9	5,159.460	0.000	0.000	0.000	5,145.030	Not Full	No	-0.336	14.430
217	FMF9_1	5,189.630	0.000	0.000	0.000	5,172.361	Not Full	No	-0.412	17.269
218	FMF9_10	5,162.750	0.000	0.000	0.000	5,153.955	Not Full	No	-0.492	8.795
219	FMF9_11	5,164.610	0.000	0.000	0.000	5,150.558	Not Full	No	-0.469	14.052
220 [	FMF9_12	5,162.750	0.000	0.000	0.000	5,148.457	Not Full	No	-0.469	14.293
221 [	FMF9_13	5,162.520	0.000	0.000	0.000	5,147.932	Not Full	No	-0.475	14.588
222 [	FMF9_15	5,172.560	37,385.266	139,232.949	0.000	5,159.792	Not Full	No	-0.465	12.768
223 [	FMF9_22	5,178.510	0.000	0.000	0.000	5,158.055	Not Full	Yes	-0.432	20.455
224 [	FMF9_23	5,173.130	0.000	0.000	0.000	5,159.328	Not Full	No	-0.468	13.802
225 [	FMF9_3	5,162.290	0.000	0.000	0.000	5,147.349	Not Full	Yes	-0.448	14.941
226 [	FMF9_35	5,174.800	0.000	0.000	0.000	5,158.871	Not Full	No	-0.455	15.929
227 [	FMF9_9	5,174.730	0.000	0.000	0.000	5,156.454	Not Full	No	-0.473	18.276
228 [	GVF1_0	5,069.880	20,519.992	77,518.051	0.000	5,061.178	Not Full	No	-0.519	8.702
229 [	GVF1_100	5,086.630	0.000	0.000	0.000	5,074.891	Not Full	No	-0.376	11.739
230 [	GVF1_101	5,083.880	0.000	0.000	0.000	5,072.222	Not Full	No	-0.324	11.658
231	GVF1_102	5,079.520	0.000	0.000	0.000	5,067.940	Not Full	No	-0.316	11.580
232 [	GVF1_103	5,078.780	0.000	0.000	0.000	5,067.157	Not Full	No	-0.280	11.623
233 [	GVF1_104	5,078.130	0.000	0.000	0.000	5,066.449	Not Full	No	-0.388	11.681
234 [	GVF1_105	5,074.200	0.000	0.000	0.000	5,062.402	Not Full	No	-0.415	11.798
235	GVF1_106	5,071.440	0.000	0.000	0.000	5,059.628	Not Full	No	-0.399	11.812
236	GVF1_107	5,070.010	0.000	0.000	0.000	5,058.058	Not Full	No	-0.419	11.952
237	GVF1_108	5,064.570	0.000	0.000	0.000	5,052.807	Not Full	No	-0.370	11.763
238	GVF1_109	5,062.860	0.000	0.000	0.000	5,050.535	Not Full	No	-0.471	12.325
239	GVF1_111	5,041.130	0.000	0.000	0.000	5,029.745	Not Full	No	-0.351	11.385
240	GVF1_113	5,037.460	0.000	0.000	0.000	5,025.785	Not Full	No	-0.292	11.675
241	GVF1_114	5,036.980	0.000	0.000	0.000	5,025.186	Not Full	No	-0.301	11.794
242	GVF1_115	5,036.250	0.000	0.000	0.000	5,024.223	Not Full	No	-0.324	12.027
243	GVF1_116	5,036.640	0.000	0.000	0.000	5,023.381	Not Full	Yes	-0.479	13.259
244	GVF1_117	5,036.520	65,610.695	235,141.999	0.000	5,022.977	Not Full	No	-0.523	13.543
245	GVF1_36	5,063.750	0.000	0.000	0.000	5,049.796	Not Full	No	-0.431	13.954
246		5,061.780	0.000	0.000	0.000	5,047.670	Not Full	No	-0.416	14.110

	// I/I - MANHC	Rim Elevation	Base Flow	Total Flow	Storm Flow	Grade	01.1	Hydraulic	Surcharge Depth	Unfilled Depth
	ID	(ft)	(gpd)	(gpd)	(gpd)	(ft)	Status	Jump	(ft)	(ft)
247	GVF1_	5,062.570	0.000	0.000	0.000	5,046.658	Not Full	No	-0.429	15.912
248	GVF1_	5,060.770	0.000	0.000	0.000	5,045.718	Not Full	No	-0.458	15.052
249	GVF1_	5,053.840	0.000	0.000	0.000	5,041.979	Not Full	No	-0.458	11.861
250	GVF1_	5,052.490	0.000	0.000	0.000	5,039.650	Not Full	No	-0.467	12.840
251	GVF1_	5,052.020	42,767.984	157,852.741	0.000	5,035.169	Not Full	Yes	-0.495	16.851
252	GVF1_	5,051.260	0.000	0.000	0.000	5,034.350	Not Full	No	-0.503	16.910
253	GVF1_	5,049.200	0.000	0.000	0.000	5,033.832	Not Full	No	-0.531	15.368
254	GVF1_	5,047.700	0.000	0.000	0.000	5,033.225	Not Full	Yes	-0.488	14.475
255	GVF1_	5,046.840	0.000	0.000	0.000	5,032.845	Not Full	No	-0.489	13.995
256	GVF1_	5,044.590	0.000	0.000	0.000	5,032.122	Not Full	No	-0.521	12.468
257	GVF1_	5,042.030	0.000	0.000	0.000	5,031.174	Not Full	Yes	-0.510	10.856
258	GVF1_	5,038.910	0.000	0.000	0.000	5,030.135	Not Full	No	-0.645	8.775
259	GVF1_	5,040.570	0.000	0.000	0.000	5,029.503	Not Full	No	-0.697	11.067
260	GVF1_	78 5,041.100	0.000	0.000	0.000	5,029.027	Not Full	No	-0.623	12.073
261	GVF1_	5,041.000	0.000	0.000	0.000	5,028.343	Not Full	No	-0.627	12.657
262	GVF1_	5,038.390	0.000	0.000	0.000	5,027.608	Not Full	No	-0.642	10.782
263	GVF1_	5,037.800	0.000	0.000	0.000	5,027.236	Not Full	No	-0.784	10.564
264	GVF1_	5,106.750	112,050.678	369,319.768	0.000	5,094.327	Not Full	No	-0.360	12.423
265	GVF1_	5,104.310	0.000	0.000	0.000	5,092.597	Not Full	No	-0.400	11.713
266	GVF1_	5,099.330	0.000	0.000	0.000	5,087.691	Not Full	No	-0.406	11.639
267	GVF1_	5,095.600	0.000	0.000	0.000	5,083.566	Not Full	No	-0.431	12.034
268	GVF1_	5,090.720	0.000	0.000	0.000	5,078.876	Not Full	No	-0.431	11.844
269	HWY52	_1 5,018.000	100,997.242	338,391.757	0.000	5,004.866	Not Full	No	-0.894	13.134
270	HWY52	4,949.000	15,299.994	57,800.138	0.000	4,936.877	Not Full	No	-0.623	12.123
271	HWY52	11 4,945.000	127,748.112	412,883.809	0.000	4,933.551	Not Full	No	-0.599	11.449
272	HWY52	4,942.120	0.000	0.000	0.000	4,930.060	Not Full	No	-1.090	12.060
273	HWY52		0.000	0.000	0.000	5,000.139	Not Full	No	-0.971	35.111
274	HWY52	_3 5,025.320	0.000	0.000	0.000	4,998.067	Not Full	No	-0.983	27.253
275	HWY52	_4 5,010.170	0.000	0.000	0.000	4,992.255	Not Full	Yes	-0.895	17.915
276	HWY52	_5 5,002.380	534,926.679	1,383,377.747	0.000	4,981.920	Not Full	No	-1.270	20.460
277	HWY52	_6 4,990.000	0.000	0.000	0.000	4,972.481	Not Full	No	-0.759	17.519
278	HWY52	_7 4,977.000	0.000	0.000	0.000	4,965.210	Not Full	No	-0.760	11.790
279	HWY52		166,625.217	516,540.443	0.000	4,960.108	Not Full	No	-1.042	19.252
280	HWY52	_	0.000	0.000	0.000	4,939.711	Not Full	Yes	-0.609	8.789
281	☐ I25_1	5,220.000	63,740.136	229,621.442	0.000	5,206.736	Not Full	No	-0.430	13.264
282	I25_1		0.000	0.000	0.000	5,147.758	Not Full	Yes	-0.522	8.252
283	l25_1	5,154.000	0.000	0.000	0.000	5,146.804	Not Full	No	-0.546	7.196
284	I25_1:	5,155.000	0.000	0.000	0.000	5,145.499	Not Full	No	-0.521	9.501
285	I25_1	5,155.070	0.000	0.000	0.000	5,145.169	Not Full	No	-0.511	9.901
286	125_1		244,366.468	713,875.104	0.000	5,144.942	Not Full	No	-0.328	12.148
287	l25_1	5,158.050	0.000	0.000	0.000	5,144.539	Not Full	No	-0.331	13.511

ID 288 125_16	Rim Elevation (ft)	Base Flow (gpd)	Total Flow	Storm Flow	Grade	0, ,	Hydraulic	Surcharge Depth	Unfilled Depth
288 125 16		((10(1)	/ a.u.a. al \	/ aug. al \	(£4)	Status			
288 I I 125 16			(gpd)	(gpd)	(ft)		Jump	(ft)	(ft)
	5,176.000	0.000	0.000	0.000	5,143.214	Not Full	No	-0.326	32.786
289	5,153.000	177,776.573	545,615.645	0.000	5,140.804	Not Full	No	-1.016	12.196
290 125_18	5,120.000	0.000	0.000	0.000	5,106.908	Not Full	No	-0.992	13.092
291 125_19	5,101.320	139,158.668	443,575.993	0.000	5,092.918	Not Full	Yes	-0.582	8.402
292 125_2	5,192.000	249,907.586	727,588.947	0.000	5,178.892	Not Full	No	-0.274	13.108
293 125_20	5,100.300	0.000	0.000	0.000	5,091.239	Not Full	No	-0.581	9.061
294 125_21	5,104.180	0.000	0.000	0.000	5,086.426	Not Full	No	-0.724	17.754
295 125_22	5,091.630	0.000	0.000	0.000	5,079.393	Not Full	No	-0.887	12.237
296 125_23	5,065.480	148,924.744	469,843.275	0.000	5,053.612	Not Full	No	-0.618	11.868
297 125_24	5,058.000	0.000	0.000	0.000	5,046.189	Not Full	Yes	-0.711	11.811
298	5,060.930	0.000	0.000	0.000	5,045.017	Not Full	No	-0.713	15.913
299 125_26	5,061.820	154,272.902	484,229.122	0.000	5,043.576	Not Full	No	-1.004	18.244
300 125_27	5,053.670	0.000	0.000	0.000	5,040.531	Not Full	No	-0.839	13.139
301 125_28	5,057.640	0.000	0.000	0.000	5,039.010	Not Full	No	-0.740	18.630
302 125_29	5,053.000	155,809.381	488,338.226	0.000	5,037.463	Not Full	No	-1.187	15.537
303	5,183.000	0.000	0.000	0.000	5,169.985	Not Full	Yes	-0.415	13.015
304 125_30	5,029.050	127,316.112	411,721.225	0.000	5,019.223	Not Full	Yes	-0.667	9.827
305 125_31	5,046.550	0.000	0.000	0.000	5,016.349	Not Full	No	-0.671	30.201
306 125_32	5,046.000	0.000	0.000	0.000	5,015.643	Not Full	No	-0.667	30.357
307 125_33	5,050.000	0.000	0.000	0.000	5,015.012	Not Full	No	-0.668	34.988
308 125_34	5,033.000	0.000	0.000	0.000	5,013.353	Not Full	No	-0.667	19.647
309 125_35	5,033.180	0.000	0.000	0.000	5,011.522	Not Full	No	-0.848	21.658
310 125_36	5,024.780	0.000	0.000	0.000	5,007.683	Not Full	Yes	-0.707	17.097
311 125_4	5,181.940	171,387.295	528,957.028	0.000	5,168.912	Not Full	No	-0.488	13.028
312 125_5	5,180.000	0.000	0.000	0.000	5,166.914	Not Full	No	-0.486	13.086
313 125_6	5,176.000	0.000	0.000	0.000	5,163.927	Not Full	No	-0.473	12.073
314 125_7	5,172.980	0.000	0.000	0.000	5,160.618	Not Full	No	-0.472	12.362
315 125_8	5,171.000	0.000	0.000	0.000	5,158.112	Not Full	Yes	-0.538	12.888
316 125_9	5,168.930	316,012.201	886,952.981	0.000	5,155.926	Not Full	No	-0.654	13.004
317 KEF1 1	4,993.140	0.000	0.000	0.000	4,982.472	Not Full	No	-0.578	10.668
318 KEF1_10	4,994.650	6,479.998	24,481.431	0.000	4,982.857	Not Full	No	-0.893	11.793
319 KEF1_1/		0.000	0.000	0.000	4,987.630	Not Full	No	-1.000	4.830
320 KEF1_2		0.000	0.000	0.000	4,982.720	Not Full	No	-0.560	10.220
321 KEF1_2/	4,993.170	0.000	0.000	0.000	4,986.910	Not Full	No	-1.000	6.260
322 KEF1_3	4,992.980	0.000	0.000	0.000	4,982.782	Not Full	No	-0.628	10.198
323 KEF1_3/	4,992.130	0.000	0.000	0.000	4,986.450	Not Full	No	-1.000	5.680
324 KEF1_4		0.000	0.000	0.000	4,985.750	Not Full	No	-1.000	6.560
325 KEF1_5		0.000	0.000	0.000	4,985.470	Not Full	No	-1.000	6.350
326 KEF1_6		0.000	0.000	0.000	4,985.080	Not Full	No	-1.000	6.040
327 KEF1_7		0.000	0.000	0.000	4,984.100	Not Full	No	-1.000	8.180
328 KEF1_8		0.000	0.000	0.000	4,983.870	Not Full	No	-1.000	9.050

	., .,,	- MANHOLE I	Rim Elevation	Base Flow	Total Flow	Storm Flow	Grade		Hydraulic	Surcharge Depth	Unfilled Depth
		ID	(ft)	(gpd)	(gpd)	(gpd)	(ft)	Status	Jump	(ft)	(ft)
329		KEF1_80	4,993.540	0.000	0.000	0.000	4,982.039	Not Full	No	-0.591	11.501
330		KEF1_81	4,992.760	0.000	0.000	0.000	4,981.724	Not Full	No	-0.586	11.036
331		KEF1_82	4,990.810	0.000	0.000	0.000	4,981.023	Not Full	No	-0.557	9.787
332		KEF1_83	4,989.710	0.000	0.000	0.000	4,980.348	Not Full	No	-0.682	9.362
333		KEF1_9	4,994.310	0.000	0.000	0.000	4,983.190	Not Full	No	-1.000	11.120
334		KFF1_10	4,997.270	63,990.696	230,360.489	0.000	4,983.961	Not Full	No	-0.669	13.309
335		KFF1_11	4,998.630	0.000	0.000	0.000	4,984.070	Not Full	No	-1.000	14.560
336		KFF1_14	5,000.070	0.000	0.000	0.000	4,984.910	Not Full	No	-1.000	15.160
337		KFF1_15	5,000.120	0.000	0.000	0.000	4,986.020	Not Full	No	-1.000	14.100
338		KFF1_16	5,001.010	0.000	0.000	0.000	4,986.750	Not Full	No	-1.000	14.260
339		KFF1_9	4,995.240	0.000	0.000	0.000	4,983.352	Not Full	No	-0.688	11.888
340		LCFA_1	5,012.427	0.000	0.000	0.000	4,996.985	Not Full	Yes	-0.965	15.442
341		LCFA_10	5,023.387	0.000	0.000	0.000	5,010.599	Not Full	No	-0.435	12.788
342		LCFA_11	5,026.087	0.000	0.000	0.000	5,013.419	Not Full	No	-0.435	12.668
343		LCFA_12	5,027.167	0.000	0.000	0.000	5,014.425	Not Full	No	-0.418	12.742
344		LCFA_13	5,028.197	0.000	0.000	0.000	5,015.662	Not Full	No	-0.441	12.535
345		LCFA_14	5,030.217	0.000	0.000	0.000	5,017.406	Not Full	No	-0.427	12.811
346		LCFA_15	5,031.377	0.000	0.000	0.000	5,018.735	Not Full	No	-0.429	12.642
347		LCFA_16	5,033.227	0.000	0.000	0.000	5,020.413	Not Full	No	-0.451	12.814
348		LCFA_17	5,041.107	52,140.940	190,276.794	0.000	5,029.164	Not Full	No	-0.510	11.943
349		LCFA_3	5,013.587	0.000	0.000	0.000	5,002.042	Not Full	No	-0.451	11.545
350		LCFA_4	5,016.087	0.000	0.000	0.000	5,003.278	Not Full	No	-0.286	12.809
351		LCFA_5	5,016.697	11,339.996	42,841.424	0.000	5,004.671	Not Full	No	-0.293	12.026
352		LCFA_6	5,018.577	0.000	0.000	0.000	5,005.643	Not Full	Yes	-0.341	12.934
353		LCFA_7	5,018.577	0.000	0.000	0.000	5,006.616	Not Full	No	-0.368	11.961
354		LCFA_8	5,019.587	0.000	0.000	0.000	5,007.426	Not Full	No	-0.428	12.161
355		LCFA_9	5,020.547	0.000	0.000	0.000	5,008.077	Not Full	No	-0.417	12.470
356		LCFB_1	5,019.517	0.000	0.000	0.000	5,007.249	Not Full	Yes	-0.455	12.268
357		LCFB_2	5,020.547	0.000	0.000	0.000	5,008.248	Not Full	No	-0.475	12.299
358		LCFB_3	5,022.307	0.000	0.000	0.000	5,009.983	Not Full	No	-0.480	12.324
359		LCFB_4	5,023.587	32,130.708	121,054.937	0.000	5,010.917	Not Full	No	-0.486	12.670
360		NMS_1	5,190.130	0.000	0.000	0.000	5,180.150	Not Full	No	-0.623	9.980
361		NMS_10	5,211.030	0.000	0.000	0.000	5,203.003	Not Full	No	-0.600	8.027
362		NMS_11	5,214.550	0.000	0.000	0.000	5,207.306	Not Full	No	-0.497	7.244
363		NMS_12	5,217.140	0.000	0.000	0.000	5,210.727	Not Full	No	-0.476	6.413
364		NMS_13	5,223.610	0.000	0.000	0.000	5,214.127	Not Full	No	-0.476	9.483
365		NMS_14	5,225.100	0.000	0.000	0.000	5,215.216	Not Full	No	-0.487	9.884
366		NMS_15	5,226.430	0.000	0.000	0.000	5,216.705	Not Full	No	-0.498	9.725
367		NMS_16	5,233.130	0.000	0.000	0.000	5,219.661	Not Full	No	-0.462	13.469
368		NMS_17	5,241.740	0.000	0.000	0.000	5,226.419	Not Full	No	-0.554	15.321
369		NMS_18	5,250.320	0.000	0.000	0.000	5,237.545	Not Full	No	-0.588	12.775

		ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
370	П	NMS_19	5,252.800	0.000	0.000	0.000	5,240.971	Not Full	No	-0.582	11.829
371	Ħ	NMS 2	5,190.240	0.000	0.000	0.000	5,183.863	Not Full	No	-0.600	6.377
372	Ħ	NMS_20	5,251.790	170,099.936	525,599.802	0.000	5,242.236	Not Full	No	-0.497	9.554
373	Ħ	NMS_3	5,191.230	0.000	0.000	0.000	5,185.306	Not Full	No	-0.498	5.924
374	Ħ	NMS_4	5,195.030	0.000	0.000	0.000	5,188.206	Not Full	No	-0.497	6.824
375	Ħ	NMS_5	5,196.680	0.000	0.000	0.000	5,190.001	Not Full	No	-0.583	6.679
376	Ħ	NMS_6	5,198.380	0.000	0.000	0.000	5,191.901	Not Full	No	-0.582	6.479
377	Ħ	NMS_7	5,200.000	0.000	0.000	0.000	5,193.761	Not Full	No	-0.582	6.239
378	Ħ	NMS_8	5,203.910	0.000	0.000	0.000	5,198.046	Not Full	No	-0.497	5.864
379	П	NMS_9	5,210.370	0.000	0.000	0.000	5,201.642	Not Full	No	-0.481	8.728
380	П	OGF1_1	5,165.050	0.000	0.000	0.000	5,151.065	Not Full	No	-0.833	13.985
381		OGF1_17	5,150.610	0.000	0.000	0.000	5,138.985	Not Full	No	-0.833	11.625
382		OGF1_18	5,148.840	0.000	0.000	0.000	5,137.445	Not Full	No	-0.833	11.395
383		OGF1_2	5,160.050	0.000	0.000	0.000	5,146.865	Not Full	No	-0.833	13.185
384		OGF1_25	5,148.140	0.000	0.000	0.000	5,136.135	Not Full	No	-0.833	12.005
385		OGF1_3	5,159.350	0.000	0.000	0.000	5,146.225	Not Full	No	-0.833	13.125
386		OGF1_4	5,152.800	0.000	0.000	0.000	5,140.735	Not Full	No	-0.833	12.065
387		OGF1_5	5,150.890	0.000	0.000	0.000	5,139.645	Not Full	No	-0.833	11.245
388		OGF1_69	5,151.490	0.000	0.000	0.000	5,139.625	Not Full	Yes	-0.563	11.865
389		OGF1_70	5,150.690	0.000	0.000	0.000	5,138.978	Not Full	No	-0.560	11.712
390		OGF1_71	5,149.600	0.000	0.000	0.000	5,138.356	Not Full	No	-0.463	11.244
391		OGF1_72	5,148.590	0.000	0.000	0.000	5,137.876	Not Full	No	-0.602	10.714
392		OGF1_73	5,149.230	0.000	0.000	0.000	5,137.162	Not Full	Yes	-0.557	12.068
393		OGF1_74	5,148.230	0.000	0.000	0.000	5,135.956	Not Full	No	-0.603	12.274
394		OGF1_75	5,148.230	0.000	0.000	0.000	5,135.082	Not Full	No	-0.577	13.148
395		OGF2_29	5,177.635	0.000	0.000	0.000	5,163.791	Not Full	No	-0.551	13.844
396		OGF2_31	5,172.695	0.000	0.000	0.000	5,161.282	Not Full	No	-0.569	11.413
397		OGF2_32	5,167.395	0.000	0.000	0.000	5,155.855	Not Full	No	-0.567	11.540
398		OGF2_33	5,162.905	0.000	0.000	0.000	5,151.046	Not Full	No	-0.545	11.859
399		OGF2_34	5,162.905	0.000	0.000	0.000	5,149.336	Not Full	No	-0.545	13.569
400		OGF2_46	5,158.455	0.000	0.000	0.000	5,146.603	Not Full	No	-0.559	11.852
401		OGF2_49	5,156.745	0.000	0.000	0.000	5,144.612	Not Full	No	-0.550	12.133
402		OGF2_50	5,155.135	0.000	0.000	0.000	5,143.306	Not Full	Yes	-0.496	11.829
403		OGF2_65	5,153.045	53,082.700	193,532.460	0.000	5,142.980	Not Full	No	-0.519	10.065
404		OGF2_68	5,154.360	0.000	0.000	0.000	5,142.430	Not Full	No	-0.608	11.930
405		OTF1_101	5,021.153	0.000	0.000	0.000	5,004.293	Not Full	No	-1.000	16.860
406		OTF1_102	5,011.353	0.000	0.000	0.000	5,003.323	Not Full	No	-0.920	8.030
407		OTF1_103	5,010.453	0.000	0.000	0.000	5,003.323	Not Full	No	-0.660	7.130
408		OTF1_108	5,011.000	0.000	0.000	0.000	4,999.148	Not Full	No	-1.186	11.852
409		OTF1_30	5,023.393	0.000	0.000	0.000	5,016.723	Not Full	No	-0.667	6.670
410		OTF1_37	5,021.223	0.000	0.000	0.000	5,016.053	Not Full	No	-0.667	5.170

	// I/I - MANHOLE	Rim Elevation	Base Flow	Total Flow	Storm Flow	Grade		Hydraulic	Surcharge Depth	Unfilled Depth
	ID	(ft)	(gpd)	(gpd)	(gpd)	(ft)	Status	Jump	(ft)	(ft)
411	OTF1_43	5,019.833	69,484.294	246,573.487	0.000	5,014.653	Not Full	No	-0.347	5.180
412	OTF1_44	5,018.643	0.000	0.000	0.000	5,012.854	Not Full	No	-0.336	5.789
413	OTF1_46	5,021.543	0.000	0.000	0.000	5,015.263	Not Full	No	-0.833	6.280
414	OTF1_47	5,021.643	0.000	0.000	0.000	5,015.223	Not Full	No	-0.833	6.420
415	OTF1_48	5,019.783	0.000	0.000	0.000	5,013.303	Not Full	No	-0.833	6.480
416	OTF1_60A	5,011.220	0.000	0.000	0.000	4,993.361	Not Full	No	-1.329	17.859
417	OTF1_61A	5,011.010	0.000	0.000	0.000	4,993.009	Not Full	No	-1.361	18.001
418	OTF1_62	5,017.723	30,239.989	114,238.037	0.000	5,012.209	Not Full	No	-0.617	5.514
419	OTF1_64	5,015.763	0.000	0.000	0.000	5,010.974	Not Full	No	-0.623	4.789
420	OTF1_65	5,016.743	0.000	0.000	0.000	5,011.206	Not Full	No	-0.354	5.537
421	OTF1_80	5,013.043	0.000	0.000	0.000	5,009.178	Not Full	No	-0.351	3.865
422	OTF1_82	5,013.773	0.000	0.000	0.000	5,009.657	Not Full	No	-0.620	4.116
423	OTF1_87	5,013.123	23,598.711	89,150.366	0.000	5,008.537	Not Full	No	-0.559	4.586
424	OTF1_88	5,027.903	18,035.993	68,135.014	0.000	5,019.138	Not Full	No	-0.551	8.765
425	OTF1_89	5,022.873	0.000	0.000	0.000	5,017.141	Not Full	Yes	2.361	5.732
426	OTF1_90	5,023.493	0.000	0.000	0.000	5,016.611	Not Full	No	-0.509	6.882
427	OTF1_92	5,022.393	0.000	0.000	0.000	5,015.905	Not Full	No	-0.514	6.488
428	OTF1_93	5,021.323	0.000	0.000	0.000	5,015.789	Not Full	No	-0.531	5.534
429	OTF1_94	5,017.163	0.000	0.000	0.000	5,012.828	Not Full	No	-0.562	4.335
430	OTF1_95	5,012.943	31,616.628	119,278.726	0.000	5,008.921	Not Full	Yes	-0.399	4.022
431	OTF1_96	5,013.243	0.000	0.000	0.000	5,007.344	Not Full	No	-0.769	5.899
432	OTF1_97	5,012.803	0.000	0.000	0.000	5,006.977	Not Full	No	-0.636	5.826
433	OTF1_98	5,011.373	0.000	0.000	0.000	5,005.733	Not Full	No	-0.660	5.640
434	RMF1_114	5,083.790	0.000	0.000	0.000	5,069.174	Not Full	No	-0.716	14.616
435	RMF1_118	5,074.620	0.000	0.000	0.000	5,060.111	Not Full	No	-0.559	14.509
436	SCC_01	5,118.460	52,590.220	191,831.394	0.000	5,101.769	Not Full	No	-0.458	16.691
437	SCC_02	5,113.610	49,194.701	180,082.865	0.000	5,096.648	Not Full	No	-0.546	16.962
438	SCC_03	5,106.940	0.000	0.000	0.000	5,092.140	Not Full	No	-0.543	14.800
439	SCC_04	5,111.500	0.000	0.000	0.000	5,090.353	Not Full	No	-0.541	21.147
440	SCC_05	5,108.930	0.000	0.000	0.000	5,088.754	Not Full	No	-0.539	20.176
441	SCC_06	5,106.410	0.000	0.000	0.000	5,087.520	Not Full	No	-0.543	18.890
442	SCC_07	5,102.770	10,799.996	40,798.065	0.000	5,084.600	Not Full	No	-0.720	18.170
443	SCC_08	5,097.960	0.000	0.000	0.000	5,081.288	Not Full	No	-0.742	16.672
444	SCC_09	5,094.160	0.000	0.000	0.000	5,076.847	Not Full	No	-0.733	17.313
445	SCC_10	5,093.370	0.000	0.000	0.000	5,075.814	Not Full	Yes	-0.666	17.556
446	SCC_11	5,089.070	0.000	0.000	0.000	5,073.632	Not Full	No	-0.788	15.438
447	SCC_11A	5,087.810	559,439.789	1,436,782.652	0.000	5,066.019	Not Full	Yes	-0.381	21.791
448	SCC_12	5,087.290	0.000	0.000	0.000	5,065.527	Not Full	No	-0.383	21.763
449	SCC_13	5,085.400	0.000	0.000	0.000	5,064.580	Not Full	No	-0.380	20.820
450	SCC_14	5,081.740	0.000	0.000	0.000	5,063.387	Not Full	No	-0.383	18.353
451	SCC_15	5,079.780	0.000	0.000	0.000	5,062.188	Not Full	No	-0.382	17.592

		ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
452	П	SCC_16	5,077.060	0.000	0.000	0.000	5,060.966	Not Full	No .	-0.384	16.094
453	Ħ	SCC_17	5,074.870	0.000	0.000	0.000	5,059.737	Not Full	No	-0.383	15.133
454	Ħ	SCC_18	5,073.800	0.000	0.000	0.000	5,058.990	Not Full	No	-0.380	14.810
455	Ħ	SCC_19	5,072.830	0.000	0.000	0.000	5,057.827	Not Full	No	-0.383	15.003
456	Ħ	SCC_20	5,071.610	0.000	0.000	0.000	5,056.797	Not Full	No	-0.383	14.813
457	Ħ	SCC 21	5,069.850	0.000	0.000	0.000	5,056.293	Not Full	No	-0.237	13.557
458	Ħ	SUN_1	5,117.830	63,719.976	229,561.839	0.000	5,104.346	Not Full	No	-0.461	13.484
459	Ħ	SUN_10	5,081.060	0.000	0.000	0.000	5,069.148	Not Full	No	-0.479	11.912
460		SUN_11	5,071.850	0.000	0.000	0.000	5,059.234	Not Full	No	-0.512	12.616
461		SUN_12	5,054.840	0.000	0.000	0.000	5,042.367	Not Full	Yes	-0.370	12.473
462		SUN_13	5,053.120	0.000	0.000	0.000	5,040.457	Not Full	No	-0.430	12.663
463		SUN_14	5,050.790	0.000	0.000	0.000	5,036.920	Not Full	No	-0.477	13.870
464		SUN_15	5,035.740	0.000	0.000	0.000	5,029.313	Not Full	Yes	-0.354	6.427
465		SUN_2	5,109.460	0.000	0.000	0.000	5,097.573	Not Full	No	-0.453	11.887
466		SUN_3	5,103.540	0.000	0.000	0.000	5,091.692	Not Full	No	-0.415	11.848
467		SUN_4	5,096.140	0.000	0.000	0.000	5,088.460	Not Full	No	-0.397	7.680
468		SUN_5	5,099.970	0.000	0.000	0.000	5,087.242	Not Full	Yes	-0.374	12.728
469		SUN_6	5,104.710	0.000	0.000	0.000	5,085.592	Not Full	No	-0.375	19.118
470		SUN_7	5,112.510	0.000	0.000	0.000	5,084.342	Not Full	No	-0.374	28.168
471		SUN_8	5,094.800	0.000	0.000	0.000	5,082.893	Not Full	No	-0.474	11.907
472		SUN_9	5,087.680	0.000	0.000	0.000	5,076.777	Not Full	No	-0.469	10.903
473		TOE_2576	5,140.690	0.000	0.000	0.000	5,129.362	Not Full	No	-0.978	11.328
474		TOE_2577	5,137.370	0.000	0.000	0.000	5,127.460	Not Full	No	-1.100	9.910
475		TOE_2578	5,132.730	0.000	0.000	0.000	5,123.331	Not Full	No	-1.099	9.399
476		TOE_2579	5,129.120	0.000	0.000	0.000	5,118.924	Not Full	No	-1.046	10.196
477		TOE_2580	5,123.350	0.000	0.000	0.000	5,113.234	Not Full	No	-0.956	10.116
478		TOE_2581	5,125.960	0.000	0.000	0.000	5,111.200	Not Full	No	-0.940	14.760
479		TOE_2582	5,126.690	0.000	0.000	0.000	5,109.415	Not Full	No	-0.945	17.275
480		TOE_2583	5,127.830	0.000	0.000	0.000	5,107.547	Not Full	No	-0.913	20.283
481		TOE_2584	5,127.830	0.000	0.000	0.000	5,105.857	Not Full	No	-0.923	21.973
482		TOE_2585	5,078.040	0.000	0.000	0.000	5,064.277	Not Full	No	-1.043	13.763
483		TOE_2586	5,048.720	0.000	0.000	0.000	5,037.137	Not Full	No	-0.983	11.583
484		TOE_2587	5,051.780	0.000	0.000	0.000	5,035.006	Not Full	No	-1.094	16.774
485		TOE_2588	5,042.550	0.000	0.000	0.000	5,024.618	Not Full	No	-1.112	17.932
486		TOE_2589	5,027.940	57,509.258	208,847.764	0.000	5,012.438	Not Full	No	-1.092	15.502
487		TOE_2590	5,029.380	0.000	0.000	0.000	5,009.459	Not Full	No	-1.181	19.921
488		TOE_2591	5,026.905	0.000	0.000	0.000	5,008.785	Not Full	Yes	-1.140	18.120
489		TOE_2592	5,109.510	0.000	0.000	0.000	5,097.704	Not Full	No	-0.433	11.806
490		TOE_2593	5,110.100	0.000	0.000	0.000	5,097.273	Not Full	No	-0.484	12.827
491		TOE_2594	5,034.380	0.000	0.000	0.000	5,016.398	Not Full	No	-0.732	17.982
492		TOE_2595	5,027.210	0.000	0.000	0.000	5,015.618	Not Full	No	-0.662	11.592

	ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
493	TOE_2596	5,030.630	0.000	0.000	0.000	5,014.836	Not Full	No	-2.074	15.794
494	TOE_2597	5,029.850	0.000	0.000	0.000	5,014.497	Not Full	No	-2.013	15.353
495	TOE_2598	5,030.780	0.000	0.000	0.000	5,013.901	Not Full	No	-0.939	16.879
496	TOE_2609	5,049.595	0.000	0.000	0.000	5,039.762	Not Full	Yes	-0.903	9.833
497	TOE_2610	5,049.965	0.000	0.000	0.000	5,040.687	Not Full	No	-1.128	9.278
498	TOE_2612	5,052.325	0.000	0.000	0.000	5,042.841	Not Full	No	-1.134	9.484
499	TOE_2615	5,011.000	55,886.379	203,231.962	0.000	4,995.177	Not Full	Yes	-0.948	15.823
500	TOE_2619	5,011.075	0.000	0.000	0.000	4,994.432	Not Full	No	-1.093	16.643
501	TOE_2620	5,141.225	0.000	0.000	0.000	5,129.385	Not Full	Yes	-0.740	11.840
502	TOE_2621	5,148.225	0.000	0.000	0.000	5,131.907	Not Full	No	-0.808	16.318
503	TOE_2622	5,148.225	0.000	0.000	0.000	5,133.820	Not Full	No	-0.755	14.405
504	TOE_2623	5,158.225	0.000	0.000	0.000	5,144.065	Not Full	No	-0.833	14.160
505	TOE_2624	5,168.225	0.000	0.000	0.000	5,154.505	Not Full	No	-0.833	13.720
506	TOE_2625	5,173.225	0.000	0.000	0.000	5,160.575	Not Full	No	-0.833	12.650
507	TOE_2626	5,185.225	15,390.714	58,141.418	0.000	5,168.596	Not Full	No	-0.576	16.629
508	TOE_2628	5,083.085	0.000	0.000	0.000	5,068.816	Not Full	Yes	-1.019	14.269
509	TOE_2629	5,085.095	0.000	0.000	0.000	5,070.479	Not Full	No	-0.796	14.616
510	TOE_2630	5,088.805	0.000	0.000	0.000	5,074.502	Not Full	Yes	-0.663	14.303
511	TOE_2631	5,095.275	48,599.982	178,027.133	0.000	5,076.092	Not Full	No	-0.793	19.183
512	TOE_2635	5,080.000	0.000	0.000	0.000	5,072.240	Not Full	No	-0.833	7.760
513	TOE_2636	5,085.000	0.000	0.000	0.000	5,071.110	Not Full	No	-0.833	13.890
514	TOE_2637	5,085.000	0.000	0.000	0.000	5,072.799	Not Full	No	-0.711	12.201
515	TOE_2638	5,085.000	0.000	0.000	0.000	5,071.676	Not Full	No	-0.664	13.324
516	TOE_2639	5,085.000	0.000	0.000	0.000	5,070.918	Not Full	No	-0.652	14.082
517	TOE_2640	5,091.070	0.000	0.000	0.000	5,077.278	Not Full	No	-0.682	13.792
518	TOE_2646	5,212.890	0.000	0.000	0.000	5,202.616	Not Full	No	-0.261	10.274
519	TOE_2647	5,214.610	0.000	0.000	0.000	5,204.198	Not Full	Yes	-0.379	10.412
520	TOE_2648	5,057.225	0.000	0.000	0.000	5,037.387	Not Full	No	-0.548	19.838
521	TOE_2649	5,058.225	0.000	0.000	0.000	5,038.062	Not Full	No	-0.553	20.163
522	TOE_2650	5,051.225	35,572.307	132,960.461	0.000	5,035.496	Not Full	No	-0.799	15.729
523	TOE_2651	5,033.085	0.000	0.000	0.000	5,017.861	Not Full	Yes	-0.564	15.224
524	TOE_2652	5,031.225	0.000	0.000	0.000	5,017.822	Not Full	No	-0.533	13.403
525	TOE_2653	5,048.625	0.000	0.000	0.000	5,016.254	Not Full	No	-0.531	32.371
526	TOE_2654	5,029.225	37,146.226	138,404.914	0.000	5,014.432	Not Full	No	-0.713	14.793
527	TOE_2655	5,028.225	0.000	0.000	0.000	5,010.417	Not Full	Yes	-0.813	17.808
528	TOE_2656	5,040.685	0.000	0.000	0.000	5,028.136	Not Full	No	-0.839	12.549
529	TOE_2657	5,072.520	122,214.194	397,758.275	0.000	5,059.013	Not Full	No	-0.373	13.507
530	TOE_2659	5,069.950	0.000	0.000	0.000	5,056.147	Not Full	No	-0.370	13.803
531	TOE_2660	5,063.730	0.000	0.000	0.000	5,051.347	Not Full	No	-0.349	12.383
532	TOE_2661	5,060.080	0.000	0.000	0.000	5,047.998	Not Full	No	-0.348	12.082
533	TOE_2662	5,055.000	0.000	0.000	0.000	5,041.478	Not Full	No	-0.757	13.522

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		ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
534		TOE 2663	5,059.350	0.000	0.000	0.000	5,046.875	Not Full	No	-0.372	12.475
535	H	TOE 2664	5,051.225	0.000	0.000	0.000	5,039.015	Not Full	Yes	-0.560	12.210
536	H	TOE 2673	5,142.740	0.000	0.000	0.000	5,127.342	Not Full	No	-0.531	15.398
537	H	TOE 2710	5,188.970	130,679.951	420,769.426	0.000	5,172.059	Not Full	Yes	0.035	16.911
538	H	TOE 2711	5,175.840	0.000	0.000	0.000	5,168.662	Not Full	No	-0.222	7.178
539	H	TOE 2712	5,183.520	0.000	0.000	0.000	5,171.281	Not Full	No	0.057	12.239
540	H	TOE 2713	5,179.770	0.000	0.000	0.000	5,170.734	Not Full	No	0.040	9.036
541	H	TOE 2714	5,179.540	0.000	0.000	0.000	5,170.347	Not Full	No	0.094	9.193
542	Ħ	TOE 2715	5,171.960	0.000	0.000	0.000	5,168.093	Not Full	No	0.270	3.867
543	Ħ	TOE 2716	5,173.770	0.000	0.000	0.000	5,167.343	Not Full	No	0.060	6.427
544	Ħ	TOE 2717	5,171.760	0.000	0.000	0.000	5,166.377	Not Full	No	-0.416	5.383
545	Ħ	TOE 2718	5,169.220	0.000	0.000	0.000	5,160.124	Not Full	Yes	0.041	9.096
546		TOE 2719	5,171.870	0.000	0.000	0.000	5,157.479	Not Full	No	-0.325	14.391
547	Ħ	TOE 2720	5,162.710	0.000	0.000	0.000	5,153.896	Not Full	Yes	0.053	8.814
548	Ħ	TOE 2721	5,160.580	0.000	0.000	0.000	5,151.450	Not Full	No	-0.463	9.130
549		TOE_2722	5,153.520	0.000	0.000	0.000	5,144.532	Not Full	No	-0.461	8.988
550		TOE_2723	5,149.910	0.000	0.000	0.000	5,140.839	Not Full	No	-0.475	9.071
551		TOE_2724	5,137.860	0.000	0.000	0.000	5,129.345	Not Full	Yes	-0.268	8.515
552		TOE_2725	5,133.820	0.000	0.000	0.000	5,126.488	Not Full	No	-0.286	7.332
553		TOE_2726	5,130.690	0.000	0.000	0.000	5,123.112	Not Full	No	-0.462	7.578
554		TOE_2727	5,121.990	0.000	0.000	0.000	5,112.801	Not Full	No	-0.522	9.189
555		TOE_2728	5,115.430	0.000	0.000	0.000	5,104.630	Not Full	No	-0.514	10.800
556		TOE_2729	5,114.600	0.000	0.000	0.000	5,101.928	Not Full	No	-0.455	12.672
557		TOE_2730	5,107.960	0.000	0.000	0.000	5,095.398	Not Full	No	-0.335	12.562
558		TOE_2731	5,101.300	0.000	0.000	0.000	5,092.499	Not Full	No	-0.418	8.801
559		TOE_2732	5,104.000	0.000	0.000	0.000	5,094.359	Not Full	No	-0.328	9.641
560		TOE_2733	5,112.400	0.000	0.000	0.000	5,095.640	Not Full	Yes	-0.337	16.760
561		TOE_2734	5,010.600	0.000	0.000	0.000	4,998.557	Not Full	No	-1.468	12.043
562		TOE_2735	5,014.525	0.000	0.000	0.000	4,999.509	Not Full	No	-1.116	15.016
563		TOE_2736	5,017.825	0.000	0.000	0.000	5,000.451	Not Full	No	-1.074	17.374
564		TOE_2737	5,023.625	0.000	0.000	0.000	5,003.223	Not Full	No	-1.102	20.402
565		TOE_2738	5,023.325	0.000	0.000	0.000	5,004.171	Not Full	No	-0.954	19.154
566		TOE_2739	5,020.425	0.000	0.000	0.000	5,005.156	Not Full	No	-1.069	15.269
567		TOE_2740	5,022.425	0.000	0.000	0.000	5,006.199	Not Full	No	-1.026	16.226
568		TOE_2741	5,025.425	0.000	0.000	0.000	5,007.159	Not Full	No	-0.966	18.266
569		TOE_2742	5,025.825	0.000	0.000	0.000	5,007.435	Not Full	No	-1.090	18.390
570		TOE_2743	5,026.525	0.000	0.000	0.000	5,007.971	Not Full	No	-1.254	18.554
571		TOE_2744	5,029.425	0.000	0.000	0.000	5,010.266	Not Full	Yes	0.241	19.159
572		TOE_2745	5,028.225	0.000	0.000	0.000	5,010.408	Not Full	No	-0.267	17.817
573		TOE_2746	5,027.525	0.000	0.000	0.000	5,014.832	Not Full	No	-0.993	12.693
574		TOE_2747	5,053.435	99,992.122	335,577.315	0.000	5,038.712	Not Full	No	-1.013	14.723

	, ,,,	MANHOLE I	Rim Elevation	Base Flow	Total Flow	Storm Flow	Grade		Hydraulic	Surcharge Depth	Unfilled Depth
		ID	(ft)	(gpd)	(gpd)	(gpd)	(ft)	Status	Jump	(ft)	(ft)
575 [		TOE_2748	5,094.000	0.000	0.000	0.000	5,081.335	Not Full	No	-0.415	12.665
576		TOE_2749	5,090.550	0.000	0.000	0.000	5,078.115	Not Full	No	-0.385	12.435
577		TOE_2750	5,087.000	0.000	0.000	0.000	5,074.234	Not Full	No	-0.516	12.766
578		TOE_2751	5,081.000	0.000	0.000	0.000	5,068.804	Not Full	No	-0.776	12.196
579 [		TOE_2752	5,075.220	0.000	0.000	0.000	5,062.997	Not Full	No	-0.723	12.223
580 [		TOE_2753	5,069.870	0.000	0.000	0.000	5,058.899	Not Full	No	-0.741	10.971
581		TOE_2754	5,066.730	0.000	0.000	0.000	5,054.905	Not Full	No	-0.685	11.825
582 [		TOE_2755	5,064.690	0.000	0.000	0.000	5,053.752	Not Full	No	-0.718	10.938
583 [		TOE_2756	5,059.960	0.000	0.000	0.000	5,047.166	Not Full	No	-0.714	12.794
584 [		TOE_2757	5,058.890	0.000	0.000	0.000	5,046.363	Not Full	No	-0.767	12.527
585 [		TOE_2758	5,033.130	0.000	0.000	0.000	5,020.102	Not Full	No	-0.688	13.028
586 [		TOE_2759	5,062.630	36,509.746	136,204.157	0.000	5,050.649	Not Full	No	-0.721	11.981
587		TOE_2760	5,053.320	0.000	0.000	0.000	5,039.990	Not Full	No	-0.800	13.330
588 [		TOE_2761	5,030.160	0.000	0.000	0.000	5,019.228	Not Full	No	-0.842	10.932
589 [		TOE_2762	5,029.520	0.000	0.000	0.000	5,019.124	Not Full	No	-0.696	10.396
590 [		TOE_2763	5,031.630	0.000	0.000	0.000	5,017.097	Not Full	No	-0.733	14.533
591 [		TOE_2764	5,030.240	0.000	0.000	0.000	5,018.185	Not Full	No	-0.755	12.055
592 [		TOE_2765	5,031.520	0.000	0.000	0.000	5,016.219	Not Full	No	-0.631	15.301
593 [		TOE_2766	5,029.380	0.000	0.000	0.000	5,015.907	Not Full	No	-0.713	13.473
594 [		TOE_2767	5,028.000	0.000	0.000	0.000	5,015.363	Not Full	No	-0.907	12.637
595 [		TOE_2768	5,027.030	0.000	0.000	0.000	5,013.395	Not Full	No	-1.035	13.635
596 [		TOE_2769	5,021.960	0.000	0.000	0.000	5,009.316	Not Full	No	-0.744	12.644
597 [		TOE_2770	5,018.710	0.000	0.000	0.000	5,008.221	Not Full	No	-0.739	10.489
598 [		TOE_2771	5,019.010	3,779.999	14,281.915	0.000	5,007.173	Not Full	No	-0.917	11.837
599 [		TOE_2772	5,020.000	0.000	0.000	0.000	5,006.766	Not Full	Yes	-0.764	13.234
600 [		TOE_2773	5,019.000	0.000	0.000	0.000	5,006.152	Not Full	No	-0.498	12.848
601		TOE_2774	5,017.000	0.000	0.000	0.000	5,006.003	Not Full	No	0.353	10.997
602 [		TOE_2775	5,015.840	0.000	0.000	0.000	5,005.149	Not Full	No	-0.651	10.691
603 [		TOE_2776	5,014.980	0.000	0.000	0.000	5,004.512	Not Full	No	-0.528	10.468
604		TOE_2777	5,012.960	0.000	0.000	0.000	5,003.976	Not Full	No	-0.554	8.984
605 [		TOE_2778	5,012.130	0.000	0.000	0.000	5,003.509	Not Full	No	-0.531	8.621
606		TOE_2779	5,009.900	0.000	0.000	0.000	5,003.354	Not Full	No	-0.226	6.546
607		TOE_2780	5,011.970	0.000	0.000	0.000	5,003.083	Not Full	No	-0.027	8.887
608		TOE_2781	5,011.660	0.000	0.000	0.000	5,002.913	Not Full	No	0.113	8.747
609 [		TOE_2782	5,011.310	0.000	0.000	0.000	5,002.066	Not Full	No	-0.874	9.244
610		TOE_2783	5,008.830	0.000	0.000	0.000	5,001.836	Not Full	No	-0.724	6.994
611		TOE_2784	5,006.790	0.000	0.000	0.000	5,000.734	Not Full	No	-0.816	6.056
612		TOE_2785	5,012.690	0.000	0.000	0.000	5,000.605	Not Full	No	-0.815	12.085
613		TOE_2786	5,008.290	99,779.002	334,983.874	0.000	5,001.710	Not Full	No	0.070	6.580
614		TOE_2787	5,016.850	0.000	0.000	0.000	5,000.306	Not Full	No	0.076	16.544
615		TOE_2788	5,014.290	0.000	0.000	0.000	5,000.465	Not Full	No	-0.675	13.825

	., .,.	ID	Rim Elevation	Base Flow	Total Flow	Storm Flow	Grade	Status	Hydraulic	Surcharge Depth	Unfilled Depth
		טו	(ft)	(gpd)	(gpd)	(gpd)	(ft)	Status	Jump	(ft)	(ft)
616		TOE_2789	5,007.240	0.000	0.000	0.000	4,996.146	Not Full	No	-1.004	11.094
617		TOE_2790	5,012.380	48,539.502	177,817.492	0.000	4,996.371	Not Full	No	-0.709	16.009
618		TOE_2791	5,004.080	0.000	0.000	0.000	4,995.716	Not Full	No	-0.984	8.364
619		TOE_2792	5,003.840	0.000	0.000	0.000	4,995.441	Not Full	No	-1.109	8.399
620		TOE_2793	5,008.860	0.000	0.000	0.000	4,994.814	Not Full	No	-1.176	14.046
621		TOE_2794	5,009.670	0.000	0.000	0.000	4,994.261	Not Full	No	-1.059	15.409
622		TOE_2795	5,011.010	0.000	0.000	0.000	4,993.944	Not Full	No	-0.876	17.066
623		TOE_2798	5,011.503	70,777.413	250,387.927	0.000	5,000.997	Not Full	Yes	-0.436	10.506
624		TOE_2799	5,007.780	0.000	0.000	0.000	5,000.238	Not Full	No	-0.848	7.542
625		TOE_2800	5,010.450	0.000	0.000	0.000	4,992.636	Not Full	No	-2.264	17.814
626		TOE_2801	5,055.525	0.000	0.000	0.000	5,045.303	Not Full	No	-1.152	10.222
627		TOE_2802	5,061.985	0.000	0.000	0.000	5,047.257	Not Full	No	-1.008	14.728
628		TOE_2803	5,065.905	0.000	0.000	0.000	5,048.168	Not Full	No	-0.987	17.737
629		TOE_2804	5,067.345	0.000	0.000	0.000	5,049.163	Not Full	No	-0.982	18.182
630		TOE_2805	5,093.920	0.000	0.000	0.000	5,081.851	Not Full	No	-1.059	12.069
631		TOE_2806	5,098.000	0.000	0.000	0.000	5,085.167	Not Full	No	-1.073	12.833
632		TOE_2807	5,096.900	0.000	0.000	0.000	5,087.421	Not Full	No	-0.959	9.479
633		TOE_2808	5,105.750	0.000	0.000	0.000	5,094.810	Not Full	No	-1.070	10.940
634		TOE_2809	5,152.350	0.000	0.000	0.000	5,134.008	Not Full	No	-0.575	18.342
635		TOE_2817	5,046.820	0.000	0.000	0.000	5,031.816	Not Full	No	-0.834	15.004
636		TOE_2818	5,034.360	0.000	0.000	0.000	5,021.109	Not Full	Yes	-0.831	13.251
637		TOE_2819	5,101.240	0.000	0.000	0.000	5,090.294	Not Full	No	-1.006	10.946
638		TOE_2825	5,011.300	0.000	0.000	0.000	4,991.678	Not Full	No	-1.822	19.622
639		TOE_2826	5,010.820	0.000	0.000	0.000	4,991.052	Not Full	Yes	-1.398	19.768
640		TOE_2827	5,010.790	0.000	0.000	0.000	4,990.359	Not Full	No	-1.681	20.431
641		TOE_2828	5,009.220	0.000	0.000	0.000	4,989.505	Not Full	No	-1.365	19.715
642		TOE_2829	5,007.990	0.000	0.000	0.000	4,988.152	Not Full	Yes	-1.668	19.838
643		TOE_2830	5,007.630	0.000	0.000	0.000	4,988.008	Not Full	No	-1.422	19.622
644		TOE_2831	5,006.030	0.000	0.000	0.000	4,987.532	Not Full	No	-1.368	18.498
645		TOE_2832	5,004.210	0.000	0.000	0.000	4,987.122	Not Full	No	-1.588	17.088
646		TOE_2833	5,004.410	0.000	0.000	0.000	4,986.871	Not Full	No	-1.409	17.539
647		TOE_2834	5,004.240	0.000	0.000	0.000	4,985.888	Not Full	No	-1.552	18.352
648		TOE_2835	5,001.480	0.000	0.000	0.000	4,984.905	Not Full	No	-1.495	16.575
649		TOE_2836	5,000.540	0.000	0.000	0.000	4,984.026	Not Full	No	-1.434	16.514
650		TOE_2837	5,000.330	0.000	0.000	0.000	4,983.593	Not Full	No	-1.077	16.737
651		TOE_2838	5,005.660	0.000	0.000	0.000	4,982.413	Not Full	No	-1.367	23.247
652		TOE_2839	5,002.590	0.000	0.000	0.000	4,982.924	Not Full	No	-1.386	19.666
653		TOE_2840	5,006.110	0.000	0.000	0.000	4,981.739	Not Full	No	-1.521	24.371
654		TOE_2841	5,002.460	0.000	0.000	0.000	4,980.883	Not Full	No	-1.727	21.577
655		TOE_2842	5,002.920	0.000	0.000	0.000	4,979.957	Not Full	Yes	-1.653	22.963
656		TOE_2843	5,000.380	0.000	0.000	0.000	4,980.474	Not Full	No	-1.896	19.906

		ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
657		TOE_2844	4,994.190	0.000	0.000	0.000	4,978.538	Not Full	No	-1.782	15.652
658		TOE_2845	4,993.980	0.000	0.000	0.000	4,978.529	Not Full	Yes	-1.451	15.451
659		TOE_2846	4,991.150	0.000	0.000	0.000	4,977.979	Not Full	No	-1.521	13.171
660		TOE_2847	4,990.880	0.000	0.000	0.000	4,977.066	Not Full	No	-1.804	13.814
661		TOE_2848	4,990.370	0.000	0.000	0.000	4,976.530	Not Full	No	-1.830	13.840
662		TOE_2849	4,990.000	0.000	0.000	0.000	4,973.948	Not Full	No	-2.032	16.052
663		TOE_2850	4,988.020	0.000	0.000	0.000	4,969.801	Not Full	No	-2.009	18.219
664		TOE_2851	4,987.060	0.000	0.000	0.000	4,967.609	Not Full	No	-1.801	19.451
665		TOE_2852	4,985.500	0.000	0.000	0.000	4,967.333	Not Full	Yes	-1.407	18.167
666		TOE_2853	4,986.910	0.000	0.000	0.000	4,967.365	Not Full	No	-1.715	19.545
667		TOE_2854	4,987.460	0.000	0.000	0.000	4,970.113	Not Full	No	-0.637	17.347
668		TOE_2855	4,986.200	0.000	0.000	0.000	4,971.118	Not Full	No	-0.563	15.083
669		TOE_2856	4,988.050	0.000	0.000	0.000	4,971.876	Not Full	No	-0.604	16.174
670		TOE_2857	4,987.820	0.000	0.000	0.000	4,972.240	Not Full	Yes	-0.610	15.580
671		TOE_2858	4,988.840	0.000	0.000	0.000	4,975.910	Not Full	No	-0.720	12.930
672		TOE_2859	4,989.490	0.000	0.000	0.000	4,977.900	Not Full	Yes	-0.650	11.590
673		TOE_2860	4,985.430	0.000	0.000	0.000	4,966.570	Not Full	No	-1.350	18.860
674		TOE_2861	4,983.250	0.000	0.000	0.000	4,965.555	Not Full	No	-1.625	17.695
675		TOE_2862	4,982.380	0.000	0.000	0.000	4,965.522	Not Full	Yes	-1.188	16.858
676		TOE_2863	4,982.420	0.000	0.000	0.000	4,964.867	Not Full	No	-1.543	17.553
677		TOE_2864	4,980.720	0.000	0.000	0.000	4,964.042	Not Full	No	-1.668	16.678
678		TOE_2865	4,981.960	0.000	0.000	0.000	4,963.849	Not Full	No	-1.361	18.111
679		TOE_2866	4,982.300	0.000	0.000	0.000	4,963.307	Not Full	No	-1.363	18.993
680		TOE_2867	4,984.250	31,319.988	118,251.580	0.000	4,962.433	Not Full	No	-1.667	21.817
681		TOE_2868	4,980.960	0.000	0.000	0.000	4,961.350	Not Full	No	-1.440	19.610
682		TOE_2869	4,978.450	0.000	0.000	0.000	4,960.504	Not Full	No	-1.386	17.946
683		TOE_2870	4,976.690	0.000	0.000	0.000	4,959.692	Not Full	No	-1.408	16.998
684		TOE_2871	4,974.820	0.000	0.000	0.000	4,958.861	Not Full	No	-1.349	15.959
685	Ш	TOE_2872	4,973.300	0.000	0.000	0.000	4,958.008	Not Full	No	-1.472	15.292
686		TOE_2873	4,970.750	0.000	0.000	0.000	4,957.401	Not Full	No	-1.239	13.349
687		TOE_2874	4,969.570	0.000	0.000	0.000	4,956.991	Not Full	No	-1.459	12.579
688	$\Box$	TOE_2875	4,967.820	0.000	0.000	0.000	4,956.556	Not Full	No	-1.534	11.264
689	$\Box$	TOE_2876	4,970.850	0.000	0.000	0.000	4,956.216	Not Full	No	-1.474	14.634
690	Ц	TOE_2877	4,969.020	0.000	0.000	0.000	4,955.590	Not Full	No	-1.350	13.430
691	$\Box$	TOE_2878	4,975.470	0.000	0.000	0.000	4,954.910	Not Full	No	-1.400	20.560
692		TOE_2879	4,993.130	0.000	0.000	0.000	4,954.198	Not Full	No	-1.342	38.932
693	$\Box$	TOE_2880	4,992.470	0.000	0.000	0.000	4,953.756	Not Full	No	-1.644	38.714
694	$\Box$	TOE_2881	4,986.390	0.000	0.000	0.000	4,953.386	Not Full	No	-1.334	33.004
695		TOE_2882	4,983.690	78,299.971	272,586.323	0.000	4,952.940	Not Full	No	-1.380	30.750
696	$\Box$	TOE_2883	4,977.290	0.000	0.000	0.000	4,952.550	Not Full	No	-1.420	24.740
697		TOE_2884	4,973.860	0.000	0.000	0.000	4,951.658	Not Full	No	-1.402	22.202

DOOT	V/ I/I	- MANHOLE I				_	_			_	
		ID	Rim Elevation	Base Flow	Total Flow	Storm Flow	Grade	Status	Hydraulic	Surcharge Depth	Unfilled Depth
		TOF 0005	(ft)	(gpd)	(gpd)	(gpd)	(ft)	N = 11	Jump	(ft)	(ft)
698	넴	TOE_2885	4,966.950	0.000	0.000	0.000	4,950.721	Not Full	No	-1.529	16.229
699	넴	TOE_2886	4,962.980	0.000	0.000	0.000	4,949.961	Not Full	Yes	-1.419	13.019
700	븨	TOE_2887	4,963.360	0.000	0.000	0.000	4,949.249	Not Full	No	-1.531	14.111
701	븨	TOE_2888	4,965.190	0.000	0.000	0.000	4,948.486	Not Full	No	-1.074	16.704
702	Ш	TOE_2889	4,956.350	48,854.862	178,909.254	0.000	4,941.181	Not Full	No	-1.589	15.169
703	Ш	TOE_2890	4,957.260	0.000	0.000	0.000	4,940.811	Not Full	No	-1.549	16.449
704		TOE_2891	4,956.430	0.000	0.000	0.000	4,939.614	Not Full	No	-1.726	16.816
705		TOE_2892	4,952.720	0.000	0.000	0.000	4,939.579	Not Full	Yes	-1.231	13.141
706		TOE_2893	4,951.610	0.000	0.000	0.000	4,938.607	Not Full	No	-1.453	13.003
707		TOE_2894	4,950.110	0.000	0.000	0.000	4,937.691	Not Full	No	-1.369	12.419
708		TOE_2895	4,948.680	0.000	0.000	0.000	4,936.679	Not Full	No	-1.391	12.001
709		TOE_2896	4,945.630	0.000	0.000	0.000	4,935.945	Not Full	No	-1.235	9.685
710		TOE_2897	4,944.050	0.000	0.000	0.000	4,934.707	Not Full	No	-1.763	9.343
711		TOE_2898	4,942.250	0.000	0.000	0.000	4,933.012	Not Full	Yes	-1.298	9.238
712		TOE_2899	4,941.010	0.000	0.000	0.000	4,932.150	Not Full	No	-1.450	8.860
713		TOE_2900	4,939.280	0.000	0.000	0.000	4,931.156	Not Full	No	-1.584	8.124
714		TOE_2901	4,939.080	0.000	0.000	0.000	4,931.073	Not Full	No	-1.457	8.007
715		TOE_2902	4,941.290	0.000	0.000	0.000	4,930.319	Not Full	No	-1.391	10.971
716		TOE 2903	4,936.850	0.000	0.000	0.000	4,930.142	Not Full	No	-0.548	6.708
717		TOE_2904	4,934.060	158,011.141	494,079.758	0.000	4,929.874	Not Full	No	0.004	4.186
718	Ħ	TOE 2905	5,019.625	0.000	0.000	0.000	5,002.252	Not Full	No	-0.773	17.373
719	Ħ	TOE 2906	5,019.725	0.000	0.000	0.000	5,001.369	Not Full	No	-1.056	18.356
720	Ħ	TOE 2914	5,023.740	0.000	0.000	0.000	5,009.940	Not Full	Yes	-0.740	13.800
721	Ħ	TOE 2915	5,115.200	0.000	0.000	0.000	5,100.412	Not Full	No	-0.454	14.788
722	Ħ	TOE 2916	5,116.100	0.000	0.000	0.000	5,103.374	Not Full	No	-0.493	12.726
723	Ħ	TOE 2917	5,127.100	60,073.897	217,719.232	0.000	5,116.969	Not Full	No	-0.498	10.131
724	Ħ	TOE 2920	4,988.020	0.000	0.000	0.000	4,970.475	Not Full	No	-2.015	17.545
725	Ħ	TOE 2921	5,009.220	0.000	0.000	0.000	4,988.809	Not Full	No	-1.721	20.411
726	Ħ	TOE 2941	5,101.560	0.000	0.000	0.000	5,083.587	Not Full	No	-0.713	17.973
727	Ħ	TOE 2942	5,095.220	0.000	0.000	0.000	5,079.762	Not Full	No	-0.768	15.458
728	Ħ	TOE 2943	5,086.380	0.000	0.000	0.000	5,070.416	Not Full	No	-0.764	15.964
729	Ħ	TOE 2944	5,080.970	213,903.279	637,982.333	0.000	5,057.838	Not Full	Yes	-0.682	23.132
730	Ħ	TOE 2945	5,071.410	0.000	0.000	0.000	5,057.348	Not Full	No	-0.572	14.062
731	Ħ	TOE 2946	5,070.940	0.000	0.000	0.000	5,056.656	Not Full	No	-0.624	14.284
732	Ħ	TOE_2947	5,070.110	0.000	0.000	0.000	5,056.262	Not Full	No	-0.448	13.848
733	Ħ	TOE 2948	5,070.560	0.000	0.000	0.000	5,056.155	Not Full	No	-0.305	14.405
734	Ħ	TOE_2949	5,067.830	0.000	0.000	0.000	5,055.539	Not Full	No	-0.431	12.291
735	Ħ	TOE_2950	4,930.000	0.000	0.000	0.000	4,928.551	Not Full	No	-0.579	1.449
736	Ħ	TOE_2951	4,934.060	0.000	0.000	0.000	4,929.764	Not Full	No	0.014	4.296
737	Ħ	TOE_2960	5,099.000	0.000	0.000	0.000	5,087.475	Not Full	No	-0.485	11.525
738	H	TOE_2962	5,098.360	0.000	0.000	0.000	5,088.348	Not Full	Yes	0.008	10.012
730		10L_2902	0,000.000	0.000	0.000	0.000	0,000.040	NOCTUI	1 63	0.000	10.012

	•, .,.	- MANHOLE I	Rim Elevation	Base Flow	Total Flow	Storm Flow	Grade		Hydraulic	Surcharge Depth	Unfilled Depth
		ID	(ft)	(gpd)	(gpd)	(gpd)	(ft)	Status	Jump	(ft)	(ft)
739		TOE_2964	5,098.200	21,369.592	80,730.690	0.000	5,087.484	Not Full	No	-0.716	10.716
740		TOE_2965	5,099.700	0.000	0.000	0.000	5,088.916	Not Full	Yes	-0.584	10.784
741		TOE_2966	5,104.500	0.000	0.000	0.000	5,096.057	Not Full	No	-0.743	8.443
742		TOE_2967	5,109.100	0.000	0.000	0.000	5,098.209	Not Full	Yes	-0.591	10.891
743		TOE_2968	5,110.300	0.000	0.000	0.000	5,100.087	Not Full	No	-0.713	10.213
744		TOE_2969	5,111.800	0.000	0.000	0.000	5,099.169	Not Full	No	-0.631	12.631
745		TOE_2970	5,116.500	55,890.699	203,247.756	0.000	5,103.836	Not Full	No	-0.564	12.664
746		TOE_2971	5,115.900	0.000	0.000	0.000	5,102.609	Not Full	No	-0.591	13.291
747		TOE_2972	5,117.400	0.000	0.000	0.000	5,101.283	Not Full	No	-0.617	16.117
748		TOE_2973	5,120.000	0.000	0.000	0.000	5,105.878	Not Full	No	-0.622	14.122
749		TOE_2977	5,105.640	14,309.275	54,057.580	0.000	5,099.336	Not Full	No	-0.481	6.304
750		TOE_2978	5,133.570	31,590.708	119,187.787	0.000	5,112.741	Not Full	No	-0.979	20.829
751		TOE_2979	5,125.960	0.000	0.000	0.000	5,110.818	Not Full	No	-0.942	15.142
752		TOE_2980	5,135.280	0.000	0.000	0.000	5,109.309	Not Full	Yes	-0.931	25.971
753		TOE_2981	5,129.120	0.000	0.000	0.000	5,118.098	Not Full	No	-1.046	11.022
754		TOE_2982	5,156.250	0.000	0.000	0.000	5,134.500	Not Full	No	-1.500	21.750
755		TOE_2983	5,156.910	540,454.837	1,395,420.811	0.000	5,133.794	Not Full	No	-1.166	23.116
756		TOE_2984	5,083.315	0.000	0.000	0.000	5,073.530	Not Full	No	-0.855	9.785
757		TOE_2985	5,135.145	0.000	0.000	0.000	5,119.079	Not Full	No	-0.686	16.066
758		TOE_2986	5,135.995	40,499.985	150,008.418	0.000	5,119.347	Not Full	No	-0.708	16.648
759		TOE_2987	5,143.225	0.000	0.000	0.000	5,124.319	Not Full	Yes	-0.696	18.906
760		TOE_2988	5,151.225	0.000	0.000	0.000	5,126.282	Not Full	No	-0.703	24.943
761		TOE_2989	5,151.225	30,239.989	114,238.037	0.000	5,128.340	Not Full	No	-0.705	22.885
762		TOE_2990	5,127.040	0.000	0.000	0.000	5,116.779	Not Full	No	-0.428	10.261
763		TOE_2991	5,143.225	0.000	0.000	0.000	5,122.367	Not Full	No	-0.718	20.858
764		TOE_2992	5,107.670	0.000	0.000	0.000	5,092.253	Not Full	No	-0.351	15.417
765		TOE_2994	5,011.000	0.000	0.000	0.000	4,993.215	Not Full	No	-1.855	17.785
766		TOE_2997	5,102.000	0.000	0.000	0.000	5,087.083	Not Full	No	-0.451	14.917
767		TOE_3003	5,171.230	0.000	0.000	0.000	5,155.175	Not Full	No	-0.833	16.055
768		TOE_3005	5,011.000	0.000	0.000	0.000	4,993.028	Not Full	No	-2.242	17.972
769		VPF1_1	5,067.160	0.000	0.000	0.000	5,054.822	Not Full	No	-0.538	12.338
770		VPF1_103	5,067.570	0.000	0.000	0.000	5,052.775	Not Full	No	-0.875	14.795
771		VPF1_11	5,075.480	0.000	0.000	0.000	5,064.519	Not Full	No	-1.231	10.961
772		VPF1_12	5,071.900	0.000	0.000	0.000	5,060.990	Not Full	No	-1.160	10.910
773		VPF1_126	5,074.140	0.000	0.000	0.000	5,055.890	Not Full	No	-0.667	18.250
774		VPF1_127	5,066.000	0.000	0.000	0.000	5,051.180	Not Full	No	-0.667	14.820
775		VPF1_128	5,059.140	0.000	0.000	0.000	5,046.440	Not Full	No	-0.667	12.700
776		VPF1_129	5,058.660	22,679.991	85,678.528	0.000	5,045.550	Not Full	No	-0.527	13.110
777		VPF1_13	5,078.400	0.000	0.000	0.000	5,059.093	Not Full	No	-1.257	19.307
778		VPF1_130	5,056.230	0.000	0.000	0.000	5,043.800	Not Full	No	-0.566	12.430
779		VPF1_14	5,069.300	0.000	0.000	0.000	5,055.222	Not Full	Yes	-0.828	14.078

	., ., .	ID	Rim Elevation	Base Flow	Total Flow	Storm Flow	Grade	Status	Hydraulic	Surcharge Depth	Unfilled Depth
700		\/DE4_4E	(ft)	(gpd)	(gpd)	(gpd)	(ft)	Nat Full	Jump	(ft)	(ft)
780	H	VPF1_15	5,069.300	0.000	0.000	0.000	5,054.771	Not Full	No Yes	-0.879	14.529
781	H	VPF1_15A	5,064.530	44,010.703	162,151.346	0.000	5,051.234	Not Full		-0.816	13.296
782	H	VPF1_16	5,062.560	0.000	0.000	0.000	5,049.462	Not Full	No	-1.438	13.098
783	H	VPF1_17	5,058.600	0.000	0.000	0.000	5,038.291	Not Full	Yes	-0.859	20.309
784	H	VPF1_18A	5,058.100	0.000	0.000	0.000	5,037.199	Not Full	No	-0.951	20.901
785	H	VPF1_19A	5,056.800	0.000	0.000	0.000	5,036.234	Not Full	No	-0.946	20.566
786	H	VPF1_20A	5,054.500	0.000	0.000	0.000	5,035.117	Not Full	No	-0.923	19.383
787	닖	VPF1_21A	5,054.700	0.000	0.000	0.000	5,033.976	Not Full	No	-1.154	20.724
788	H	VPF1_32A	5,080.000	17,279.993	65,279.495	0.000	5,066.648	Not Full	No	-1.302	13.352
789	닖	VPF1_58	5,067.590	19,979.992	75,479.012	0.000	5,054.368	Not Full	No	-0.582	13.222
790	닖	VPF1_7	5,085.770	0.000	0.000	0.000	5,075.259	Not Full	No	-0.991	10.511
791	닏	VPF1_718	5,092.100	69,351.814	246,183.111	0.000	5,079.120	Not Full	No	-0.980	12.980
792	닏	VPF1_8	5,082.650	0.000	0.000	0.000	5,071.916	Not Full	No	-0.844	10.734
793	닏	VPFE_10A	5,083.640	0.000	0.000	0.000	5,069.774	Not Full	No	-0.926	13.866
794	닏	VPFE_717	5,098.830	0.000	0.000	0.000	5,085.421	Not Full	No	-0.543	13.409
795	Ш	VRF1D_702	5,136.180	0.000	0.000	0.000	5,123.223	Not Full	No	-0.591	12.957
796	Ш	VRF1D_703	5,125.680	0.000	0.000	0.000	5,113.604	Not Full	No	-0.560	12.076
797	Ш	VRF1D_704	5,119.340	0.000	0.000	0.000	5,107.266	Not Full	No	-0.558	12.074
798	Ш	VRF1D_705	5,116.570	0.000	0.000	0.000	5,104.443	Not Full	No	-0.561	12.127
799	Ш	VRF1D_707	5,113.290	0.000	0.000	0.000	5,101.327	Not Full	No	-0.546	11.963
800	Ш	VRF1D_708	5,111.140	0.000	0.000	0.000	5,099.288	Not Full	No	-0.485	11.852
801	Ш	VRF1D_709	5,108.490	0.000	0.000	0.000	5,098.106	Not Full	Yes	-0.417	10.384
802		VRF1D_710	5,110.890	0.000	0.000	0.000	5,097.505	Not Full	No	-0.418	13.385
803		VRF1D_711	5,115.620	0.000	0.000	0.000	5,096.625	Not Full	No	-0.428	18.995
804		VRF1D_712	5,119.540	0.000	0.000	0.000	5,095.814	Not Full	No	-0.409	23.726
805		VRF1D_713	5,116.910	0.000	0.000	0.000	5,095.063	Not Full	No	-0.410	21.847
806		VRF1D_714	5,112.260	0.000	0.000	0.000	5,094.129	Not Full	No	-0.464	18.131
807		VRF1D_715	5,110.280	0.000	0.000	0.000	5,092.863	Not Full	No	-0.550	17.417
808		VRF1D_716	5,102.500	42,659.984	157,480.841	0.000	5,088.968	Not Full	No	-0.465	13.532
809		VRF1G_186	5,145.220	0.000	0.000	0.000	5,136.104	Not Full	No	-0.550	9.116
810		VRF1G_188	5,141.220	0.000	0.000	0.000	5,128.688	Not Full	No	-0.466	12.532
811		VRF1G_204	5,146.770	0.000	0.000	0.000	5,127.042	Not Full	Yes	-0.618	19.728
812		VRF1G_205	5,137.330	0.000	0.000	0.000	5,125.817	Not Full	No	-0.613	11.513
813		VRGC1_698	5,157.760	174,635.934	537,427.831	0.000	5,137.682	Not Full	No	-0.511	20.078
814		VRGC1_699	5,153.370	0.000	0.000	0.000	5,134.958	Not Full	No	-0.546	18.412
815		VRGC2_206	5,137.400	0.000	0.000	0.000	5,124.564	Not Full	No	-0.736	12.836
816		VRGC2_526	5,142.130	0.000	0.000	0.000	5,131.842	Not Full	No	-0.688	10.288
817		VRGC2_527	5,138.210	78,570.690	273,384.973	0.000	5,127.225	Not Full	No	-0.685	10.985
818		VRGC2_543	5,134.310	0.000	0.000	0.000	5,119.109	Not Full	Yes	-0.491	15.201
819		VRGC2_544	5,125.790	0.000	0.000	0.000	5,117.251	Not Full	No	-0.539	8.539
820		VRGC2_545	5,121.520	0.000	0.000	0.000	5,111.969	Not Full	Yes	-0.701	9.551

		ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
821	П	VRGC2 580	5,120.220	0.000	0.000	0.000	5,110.437	Not Full	No	-0.733	9.783
822		VRGC2_581	5,123.750	0.000	0.000	0.000	5,108.928	Not Full	No	-0.772	14.822
823		VRGC2_582	5,116.400	74,519.972	261,433.513	0.000	5,107.200	Not Full	No	-0.780	9.200
824		VRGC2_583	5,116.440	0.000	0.000	0.000	5,104.442	Not Full	No	-1.158	11.998
825		VRGC4_365	5,191.820	176,850.653	543,202.321	0.000	5,179.389	Not Full	No	-0.404	12.431
826		VRGC4_366	5,189.850	0.000	0.000	0.000	5,178.025	Not Full	No	-0.459	11.825
827		VRGC4_389	5,191.830	0.000	0.000	0.000	5,176.812	Not Full	No	-0.451	15.018
828		VRGC4_415	5,189.660	0.000	0.000	0.000	5,175.402	Not Full	Yes	-0.391	14.258
829		VRGC4_416	5,192.130	0.000	0.000	0.000	5,173.522	Not Full	No	-0.441	18.608
830		VRGC4_417	5,183.930	0.000	0.000	0.000	5,170.994	Not Full	No	-0.619	12.936
831		VRGC4_418	5,153.010	25,352.630	95,777.244	0.000	5,147.096	Not Full	No	-0.448	5.914
832		VRGC4_419	5,150.600	0.000	0.000	0.000	5,143.516	Not Full	No	-0.518	7.084
833		VRGC4_420	5,150.350	0.000	0.000	0.000	5,140.063	Not Full	No	-0.520	10.287
834		VRGC6_183	5,175.770	170,936.576	527,781.355	0.000	5,146.529	Not Full	No	-0.445	29.241
835		VRGC6_184	5,155.730	0.000	0.000	0.000	5,145.136	Not Full	No	-0.527	10.594
836		VRGC6_185	5,152.370	0.000	0.000	0.000	5,140.338	Not Full	No	-0.565	12.032
837		WCR10	5,106.000	218,184.398	648,832.482	0.000	5,094.373	Not Full	No	-0.293	11.627
838		WCR3_100	5,023.010	0.000	0.000	0.000	5,015.620	Not Full	No	-0.910	7.390
839		WCR3_100A	5,026.060	0.000	0.000	0.000	5,017.492	Not Full	No	-0.778	8.568
840		WCR3_100B	5,027.500	0.000	0.000	0.000	5,019.283	Not Full	No	-0.777	8.217
841		WCR3_101	5,028.990	0.000	0.000	0.000	5,021.073	Not Full	No	-0.777	7.917
842		WCR3_102	5,029.520	0.000	0.000	0.000	5,022.216	Not Full	No	-0.784	7.304
843		WCR3_103	5,030.990	0.000	0.000	0.000	5,024.600	Not Full	No	-0.850	6.390
844		WCR3_11A	5,068.180	0.000	0.000	0.000	5,055.853	Not Full	Yes	-0.797	12.327
845		WCR3_184	5,094.790	43,155.344	159,192.435	0.000	5,082.691	Not Full	No	-0.643	12.099
846		WCR3_80	4,964.020	7,559.997	28,559.509	0.000	4,951.390	Not Full	No	-0.860	12.630
847		WCR3_81	4,964.350	0.000	0.000	0.000	4,953.426	Not Full	No	-0.904	10.924
848		WCR3_82	4,964.780	0.000	0.000	0.000	4,954.301	Not Full	No	-0.669	10.479
849		WCR3_83	4,967.250	0.000	0.000	0.000	4,957.210	Not Full	No	-0.670	10.040
850		WCR3_84	4,968.740	0.000	0.000	0.000	4,958.870	Not Full	No	-0.670	9.870
851		WCR3_85	4,974.200	0.000	0.000	0.000	4,962.834	Not Full	No	-0.706	11.366
852		WCR3_86	4,976.960	0.000	0.000	0.000	4,965.618	Not Full	No	-0.672	11.342
853		WCR3_86A	4,989.610	0.000	0.000	0.000	4,973.657	Not Full	No	-0.743	15.953
854		WCR3_86B	4,983.490	49,679.981	181,761.432	0.000	4,970.619	Not Full	No	-0.721	12.871
855		WCR3_86C	4,983.460	0.000	0.000	0.000	4,967.674	Not Full	No	-0.736	15.786
856		WCR3_87	4,990.560	0.000	0.000	0.000	4,976.179	Not Full	No	-0.741	14.381
857		WCR3_88	4,994.080	0.000	0.000	0.000	4,978.320	Not Full	No	-0.740	15.760
858		WCR3_89	4,988.470	0.000	0.000	0.000	4,981.109	Not Full	No	-0.741	7.361
859		WCR3_90	5,000.230	0.000	0.000	0.000	4,985.170	Not Full	No	-0.810	15.060
860		WCR3_91	4,999.540	0.000	0.000	0.000	4,987.018	Not Full	No	-0.692	12.522
861		WCR3_92	4,999.290	0.000	0.000	0.000	4,988.897	Not Full	No	-0.693	10.393

		ID	Rim Elevation	Base Flow	Total Flow	Storm Flow	Grade	Status	Hydraulic	Surcharge Depth	Unfilled Depth
205			(ft)	(gpd)	(gpd)	(gpd)	(ft)		Jump	(ft)	(ft)
862	닏	WCR3_93	4,998.750	0.000	0.000	0.000	4,990.405	Not Full	No	-0.695	8.345
863	닏	WCR3_94	5,007.400	0.000	0.000	0.000	4,995.445	Not Full	No	-0.845	11.955
864	닏	WCR3_94A	5,010.850	60,863.017	220,447.443	0.000	4,997.656	Not Full	No	-0.684	13.194
865	닏	WCR3_95	5,012.370	0.000	0.000	0.000	4,998.753	Not Full	No	-0.737	13.617
866	닏	WCR3_96	5,013.040	0.000	0.000	0.000	5,001.559	Not Full	No	-0.721	11.481
867	닏	WCR3_97	5,013.510	0.000	0.000	0.000	5,004.169	Not Full	No	-0.721	9.341
868	닏	WCR3_98	5,018.000	114,210.677	375,364.077	0.000	5,008.361	Not Full	No	-0.789	9.639
869	Ш	WCR3_99	5,021.010	0.000	0.000	0.000	5,010.143	Not Full	No	-0.777	10.867
870	Ш	WCR3_H125	5,085.240	0.000	0.000	0.000	5,072.800	Not Full	No	-0.667	12.440
871	Ш	WCR3_H126	5,080.230	0.000	0.000	0.000	5,071.780	Not Full	No	-0.667	8.450
872	Ш	WCR3_H127	5,081.120	0.000	0.000	0.000	5,071.100	Not Full	No	-0.667	10.020
873	Ш	WCR3_H128	5,077.710	0.000	0.000	0.000	5,068.900	Not Full	No	-0.667	8.810
874		WCR3_H129	5,079.410	0.000	0.000	0.000	5,067.000	Not Full	No	-0.667	12.410
875		WCR3_H130	5,078.600	0.000	0.000	0.000	5,065.300	Not Full	No	-0.667	13.300
876		WCR3_H131	5,076.050	179,549.212	550,238.101	0.000	5,062.153	Not Full	No	-0.481	13.897
877		WCR3_H132	5,077.020	0.000	0.000	0.000	5,061.408	Not Full	No	-0.426	15.612
878		WCR3_H133	5,074.230	0.000	0.000	0.000	5,060.302	Not Full	No	-0.531	13.928
879		WCR3_H134	5,072.210	0.000	0.000	0.000	5,057.260	Not Full	No	-0.840	14.950
880		WCR3_H135	5,080.510	0.000	0.000	0.000	5,062.368	Not Full	No	-0.762	18.142
881		WCR3_H136	5,079.790	0.000	0.000	0.000	5,064.383	Not Full	No	-0.717	15.407
882		WCR3_H137	5,080.010	0.000	0.000	0.000	5,066.383	Not Full	No	-0.717	13.627
883		WCR3_H138	5,078.740	0.000	0.000	0.000	5,068.585	Not Full	No	-0.715	10.155
884		WCR3_H139	5,081.290	0.000	0.000	0.000	5,070.285	Not Full	No	-0.715	11.005
885		WCR3_H140	5,085.040	0.000	0.000	0.000	5,072.926	Not Full	No	-0.754	12.114
886		WCR3_H141	5,085.410	60,412.297	218,887.578	0.000	5,073.415	Not Full	Yes	-0.685	11.995
887		WCR3_H146	5,089.800	0.000	0.000	0.000	5,077.660	Not Full	No	-0.673	12.140
888		WCR3_H164	5,096.500	0.000	0.000	0.000	5,079.325	Not Full	No	-0.608	17.175
889		WCR3_H165	5,095.420	0.000	0.000	0.000	5,080.026	Not Full	No	-0.608	15.394
890		WCR3_H171	5,093.250	0.000	0.000	0.000	5,081.236	Not Full	Yes	-0.598	12.014
891		WCR3_H185	5,097.730	0.000	0.000	0.000	5,085.500	Not Full	No	-0.833	12.230
892		WCR3_H186	5,104.280	0.000	0.000	0.000	5,092.000	Not Full	No	-0.833	12.280
893		WCR3_H187	5,105.550	0.000	0.000	0.000	5,093.300	Not Full	No	-0.833	12.250
894		WCR3_H188	5,106.480	0.000	0.000	0.000	5,095.000	Not Full	No	-0.667	11.480
895		WCR3_H189	5,108.120	0.000	0.000	0.000	5,097.800	Not Full	No	-0.667	10.320
896		WCR3_H190	5,111.400	0.000	0.000	0.000	5,099.400	Not Full	No	-0.667	12.000
897		WCR3_H191	5,113.380	0.000	0.000	0.000	5,101.380	Not Full	No	-0.667	12.000
898		WCR3_H192	5,116.340	0.000	0.000	0.000	5,104.340	Not Full	No	-0.667	12.000
899		WCR3_H192A	5,120.060	0.000	0.000	0.000	5,108.060	Not Full	No	-0.667	12.000
900		WCR3_H193	5,123.260	0.000	0.000	0.000	5,111.260	Not Full	No	-0.667	12.000
901	同	WCR3_H194	5,127.280	0.000	0.000	0.000	5,115.290	Not Full	No	-0.667	11.990
902		WCR3_I1	5,069.640	0.000	0.000	0.000	5,056.527	Not Full	No	-0.833	13.113

	., .,.	- MANHOLE 1	Rim Elevation	Base Flow	Total Flow	Storm Flow	Grade		Hydraulic	Surcharge Depth	Unfilled Depth
		ID	(ft)	(gpd)	(gpd)	(gpd)	(ft)	Status	Jump	(ft)	(ft)
903		WCR3_I10	5,049.360	0.000	0.000	0.000	5,037.321	Not Full	No	-0.749	12.039
904		WCR3_I11	5,046.150	62,503.176	225,972.390	0.000	5,035.404	Not Full	No	-0.866	10.746
905		WCR3_I12	5,050.460	0.000	0.000	0.000	5,032.980	Not Full	Yes	-0.710	17.480
906		WCR3_I13	5,046.090	0.000	0.000	0.000	5,031.581	Not Full	No	-0.709	14.509
907		WCR3_I13A	5,041.820	0.000	0.000	0.000	5,030.105	Not Full	No	-0.835	11.715
908		WCR3_I14	5,040.390	0.000	0.000	0.000	5,028.798	Not Full	No	-0.842	11.592
909		WCR3_I15	5,039.430	0.000	0.000	0.000	5,027.053	Not Full	No	-0.777	12.377
910		WCR3_I2	5,066.970	0.000	0.000	0.000	5,053.878	Not Full	No	-0.822	13.092
911		WCR3_I4	5,065.060	0.000	0.000	0.000	5,051.377	Not Full	No	-0.923	13.683
912		WCR3_I5	5,059.210	0.000	0.000	0.000	5,046.837	Not Full	No	-0.823	12.373
913		WCR3_I6	5,056.080	67,635.335	241,117.008	0.000	5,045.101	Not Full	No	-0.779	10.979
914		WCR3_I7	5,053.870	0.000	0.000	0.000	5,043.091	Not Full	No	-0.779	10.779
915		WCR3_I8	5,051.680	0.000	0.000	0.000	5,040.921	Not Full	Yes	-0.749	10.759
916		WCR3_I9	5,048.680	0.000	0.000	0.000	5,039.121	Not Full	No	-0.749	9.559
917		WCR3-I_3	5,066.070	0.000	0.000	0.000	5,052.878	Not Full	No	-0.822	13.192
918		WCR5_1	5,170.000	239,602.950	702,041.205	0.000	5,157.523	Not Full	No	-0.310	12.477
919		WCR5_10	5,094.000	0.000	0.000	0.000	5,081.438	Not Full	No	-0.562	12.562
920		WCR5_11	5,092.990	0.000	0.000	0.000	5,078.328	Not Full	No	-0.562	14.662
921		WCR5_12	5,084.000	0.000	0.000	0.000	5,071.472	Not Full	No	-0.528	12.528
922		WCR5_13	5,080.000	0.000	0.000	0.000	5,067.526	Not Full	No	-0.474	12.474
923		WCR5_14	5,078.000	0.000	0.000	0.000	5,065.502	Not Full	No	-0.498	12.498
924		WCR5_15	5,076.000	0.000	0.000	0.000	5,063.455	Not Full	No	-0.545	12.545
925		WCR5_16	5,070.000	79,993.410	277,583.874	0.000	5,057.522	Not Full	No	-0.478	12.478
926		WCR5_17	5,066.000	0.000	0.000	0.000	5,053.541	Not Full	No	-0.459	12.459
927		WCR5_18	5,062.000	0.000	0.000	0.000	5,049.457	Not Full	No	-0.543	12.543
928		WCR5_19	5,058.000	0.000	0.000	0.000	5,045.512	Not Full	No	-0.488	12.488
929		WCR5_2	5,162.980	0.000	0.000	0.000	5,149.285	Not Full	No	-0.448	13.695
930		WCR5_20	5,048.000	0.000	0.000	0.000	5,035.622	Not Full	No	-0.378	12.378
931		WCR5_21	5,045.000	0.000	0.000	0.000	5,032.482	Not Full	No	-0.508	12.518
932		WCR5_22	5,029.000	7,911.357	29,887.189	0.000	5,016.806	Not Full	Yes	-0.444	12.194
933		WCR5_23	5,028.000	0.000	0.000	0.000	5,015.516	Not Full	No	-0.734	12.484
934		WCR5_24	5,022.000	26,455.670	99,943.162	0.000	5,009.596	Not Full	No	-0.654	12.404
935		WCR5_25	5,017.080	0.000	0.000	0.000	5,004.524	Not Full	No	-0.626	12.556
936		WCR5_26	5,018.000	0.000	0.000	0.000	5,002.394	Not Full	No	-0.626	15.606
937		WCR5_27	5,018.000	0.000	0.000	0.000	5,000.556	Not Full	No	-0.624	17.444
938		WCR5_28	5,016.000	0.000	0.000	0.000	4,999.161	Not Full	No	-0.789	16.839
939		WCR5_3	5,156.000	0.000	0.000	0.000	5,143.222	Not Full	No	-0.481	12.778
940		WCR5_4	5,138.000	275,618.776	790,223.353	0.000	5,125.668	Not Full	Yes	-0.232	12.332
941		WCR5_5	5,136.000	0.000	0.000	0.000	5,123.963	Not Full	No	0.063	12.037
942		WCR5_6	5,138.000	0.000	0.000	0.000	5,121.380	Not Full	No	0.030	16.620
943		WCR5_7	5,132.000	0.000	0.000	0.000	5,119.453	Not Full	No	-0.547	12.547

	ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
944	WCR5_8	5,124.000	0.000	0.000	0.000	5,111.419	Not Full	No	-0.581	12.581
945	WCR5_9	5,112.000	0.000	0.000	0.000	5,099.417	Not Full	No	-0.583	12.583
946	WCR7_1	5,154.000	0.000	0.000	0.000	5,141.000	Not Full	No	-0.667	13.000
947	WCR7_10	5,062.000	0.000	0.000	0.000	5,049.338	Not Full	No	-0.328	12.662
948	WCR7_11	5,058.000	0.000	0.000	0.000	5,045.380	Not Full	Yes	-0.286	12.620
949	WCR7_12	5,055.990	144,616.266	458,255.239	0.000	5,043.407	Not Full	No	-0.426	12.583
950	WCR7_13	5,050.000	0.000	0.000	0.000	5,037.427	Not Full	No	-0.406	12.573
951	WCR7_14	5,044.000	0.000	0.000	0.000	5,031.454	Not Full	No	-0.380	12.546
952	WCR7_15	5,042.000	0.000	0.000	0.000	5,029.435	Not Full	No	-0.398	12.565
953	WCR7_16	5,038.000	0.000	0.000	0.000	5,025.376	Not Full	No	-0.357	12.624
954	WCR7_17	5,036.000	0.000	0.000	0.000	5,023.529	Not Full	Yes	-0.244	12.471
955	WCR7_18	5,034.990	230,854.953	680,308.913	0.000	5,021.569	Not Full	No	-0.264	13.421
956	WCR7_2	5,136.000	0.000	0.000	0.000	5,123.000	Not Full	No	-0.667	13.000
957	WCR7_3	5,120.000	0.000	0.000	0.000	5,107.000	Not Full	No	-0.667	13.000
958	WCR7_4	5,108.000	0.000	0.000	0.000	5,095.000	Not Full	No	-0.667	13.000
959	WCR7_5	5,102.000	0.000	0.000	0.000	5,089.000	Not Full	No	-0.667	13.000
960	WCR7_6	5,094.000	0.000	0.000	0.000	5,081.000	Not Full	No	-0.667	13.000
961	WCR7_7	5,090.000	112,072.278	369,380.519	0.000	5,077.265	Not Full	No	-0.402	12.735
962	WCR7_8	5,072.000	0.000	0.000	0.000	5,059.298	Not Full	No	-0.379	12.702
963	WCR7_9	5,068.000	0.000	0.000	0.000	5,055.290	Not Full	No	-0.377	12.710

	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Unpeakable Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)		Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth (ft)	Adjusted Velocity
1 🔲	AIF1 119-ECF21 120	AIF1 119	ECF21 120	12.000	488.407	0.004	727,517.711	18,509.753	231,369.033	Free Surface	3.002	0.482	0.470	0.482	0.447	0.864	1,547,662.229	No	0.482	3.002
2	ARF1 12-ARF1 4	ARF1_12	ARF1_4	8.000	154.018	0.004	230,360.489	4,740.478	59,250.218	Free Surface	2.251	0.464	0.439	0.309	0.277	0.813	525,053.946	No	0.309	2.251
3	ARF1_16-ARF1_12	ARF1_16	ARF1_12	8.000	132.199	0.011	230,360.489	4,740.478	59,250.218	Free Surface	3.364	0.343	0.253	0.229	0.277	1.449	909,644.038	No	0.229	3.364
4	ARF1_17-ARF1_16	ARF1_17	ARF1_16	8.000	314.508	0.009	230,360.489	4,740.478	59,250.218	Free Surface	3.129	0.362	0.280	0.241	0.277	1.308	822,988.236	No	0.241	3.129
5	ARF1_28-ARF1_17	ARF1_28	ARF1_17	8.000	284.662	0.020	230,360.489	4,740.478	59,250.218	Free Surface	4.088	0.298	0.193	0.199	0.277	1.905	1,193,034.187	No	0.199	4.088
6	ARF1_29-ARF1_28	ARF1_29	ARF1_28	8.000	66.881	0.012	230,360.489	4,740.478	59,250.218	Free Surface	3.457	0.336	0.244	0.224	0.277	1.506	945,043.898	No	0.224	3.457
7	ARF1_2-FMF9_1	ARF1_2	FMF9_1	10.000			230,360.489	4,740.478	59,250.218	Free Surface	2.354	0.321	0.224	0.268	0.260	0.941	1,029,721.578	Yes	0.284	2.169
8	ARF1_31-ARF1_29	ARF1_31	ARF1_29	8.000 8.000	345.854 124.179	0.009	230,360.489 230,360.489	4,740.478	59,250.218	Free Surface	3.052 2.868	0.369	0.290 0.315	0.246 0.257	0.277	1.262 1.155	795,342.077	No No	0.246 0.257	3.052 2.868
9 🔲	ARF1_32-ARF1_31 ARF1_33-ARF1_32	ARF1_32 ARF1_33	ARF1_31 ARF1_32	8.000	224.073	0.007	230,360.489	4,740.478 4,740.478	59,250.218 59,250.218	Free Surface Free Surface	3.156	0.360	0.313	0.237	0.277	1.324	730,184.738 832,905.398	No	0.237	3.156
11	ARF1_33-ARF1_32 ARF1_34-ARF1_33	ARF1 34	ARF1 33	8.000	155.283	0.006	230,360.489	4,740.478	59,250.218	Free Surface	2.612	0.414	0.359	0.246	0.277	1.010	642,238.703	No	0.276	2.612
12	ARF1 35-ARF1 34	ARF1 35	ARF1_34	8.000	103.489	0.005	230.360.489	4,740.478	59,250.218	Free Surface	2.489	0.429	0.383	0.286	0.277	0.941	601,337.528	No	0.286	2.489
13	ARF1 36-ARF1 35	ARF1_36	ARF1_35	8.000			230,360.489	4,740.478	59,250.218	Free Surface	3.027	0.371	0.293	0.247	0.277	1.248	786,423.378	No	0.247	3.027
14	ARF1_37-ARF1_36	ARF1_37	ARF1_36	8.000	113.306	0.006	230,360.489	4,740.478	59,250.218	Free Surface	2.726	0.401	0.338	0.267	0.277	1.074	680,924.666	No	0.267	2.726
15	ARF1_3-ARF1_2	ARF1_3	ARF1_2	8.000	201.740	0.006	230,360.489	4,740.478	59,250.218	Free Surface	2.718	0.402	0.340	0.268	0.277	1.070	678,362.734	No	0.268	2.718
16	ARF1_4-ARF1_3	ARF1_4	ARF1_3	8.000	122.407	0.015	230,360.489	4,740.478	59,250.218	Free Surface	3.719	0.319	0.220	0.213	0.277	1.669	1,045,721.845	No	0.213	3.719
17	ARF2_1-TOE_2647	ARF2_1	TOE_2647	8.000	158.000	0.008	230,360.489	4,740.478	59,250.218	Free Surface	2.963	0.377	0.302	0.251	0.277	1.210	763,554.513	No	0.251	2.963
18	ARF2_2-ARF2_1	ARF2_2	ARF2_1	8.000	151.286	0.006	230,360.489	4,740.478	59,250.218	Free Surface	2.711	0.403	0.341	0.268	0.277	1.065	675,771.581	No	0.268	2.711
19	BFF1_61-BFF1_62	BFF1_61	BFF1_62	8.000	397.643		0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	601,633.726	No	0.000	0.000
20	BFF1_62-BFF1_63	BFF1_62	BFF1_63 TOE 2733	8.000 8.000	345.405 197.672	0.005	0.000 68,340.934	0.000 1,340.639	0.000 16,750.074	Free Surface Free Surface	0.000 1.998	0.000	0.000 0.096	0.000 0.139	0.000 0.148	0.000 1.127	600,374.865 713,929.656	Yes Yes	0.070 0.235	0.000 0.964
21	BFF1_63-TOE_2733 CCF3 39E-CMF2 39D	BFF1_63 CCF3 39E	CMF2_39D	10.000	161.407	0.007	269,400.673	5,719.678	71,500.293	Free Surface	2.352	0.209	0.096	0.301	0.146	0.881	968,552.158	No	0.235	2.352
23	CCF3_59E-CMF2_59D CCF3_60A-CCF3_39E	CCF3_59L	CCF3 39E	10.000	310.798	0.004	170,554.711	3,440.159	42,999.824	Free Surface	2.103	0.381	0.172	0.234	0.222	0.906	990,944.494	No	0.234	2.103
24	CCF3 60-CCF3 60A	CCF3 60	CCF3 60A	10.000	135.757	0.040	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000		3,061,985.380	Yes	0.007	0.000
25	CCF4 4-1-TOE 2990	CCF4_41	TOE_2990	8.000	204.703	0.012	259,043.478	5,460.478	68,250.214	Free Surface	3.520	0.362	0.280	0.241	0.295	1.472	926,183.223	No	0.241	3.520
26	CCF4_4-2-CCF4_41	CCF4_42	CCF4_41	8.000	274.850	0.030	127,591.152	2,519.999	31,499.988	Free Surface	4.014	0.199	0.086	0.132	0.204	2.326	1,478,629.209	No	0.132	4.014
27	CCF4_4-3-CCF4_42	CCF4_43	CCF4_42	8.000	287.880	0.031	127,591.152	2,519.999	31,499.988	Free Surface	4.027	0.198	0.086	0.132	0.204	2.337	1,485,724.658	No	0.132	4.027
28	CCF4_4-4-CCF4_43	CCF4_44	CCF4_43	8.000	307.760	0.018	127,591.152	2,519.999	31,499.988	Free Surface	3.357	0.225	0.111	0.150	0.204	1.820	1,148,410.503	No	0.150	3.357
29	CCF4_4-5-CCF4_44	CCF4_45	CCF4_44	8.000	312.018		127,591.152	2,519.999	31,499.988	Free Surface	3.346	0.226	0.112	0.150	0.204		1,143,577.617	No	0.150	3.346
30	CCF6_105-CCF6_106	CCF6_105	CCF6_106	12.000		0.015	727,517.711	18,509.753	231,369.033	Free Surface	5.002	0.329	0.234	0.329	0.447		3,112,332.973	No	0.329	5.002
31	CCF6_106-TOE_2640	CCF6_106	TOE_2640	12.000			727,517.711	18,509.753	231,369.033	Free Surface	4.893	0.334	0.241	0.334	0.447		3,018,825.908	No	0.334	4.893
32	CCF6_6-10-CCF6_69	CCF6_610 CCF6_611	CCF6_69 CCF6_610	8.000 8.000	294.243 108.377		259,043.478 259,043.478	5,460.478 5,460.478	68,250.214 68,250.214	Free Surface Free Surface	4.122 3.904	0.322	0.225 0.242	0.215 0.224	0.295 0.295		1,152,419.655 1,068,707.131	No No	0.215 0.224	4.122 3.904
33	CCF6_6-11-CCF6_610 CCF6_6-12-CCF6_611	CCF6 612	CCF6 611	8.000	139.412		259,043.478	5,460.478	68,250.214	Free Surface	4.032	0.333	0.232	0.218	0.295		1,117,689.788	No	0.218	4.032
35	CCF6 6-13-CCF6 612	CCF6 613	CCF6 612	8.000	116.143		259,043.478	5,460.478	68,250.214	Free Surface	3.544	0.360	0.277	0.240	0.295	1.485	934,707.955	No	0.240	3.544
36	CCF6 6-14-CCF6 613	CCF6 614	CCF6 613	8.000	93.593	0.010	259,043.478	5,460.478	68,250.214	Free Surface	3.334	0.377	0.302	0.251	0.295	1.362	859,168.773	No	0.251	3.334
37	CCF6 6-15-CCF6 105	CCF6 615	CCF6 105	12.000	250.404	0.035	259,043.478	5,460.478	68,250.214	Free Surface	4.966	0.159	0.055	0.159	0.262	2.636	4,699,501.517	Yes	0.174	4.371
38	CCF6_6-8-CCF6_615	CCF6_68	CCF6_615	8.000	122.248	0.018	259,043.478	5,460.478	68,250.214	Free Surface	4.065	0.326	0.229	0.217	0.295	1.803	1,130,246.077	No	0.217	4.065
39	CCF6_6-9-CCF6_68	CCF6_69	CCF6_68	8.000	210.219	0.017	259,043.478	5,460.478	68,250.214	Free Surface	4.008	0.329	0.234	0.219	0.295	1.768	1,108,600.417	No	0.219	4.008
40	CCF9_4-6-CCF4_45	CCF9_46	CCF4_45	8.000	295.271		127,591.152	2,519.999	31,499.988	Free Surface	2.160	0.308	0.206	0.205	0.204	0.988	618,590.475	No	0.205	2.160
41	CFF1_17-TOE_2631	CFF1_17	TOE_2631	15.000			881,347.763	23,232.951	290,401.811	Free Surface	4.626	0.290	0.183	0.362	0.461		4,819,738.677	No	0.362	4.626
42	CFF1_18-CFF1_17	CFF1_18	CFF1_17	15.000		0.012	881,347.763	23,232.951	290,401.811	Free Surface	4.686	0.287	0.180	0.359	0.461		4,908,843.591	No	0.359	4.686
43	CFF1_19B1-CFF1_19	CFF1_19B1	CFF1_19	12.000	114.139	0.008	440,380.202	10,219.676	127,750.992	Free Surface	3.435	0.300	0.196	0.300	0.344		2,245,553.259	No	0.300	3.435
44   45	CFF1_19B2-CFF1_19B1 CFF1_19-CFF1_18	CFF1_19B2 CFF1_19	CFF1_19B1 CFF1_18	12.000 15.000	135.089 128.744	0.007	440,380.202 881,347.763	10,219.676 23,232.951	127,750.992 290,401.811	Free Surface Free Surface	3.195 4.540	0.316	0.217 0.188	0.316 0.367	0.344		2,030,162.628 4,695,185.852	No No	0.316 0.367	3.195 4.540
46	CFF1_19-CFF1_18 CFF1_20-CFF1_19	CFF1_19	CFF1_18	12.000	259.752	0.011	540,105.884	13,013.275	162,650.819	Free Surface	4.065	0.294	0.100	0.308	0.382		2,619,928.491	No	0.308	4.065
47	CFF1 21-CFF1 20	CFF1 21	CFF1 20	12.000	204.761	0.011	540,105.884	13,013.275	162,650.819	Free Surface	4.014	0.311	0.210	0.311	0.382		2,574,854.316	No	0.311	4.014
48	CFF1_22A-CFF1_22B	CFF1_22A	CFF1_22B	10.000	369.202		269,400.673	5,719.678	71,500.293	Free Surface	3.692	0.260	0.148	0.217	0.281		1,814,859.742	No	0.217	3.692
49	CFF1_22B-CFF1_22C	CFF1_22B	CFF1_22C	10.000	151.596	0.014	269,400.673	5,719.678	71,500.293	Free Surface	3.685	0.261	0.149	0.217	0.281	1.652	1,810,337.033	No	0.217	3.685
50	CFF1_22C-CFF1_19B2	CFF1_22C	CFF1_19B2	10.000	289.466	0.013	440,380.202	10,219.676	127,750.992	Free Surface	4.171	0.340	0.249	0.283	0.363	1.616	1,771,578.311	No	0.283	4.171
51	CFF1_22-CFF1_21	CFF1_22	CFF1_21	12.000	185.308	0.008	443,720.065	10,313.276	128,900.111	Free Surface	3.431	0.302	0.199	0.302	0.345		2,235,268.786	No	0.302	3.431
52	CFF1_22D-CFF1_22C	CFF1_22D	CFF1_22C	10.000	133.147	0.014	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000		1,832,565.336	No	0.000	0.000
53	CFF1_22E-CFF1_22D	CFF1_22E	CFF1_22D	10.000	130.967	0.012	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,715,954.795	No	0.000	0.000
54	CFF1_22F1-CFF1_22E	CFF1_22F1		10.000			0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000 0.289	0.000		1,128,189.005	No No	0.000 0.289	0.000
55	CFF1_23-CFF1_22	CFF1_23	CFF1_22	12.000 12.000	96.489 100.548	0.009	443,720.065 443,720.065	10,313.276 10,313.276	128,900.111 128,900.111	Free Surface Free Surface	3.641 3.684	0.289	0.183 0.180	0.289	0.345		2,428,997.525 2,469,290.350	No No	0.289	3.641 3.684
57	CFF1_24-CFF1_23 CFF1_25-CFF1_24	CFF1_24 CFF1_25	CFF1_23 CFF1_24	12.000	122.953		443,720.065	10,313.276	128,900.111	Free Surface	3.585	0.293	0.187	0.293			2,376,498.473	No	0.293	3.585
58	CFF1_25-CFF1_24 CFF1_26-CFF1_25	CFF1_26	CFF1_25	12.000			443,720.065	10,313.276	128,900.111	Free Surface	3.658	0.288	0.182	0.288			2,444,570.671	No	0.288	3.658
59	CFF1 27-CFF1 26	CFF1_27	CFF1_26	12.000			443,720.065	10,313.276	128,900.111	Free Surface	3.750	0.283	0.175	0.283			2,531,128.225	No	0.283	3.750
60	CFF1_28-CFF1_27	CFF1_28	CFF1_27	12.000			443,720.065	10,313.276	128,900.111	Free Surface	3.754	0.283	0.175	0.283			2,534,226.581	No	0.283	3.754
61	CFF1_29-CFF1_28	CFF1_29	CFF1_28	12.000	150.879	0.024	443,720.065	10,313.276	128,900.111	Free Surface	5.048	0.229	0.115	0.229	0.345	2.212	3,841,988.751	No	0.229	5.048
62	CFF1_30-CFF1_29	CFF1_30	CFF1_29	12.000			443,720.065	10,313.276	128,900.111	Free Surface	5.033	0.230	0.116	0.230	0.345		3,827,344.160	No	0.230	5.033
63	CFF1_31-CFF1_30	CFF1_31	CFF1_30	12.000			443,720.065	10,313.276	128,900.111	Free Surface	3.765	0.283	0.174	0.283			2,545,706.000	No	0.283	3.765
64	CHF1A_22-CHF1A_23	CHF1A_22	CHF1A_23	18.000	160.160	0.019	1,685,789.987	50,073.101	625,921.684	Free Surface	6.624	0.274	0.165	0.412	0.612	2.153	10,243,088.805	No	0.412	6.624

	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Unpeakable Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)		Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth (ft)	Adjusted Velocity
65	CHF1A_23-CHF1A_24	CHF1A_23	CHF1A_24	18.000		0.023	1,685,789.987	50,073.101	625,921.684	Free Surface	7.082	0.262	0.150	0.392	0.612		11,248,363.236	Yes	0.393	7.062
66	CHF1A_24-CHF1A_25	CHF1A_24	CHF1A_25	18.000	292.440	0.010	1,685,789.987	50,073.101	625,921.684	Free Surface	5.289	0.323	0.225	0.484	0.612	1.572	7,481,584.554	No	0.484	5.289
67	CHF1A_25-CHF1A_A1A	CHF1A_25	CHF1A_A1A	18.000	123.397	0.007	1,685,789.987	50,073.101	625,921.684	Free Surface	4.653	0.354	0.269	0.532	0.612	1.312	6,262,836.979	Yes	0.533	4.637
68		CHF1A_A1A		18.000		0.007	1,685,789.987	50,073.101	625,921.684	Free Surface	4.622	0.356	0.272	0.534	0.612	1.300	6,207,300.817	No	0.534	4.622
69	CHF1A_C1-CHF1A_22	CHF1A_C1	_	18.000		0.058	1,517,559.701	44,213.743	552,671.792	Free Surface	9.491	0.198	0.085	0.296	0.580		17,749,713.432	Yes	0.329	8.180
70	CHF1B_12-CHF1B_20	CHF1B_12		18.000		0.027	1,517,559.701	44,213.743	552,671.792	Free Surface	7.281	0.238	0.124	0.357	0.580		12,205,355.972	No	0.357	7.281
71	CHF1B_14A-CHF1B_17			18.000		0.017	1,464,016.590	42,373.424	529,672.121	Free Surface	6.114	0.263	0.151	0.394	0.569	2.034	9,689,124.841	No	0.394 0.788	6.114
72	CHF1B_15A-CHF1B_14A CHF1B 15A-CHF3A 15B			18.000 18.000		0.001	1,464,016.590 1,464,016.590	42,373.424 42,373.424	529,672.121 529,672.121	Free Surface Free Surface	2.407 3.114	0.526 0.430	0.544	0.788 0.646	0.569	0.535	2,692,660.183 3,805,405.449	No No	0.766	2.407 3.114
74	CHF1B 17-CHF1B 18	CHF1B 17		18.000		0.003	1,464,016.590	42,373.424	529,672.121	Free Surface	4.298	0.339	0.247	0.508	0.569	1.243	5,924,634.458	No	0.508	4.298
75	CHF1B 18-CHF1B 12	CHF1B 18	CHF1B 12	18.000		0.033	1,517,559.701	44,213.743	552,671.792	Free Surface	7.773	0.227	0.113	0.341	0.580		13.386.173.134	No	0.341	7.773
76	CHF1B 20-TOE 2585	CHF1B 20	TOE 2585	18.000		0.025	1,517,559.701	44,213.743	552,671.792	Free Surface	7.026	0.244	0.131	0.366	0.580		11,610,027.069	No	0.366	7.026
77	CHF3A 15-CHF3A 15B		CHF3A_15B	18.000	180.044	0.003	1,464,016.590	42,373.424	529,672.121	Free Surface	3.139	0.428	0.381	0.642	0.569	0.793	3,847,134.378	No	0.642	3.139
78	CHF3C_8-CHF3C_9	CHF3C_8	CHF3C_9	18.000	288.213	0.005	1,395,420.811	40,033.425	500,421.412	Free Surface	3.757	0.361	0.279	0.541	0.555	1.048	5,009,536.836	No	0.541	3.757
79	CHF3C_9-TOE_2580	CHF3C_9	TOE_2580	18.000	339.237	0.004	1,395,420.811	40,033.425	500,421.412	Free Surface	3.570	0.375	0.299	0.562	0.555	0.975	4,669,246.805	No	0.562	3.570
80	CMF2_22G-CFF1_22F1	CMF2_22G	CFF1_22F1	10.000	50.170	0.028	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	2,587,708.428	No	0.000	0.000
81	CMF2_32-CFF1_22A	CMF2_32	CFF1_22A	10.000		0.009	269,400.673	5,719.678	71,500.293	Free Surface	3.150	0.292	0.185	0.243	0.281	1.328	1,452,948.058	No	0.243	3.150
82	CMF2_33-CMF2_32	CMF2_33	CMF2_32	10.000		0.004	269,400.673	5,719.678	71,500.293	Free Surface	2.458	0.349	0.262	0.291	0.281	0.938	1,029,443.086	No	0.291	2.458
83	CMF2_34-CMF2_33	CMF2_34	CMF2_33	10.000		0.004	269,400.673	5,719.678	71,500.293	Free Surface	2.399	0.355	0.271	0.296	0.281	0.906	995,000.873	No	0.296	2.399
84	CMF2_35-CMF2_34 CMF2_36-CMF2_35	CMF2_35 CMF2_36	CMF2_34 CMF2_35	10.000 10.000	109.503 215.403	0.005	269,400.673 269,400.673	5,719.678 5,719.678	71,500.293 71,500.293	Free Surface Free Surface	2.562 3.589	0.339 0.266	0.247 0.154	0.282 0.221	0.281 0.281	0.994 1.592	1,090,089.794 1,744,243.654	No No	0.282 0.221	2.562 3.589
86	CMF2_36-CMF2_35 CMF2_37-CMF2_36	CMF2_36 CMF2_37	CMF2_35	10.000		0.013	269,400.673	5,719.678	71,500.293	Free Surface	3.503	0.200	0.160	0.221	0.281	1.592	1,685,918.996	No	0.221	3.503
87	CMF2_38-CMF2_37	CMF2_37	CMF2_37	10.000		0.012	269,400.673	5,719.678	71,500.293	Free Surface	3.262	0.284	0.100	0.223	0.281	1.394	1,525,893.681	No	0.223	3.262
88	CMF2 39A-CMF2 39	CMF2 39A	CMF2 39	10.000		0.004	269.400.673	5,719.678	71,500.293	Free Surface	2.364	0.359	0.276	0.299	0.281	0.887	975,390.304	No	0.299	2.364
89	CMF2 39B-CMF2 39A	CMF2 39B	CMF2 39A	10.000		0.019	269,400.673	5,719.678	71,500.293	Free Surface	4.087	0.242	0.129	0.202	0.281	1.906	2,093,583.694	No	0.202	4.087
90	CMF2 39C-CMF2 39B	CMF2_39C	CMF2_39B	10.000	127.599	0.004	269,400.673	5,719.678	71,500.293	Free Surface	2.342	0.362	0.280	0.301	0.281	0.876	962,841.442	No	0.301	2.342
91	CMF2_39-CMF2_38	CMF2_39	CMF2_38	10.000	65.228	0.009	269,400.673	5,719.678	71,500.293	Free Surface	3.165	0.291	0.184	0.242	0.281	1.337	1,462,862.125	No	0.242	3.165
92	CMF2_39D-CMF2_39C	CMF2_39D	CMF2_39C	10.000	138.889	0.004	269,400.673	5,719.678	71,500.293	Free Surface	2.351	0.361	0.278	0.301	0.281	0.880	967,923.923	No	0.301	2.351
93	COMPF1_10.1-TOE_2941		_	12.000		0.005	449,090.255	10,460.156	130,749.071	Free Surface	2.900	0.344	0.255	0.344	0.348	1.018	1,760,761.108	No	0.344	2.900
94	CSF1_C2A-TOE_2804	CSF1_C2A	TOE_2804	18.000		0.003	1,104,689.959	30,359.509	379,477.297	Free Surface	3.028	0.356	0.272	0.534	0.492	0.851	4,064,442.599	No	0.534	3.028
95	CSF1_C2C-CSF1_C2A	CSF1_C2C	CSF1_C2A	18.000		0.010	1,104,689.959	30,359.509	379,477.297	Free Surface	4.575	0.264	0.153	0.396	0.492		7,225,549.849	No	0.396	4.575
96	CSF1_C3A-CSF1_C3B	CSF1_C3A	CSF1_C3B	18.000		0.004	995,266.653	26,832.950	335,401.794	Free Surface	3.181	0.318	0.220	0.478	0.466	0.953	4,532,537.708 4,048,353.344	No	0.478	3.181
97	CSF1_C3B-CSF1_C4B CSF1_C4B-CSF1_C5B	CSF1_C3B CSF1_C4B	CSF1_C4B CSF1_C5B	18.000 18.000		0.003	995,266.653 995,266.653	26,832.950 26,832.950	335,401.794 335,401.794	Free Surface Free Surface	2.933 3.248	0.338	0.246 0.213	0.507 0.470	0.466	0.850 0.981	4,664,630.000	No No	0.507 0.470	2.933 3.248
99	CSF1_C4B-C3F1_C3B	CSF1 C5B	CSF1_CSD	18.000		0.005	995,266.653	26,832.950	335,401.794	Free Surface	3.445	0.301	0.197	0.470	0.466	1.065	5,064,930.575	No	0.451	3.445
100	CSF1 C6C-CSF1 C2C	CSF1 C6C	CSF1 C2C	18.000		0.003	1,104,689.959	30,359.509	379,477.297	Free Surface	2.971	0.361	0.279	0.542	0.492	0.829	3,959,290.219	No	0.542	2.971
101	ECF1 100-ECF1 102	ECF1 100	ECF1 102	30.000		0.003	4,264,460.013	150,137.223	1,876,718.173	Free Surface	3.956	0.373	0.296	0.932	0.851		14,412,685.329	Yes	0.943	3.891
102	ECF1 102-ECF1 26	ECF1_102	ECF1_26	30.000	332.132	0.002	4,264,460.013	150,137.223	1,876,718.173	Free Surface	3.828	0.382	0.310	0.955	0.851	0.801	13,774,775.041	No	0.955	3.828
103	ECF1_108-ECF1_28	ECF1_108	ECF1_28	30.000	298.395	0.010	4,471,103.390	158,777.220	1,984,718.133	Free Surface	6.575	0.267	0.156	0.667	0.872	1.680	28,680,223.705	No	0.667	6.575
104	ECF1_118-ECF1_119	ECF1_118	ECF1_119	12.000	374.069	0.006	911,770.441	24,189.111	302,350.926	Free Surface	3.666	0.492	0.487	0.492	0.503	1.042	1,874,045.649	No	0.492	3.666
105	ECF1_119-TOE_2594	ECF1_119	TOE_2594	12.000		0.005	911,770.441	24,189.111	302,350.926	Free Surface	3.520	0.508	0.514	0.508	0.503	0.980	1,774,422.234	No	0.508	3.520
106		ECF1_2271	TOE_2655	30.000			4,553,060.285	162,224.579	2,027,815.876	Free Surface	3.645	0.416	0.362	1.040	0.880		12,574,544.023	Yes	1.453	2.381
107	ECF1_24-ECF1_44	ECF1_24	ECF1_44	30.000			4,150,821.398	145,416.905	1,817,718.516	Free Surface	2.806	0.474	0.455	1.184	0.839	0.516	9,115,619.517	No	1.184	2.806
108	ECF1_25-ECF1_100	ECF1_25	ECF1_100	30.000	447.757	0.002	4,264,460.013	150,137.223	1,876,718.173	Free Surface	3.591	0.401	0.338	1.002	0.851		12,620,046.817	No	1.002	3.591
109	ECF1_26-ECF1_27 ECF1_27-ECF1_108	ECF1_26 ECF1_27	ECF1_27 ECF1_108	30.000 30.000			4,264,460.013 4,264,460.013	150,137.223 150,137.223	1,876,718.173 1,876,718.173	Free Surface Free Surface	4.675 6.676	0.330 0.255	0.235	0.824	0.851		18,157,932.414 29,871,083.103	No No	0.824	4.675 6.676
111	ECF1_27-ECF1_108	ECF1_27	ECF1_106	30.000			4,471,103.390	158,777.220	1,984,718.133	Free Surface	6.644	0.265	0.143	0.662	0.872		29,107,942.782	No	0.662	6.644
112	ECF1 29-ECF1 2271	ECF1 29	ECF1 2271	30.000			4,471,103.390	158,777.220	1,984,718.133	Free Surface	5.789	0.292	0.186	0.731	0.872		24,003,856.458	Yes	0.875	4.521
113	ECF1 44-ECF1 97	ECF1_44	ECF1_97	30.000			4,264,460.013	150,137.223	1,876,718.173	Free Surface	2.844	0.479	0.464	1.196	0.851	0.520	9,194,468.376	No	1.196	2.844
114	ECF1_97-ECF1_25	ECF1_97	ECF1_25	30.000			4,264,460.013	150,137.223	1,876,718.173	Free Surface	2.963	0.464	0.439	1.159	0.851	0.553	9,719,681.687	No	1.159	2.963
115	ECF1A2_131-ECF1A2_132	ECF1A2_131	ECF1A2_132	12.000	293.266	0.008	1,308,957.871	37,113.106	463,904.465	Free Surface	4.468	0.561	0.604	0.561	0.607	1.165	2,166,340.368	Yes	0.604	4.081
116	ECF1A2_132-ECF4_133	ECF1A2_132	ECF4_133	12.000		0.005	1,308,957.871	37,113.106	463,904.465	Free Surface	3.761	0.648	0.753	0.648	0.607	0.883	1,738,336.479	No	0.648	3.761
117	ECF21_120-ECF21_121			12.000		0.005	1,255,387.517	35,323.187	441,529.754	Free Surface	3.832	0.615	0.698	0.615	0.594	0.936	1,798,953.748	No	0.615	3.832
118	ECF21_121-ECF21_123			12.000			1,255,387.517	35,323.187	441,529.754	Free Surface	3.557	0.656	0.766	0.656	0.594		1,638,612.605	No	0.656	3.557
119				12.000			1,255,387.517	35,323.187	441,529.754	Free Surface	3.879	0.609	0.687	0.609	0.594		1,826,926.891	No	0.609	3.879
120	ECF21_124-ECF21_130 ECF21_130-ECF1A2_131			12.000			1,255,387.517	35,323.187	441,529.754 441.529.754	Free Surface	3.822	0.617	0.700	0.617	0.594		1,793,096.783	No No	0.617	3.822
121	ECF21_130-ECF1A2_131 ECF21_131-ECF21_132			12.000 8.000	138.119		1,255,387.517 85,678.528	35,323.187 1,680.479	20,999.512	Free Surface Free Surface	3.493 2.055	0.667 0.240	0.784 0.127	0.667 0.160	0.594	1.076	1,602,102.791 677,140.724	No No	0.667 0.160	3.493 2.055
123				8.000	299.894		85,678.528	1,680.479	20,999.512	Free Surface	1.972	0.240	0.127	0.165		1.076	638,711.151	No	0.165	1.972
124	ECF21_132-ECF21_133			30.000			4,116,510.705	143,997.066	1,799,969.082	Free Surface	2.829	0.467	0.445	1.169	0.836		9,242,619.204	No	1.169	2.829
125				24.000			4,075,867.296	142,316.586	1,778,969.570	Free Surface	6.473	0.349	0.261	0.697	0.889		15,624,736.073	Yes	0.858	4.898
126		ECF21_23		30.000			4,116,510.705	143,997.066	1,799,969.082	Free Surface	2.893	0.460	0.432	1.149	0.836		9,524,883.908	No	1.149	2.893
127		ECF21_24		30.000	155.077	0.001	4,116,510.705	143,997.066	1,799,969.082	Free Surface	2.831	0.467	0.445	1.168	0.836	0.525	9,249,524.645	No	1.168	2.831
128	ECF21_9-ECF1_24	ECF21_9	ECF1_24	30.000	492.000	0.002	4,150,821.398	145,416.905	1,817,718.516	Free Surface	3.355	0.413	0.357	1.033	0.839	0.670	11,611,684.604	Yes	1.058	3.248

	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Unpeakable Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)		Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth (ft)	Adjusted Velocity
129	ECF3 217-ECF3 218	ECF3 217	ECF3 218	18.000	469.731	0.002		42,233.744	527,889.401	Free Surface	2.988	0.443	0.405	0.665	0.568		3,600,918.864	No	0.665	2.988
130	ECF3 218-TOE 2746	ECF3_218	TOE_2746	18.000	297.552	0.003	1,459,861.334	42,233.744	527,889.401	Free Surface	3.401	0.402	0.340	0.603	0.568	0.892	4,296,433.228	No	0.603	3.401
131	ECF4_133-ECF4_134	ECF4_133	ECF4_134	12.000	398.994	0.006	1,308,957.871	37,113.106	463,904.465	Free Surface	3.965	0.619	0.705	0.619	0.607	0.963	1,857,266.033	Yes	0.969	2.603
132	ECF4_134-ECF4_135	ECF4_134	ECF4_135	12.000	300.951	0.002	1,308,957.871	37,113.106	463,904.465	Pressurized	2.579	1.000	1.271	1.000	0.536	0.454	1,029,635.546	No	1.000	2.579
133	ECF4_135-TOE_2662	ECF4_135	TOE_2662	15.000	88.785	0.002	1,628,909.646	48,080.142	600,990.974	Free Surface	2.859	0.675	0.798	0.844	0.636	0.581	2,041,934.441	No	0.844	2.859
134	ECF5_204-ECF5_205	ECF5_204	ECF5_205	18.000	92.979	0.010	1,328,325.158	37,766.866	472,062.062	Free Surface	4.890	0.288	0.180	0.431	0.541	1.549	7,367,341.389	No	0.431	4.890
135	ECF5_205-ECF5_208	ECF5_205	ECF5_208	18.000	243.553	0.010	1,328,325.158	37,766.866	472,062.062	Free Surface	4.891	0.287	0.180	0.431	0.541	1.549	7,369,094.379	Yes	0.431	4.887
136	ECF5_208-ECF5_209	ECF5_208	ECF5_209	18.000	59.397	0.010	1,328,325.158	37,766.866	472,062.062	Free Surface	4.882	0.288	0.181	0.432	0.541		7,349,732.797	Yes	0.495	4.047
137	ECF5_209-ECF5_213	ECF5_209	ECF5_213	18.000	204.830		1,328,325.158	37,766.866	472,062.062	Free Surface	3.064	0.405	0.344	0.607	0.541		3,855,901.750	No	0.607	3.064
138	ECF5_213-ECF5_214 ECF5_214-ECF5_215	ECF5_213 ECF5_214	ECF5_214 ECF5_215	18.000 18.000	189.500 373.761	0.003	1,328,325.158 1.459.861.334	37,766.866 42,233.744	472,062.062 527,889.401	Free Surface Free Surface	3.068 3.451	0.404	0.344	0.607 0.596	0.541		3,863,009.650 4,382,464.774	No No	0.607 0.596	3.068 3.451
140	ECF5_214-ECF5_215 ECF5_215-ECF5_216	ECF5_214 ECF5_215	ECF5_216	18.000	501.110	0.004	1,459,861.334	42,233.744	527,889.401	Free Surface	5.502	0.397	0.333	0.424	0.568	1.759	8,366,467.435	No	0.390	5.502
141	ECF5_216-ECF3_216 ECF5_216-ECF3_217	ECF5_216	ECF3_217	18.000	465.922	0.013	1,459,861.334	42,233.744	527,889.401	Free Surface	5.502	0.282	0.174	0.424	0.568	1.762	8,382,439.078	Yes	0.519	4.160
142	EHF1 2-EHF4 1	EHF1 2	EHF4 1	8.000	72.518	0.003	171,490.918	3,460.319	43,250.384	Free Surface	1.846	0.430	0.385	0.287	0.238	0.697	445,508.194	No	0.287	1.846
143	EHF1 3-EHF1 2	EHF1 3	EHF1 2	8.000	209.536	0.005	171,490.918	3,460.319	43,250.384	Free Surface	2.255	0.371	0.293	0.247	0.238	0.930	586,049.477	No	0.247	2.255
144	EHF1 4-EHF1 3	EHF1_4	EHF1_3	8.000	264.573	0.005	171,490.918	3,460.319	43,250.384	Free Surface	2.279	0.368	0.288	0.245	0.238	0.944	594,651.505	No	0.245	2.279
145	EHF1_5-EHF1_4	EHF1_5	EHF1_4	8.000	72.008	0.021	171,490.918	3,460.319	43,250.384	Free Surface	3.827	0.253	0.140	0.169	0.238	1.950	1,224,387.430	No	0.169	3.827
146	EHF1_6-EHF1_5	EHF1_6	EHF1_5	8.000	83.531	0.041	171,490.918	3,460.319	43,250.384	Free Surface	4.854	0.214	0.100	0.143	0.238	2.705	1,711,509.151	No	0.143	4.854
147	EHF1_7-EHF1_6	EHF1_7	EHF1_6	8.000	219.245		171,490.918	3,460.319	43,250.384	Free Surface	4.585	0.223	0.109	0.148	0.238	2.502	1,579,448.808	No	0.148	4.585
148	EHF1_8-EHF1_7	EHF1_8	EHF1_7	8.000	271.700	0.021	171,490.918	3,460.319	43,250.384	Free Surface	3.836	0.252	0.140	0.168	0.238	1.956	1,228,729.304	No	0.168	3.836
149	EHF10_11-EHF9_10	EHF10_11	EHF9_10	8.000	256.644	0.014	144,403.146	2,879.999	35,999.986	Free Surface	3.132	0.258	0.146	0.172	0.218	1.579	990,677.374	No	0.172	3.132
150	EHF10_12-EHF10_11	EHF10_12	EHF10_11	8.000	104.212		144,403.146	2,879.999	35,999.986	Free Surface	2.407	0.312	0.211	0.208	0.218	1.094	685,264.637	No	0.208	2.407
151	EHF10_13-EHF10_12 EHF10_14-EHF10_13	EHF10_13 EHF10_14	EHF10_12 EHF10_13	8.000 8.000	148.178 185.568	0.013	144,403.146 144,403.146	2,879.999 2,879.999	35,999.986 35,999.986	Free Surface Free Surface	3.076 2.222	0.261	0.150 0.235	0.174 0.220	0.218	1.539 0.978	965,656.503 613,334.939	No No	0.174 0.220	3.076 2.222
152	EHF10_14-EHF10_13 EHF10_15-EHF10_14	EHF10_14	EHF10_13	8.000	179.349	0.005	144,403.146	2,879.999	35,999.986	Free Surface	2.222	0.332	0.238	0.220	0.218	0.978	607,587.024	No	0.220	2.222
154	EHF10_15-EHF10_14 EHF10_16-EHF10_15	EHF10_16	EHF10 15	8.000	191.512	0.005	144,403.146	2,879.999	35,999.986	Free Surface	2.213	0.331	0.237	0.221	0.218	0.973	609,934.416	No	0.221	2.213
155	EHF10 17-EHF10 16	EHF10 17	EHF10 16	8.000	99.824	0.004	144,403.146	2,879.999	35,999.986	Free Surface	2.055	0.350	0.262	0.233	0.218	0.876	550,262.793	No	0.233	2.055
156	EHF10 18-EHF10 17	EHF10 18	EHF10 17	8.000	48.315	0.005	144,403.146	2,879.999	35,999.986	Free Surface	2.149	0.338	0.247	0.226	0.218	0.933	585,310.316	No	0.226	2.149
157	EHF11 146-EHF11 147	EHF11_146	EHF11_147	8.000	149.540	0.005	144,403.146	2,879.999	35,999.986	Free Surface	2.189	0.334	0.240	0.223	0.218	0.958	600,780.117	No	0.223	2.189
158	EHF11_147-EHF11_148	EHF11_147	EHF11_148	8.000	258.010	0.007	144,403.146	2,879.999	35,999.986	Free Surface	2.470	0.306	0.203	0.204	0.218	1.134	710,533.609	No	0.204	2.470
159	EHF11_148-EHF9_19	EHF11_148	EHF9_19	8.000	162.000	0.008	144,403.146	2,879.999	35,999.986	Free Surface	2.599	0.295	0.189	0.197	0.218	1.218	762,854.562	No	0.197	2.599
160	EHF3_10-EHF3_9	EHF3_10	EHF3_9	8.000	275.063	0.040	171,490.918	3,460.319	43,250.384	Free Surface	4.839	0.214	0.101	0.143	0.238	2.694	1,704,154.670	No	0.143	4.839
161	EHF3_11-EHF3_10	EHF3_11	EHF3_10	8.000	280.011	0.036	171,490.918	3,460.319	43,250.384	Free Surface	4.634	0.221	0.107	0.147	0.238	2.538	1,603,157.020	No	0.147	4.634
162	EHF3_12-EHF3_11	EHF3_12	EHF3_11	8.000	280.647	0.010	171,490.918	3,460.319	43,250.384	Free Surface	2.979	0.302	0.199	0.202	0.238	1.377	862,347.690	No	0.202	2.979
163	EHF3_42_EHF3_12	EHF3_42	EHF3_12	8.000	143.448	0.005	171,490.918	3,460.319	43,250.384	Free Surface	2.274	0.368	0.289	0.246	0.238	0.941	592,605.092	No	0.246	2.274
164	EHF3_9-EHF1_8	EHF3_9 EHF4_1	EHF1_8 TOE 2592	8.000 8.000	281.524 38.176	0.016	171,490.918 171,490.918	3,460.319 3,460.319	43,250.384 43,250.384	Free Surface Free Surface	3.482 4.077	0.270	0.160 0.128	0.180 0.161	0.238	1.711 2.128	1,072,536.676 1,338,228.266	No No	0.180 0.161	3.482 4.077
166	EHF4_1-TOE_2592 EHF7 1-EHF3 42	EHF7 1	EHF3 42	8.000	167.606	0.025	171,490.918	3,460.319	43,250.384	Free Surface	2.382	0.356	0.128	0.101	0.238	1.005	631,917.381	No	0.101	2.382
167	EHF7_1-EHF3_42 EHF7_6-EHF7_1	EHF7 6	EHF7 1	8.000	274.487	0.005	171,490.918	3,460.319	43,250.384	Free Surface	2.351	0.359	0.271	0.240	0.238	0.987	620,813.832	No	0.240	2.351
168	EHF9 10-EHF9 9	EHF9 10	EHF9 9	8.000	50.865	0.010	144,403.146	2,879.999	35,999.986	Free Surface	2.807	0.279	0.170	0.186	0.218	1.356	849,449.276	No	0.186	2.807
169	EHF9 19-EHF10 18	EHF9 19	EHF10 18	8.000	262.829	0.006	144,403.146	2,879.999	35,999.986	Free Surface	2.310	0.321	0.223	0.214	0.218	1.033	647,250.479	No	0.214	2.310
170	EHF9_1-GVF1_0	EHF9_1	GVF1_0	8.000	246.107	0.042	144,403.146	2,879.999	35,999.986	Free Surface	4.648	0.195	0.084	0.130	0.218	2.716	1,728,730.317	Yes	0.667	0.640
171	EHF9_2-EHF9_1	EHF9_2	EHF9_1	8.000	361.561	0.048	144,403.146	2,879.999	35,999.986	Free Surface	4.884	0.189	0.078	0.126	0.218	2.907	1,854,576.605	No	0.126	4.884
172	EHF9_3-EHF9_2	EHF9_3	EHF9_2	8.000	186.841	0.050	144,403.146	2,879.999	35,999.986	Free Surface	4.970	0.186	0.076	0.124	0.218	2.977	1,900,766.814	No	0.124	4.970
173	EHF9_4-EHF9_3	EHF9_4	EHF9_3	8.000	155.145		144,403.146	2,879.999	35,999.986	Free Surface	4.920	0.188	0.077	0.125	0.218	2.936	1,873,883.793	No	0.125	4.920
174	EHF9_5-EHF9_4	EHF9_5	EHF9_4	8.000	242.340	0.049	144,403.146	2,879.999	35,999.986	Free Surface	4.940	0.187	0.077	0.125	0.218	2.952	1,884,590.663	No	0.125	4.940
175	EHF9_6-EHF9_5	EHF9_6	EHF9_5	8.000	124.073		144,403.146	2,879.999	35,999.986	Free Surface	2.729	0.285	0.177	0.190	0.218	1.304	816,722.607	No	0.190	2.729
176	EHF9_7-EHF9_6	EHF9_7	EHF9_6	8.000	189.952		144,403.146	2,879.999	35,999.986	Free Surface	4.315	0.206	0.093 0.152	0.137 0.176	0.218	2.453	1,555,938.102	No No	0.137 0.176	4.315
177 <b>1</b>	EHF9_8-EHF9_7 EHF9_9-EHF9_8	EHF9_8 EHF9_9	EHF9_7 EHF9_8	8.000 8.000	131.348 126.463		144,403.146 144,403.146	2,879.999 2,879.999	35,999.986 35,999.986	Free Surface Free Surface	3.036 3.043	0.264	0.152	0.176	0.218	1.512 1.517	947,924.207 951,220.660	No	0.176	3.036 3.043
178	EP 1-EP 2	EP 1	EP 2	8.000	2,935.010		196,760.362	4,001.758	50,014.061	Free Surface	3.975	0.203	0.152	0.170	0.216	1.949	1,221,889.131	Yes	0.170	2.909
180	EP 2-EP 3	EP 2	EP 3	8.000	1,331.650		610,249.714	15,036.474	187,950.169	Free Surface	4.708	0.559	0.601	0.372	0.461	1.508	1,015,980.200	No	0.372	4.708
181	EP_3-I25_19	EP_3	125_19	8.000	574.890	0.017	610,249.714	15,036.474	187,950.169	Free Surface	4.971	0.535	0.559	0.356	0.461	1.639	1,091,092.294	Yes	0.587	2.900
182	EVF1_7-EVF2_6	EVF1_7	EVF2_6	10.000	216.280	0.003	185,499.555	3,759.839	47,000.142	Free Surface	1.853	0.327	0.231	0.272	0.232	0.733	803,361.857	No	0.272	1.853
183	EVF1A1_51-LCFA_1	EVF1A1_51	LCFA_1	21.000	93.148	0.002	2,081,721.867	64,274.376	803,440.497	Free Surface	3.304	0.425	0.377	0.744	0.652	0.776	5,527,552.587	Yes	0.765	3.189
184				21.000			2,273,968.243	71,356.293	891,970.224	Free Surface	2.306	0.606	0.683	1.061	0.683		3,330,501.695	No	1.061	2.306
185	EVF1A2_1-EVF1A2_50			21.000	186.858		2,081,721.867	64,274.376	803,440.497	Free Surface	2.419	0.542	0.572	0.949	0.652		3,639,275.758	Yes	0.984	2.312
186				21.000			2,081,721.867	64,274.376	803,440.497	Free Surface	2.214	0.583	0.642	1.020	0.652		3,242,109.775	No	1.020	2.214
187	EVF2_1A-EVF2_8	EVF2_1A	EVF2_8	12.000	143.991		0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000		1,587,423.739	Yes	0.122	0.000
188	EVF2_2-EVF2_8	EVF2_2	EVF2_8	12.000	94.559	0.003	185,499.555	3,759.839	47,000.142	Free Surface	1.967	0.241	0.127	0.241	0.220		1,455,021.234	No	0.241	1.967
189	EVF2_3-EVF2_2	EVF2_3 EVF2_4A	EVF2_2 KEF1_3	12.000 12.000	95.123 276.789	0.008	185,499.555 239,919.034	3,759.839 4,979.518	47,000.142 62,249.737	Free Surface Free Surface	2.616 1.547	0.197 0.345	0.085 0.256	0.197 0.345	0.220	0.542	2,176,055.790 938,867.719	No No	0.197 0.345	2.616 1.547
190	EVF2_4A-KEF1_3 EVF2_4-EVF2_3	EVF2_4A EVF2_4	EVF2_3	10.000	287.309		185,499.555	3,759.839	47,000.142	Free Surface	1.760	0.345	0.236	0.345	0.232	0.682	748,295.666	Yes	0.545	0.751
192	EVF2_4-EVF2_3 EVF2_5A-EVF2_4	EVF2_4 EVF2_5A	EVF2_3 EVF2_4	10.000	177.162			3,759.839	47,000.142	Free Surface	1.915	0.339	0.220	0.266		0.768	841,291.145	No	0.330	1.915
102	2712_0/\.EVI2_4			.0.000		3.000	. 50, 100.000	3,7 00.000	,000			0.0.0	0.220	0.200	3.202	300	, 10		0.200	

	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Unpeakable Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)		Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth (ft)	Adjusted Velocity
193	EVF2 5-EVF2 4A	EVF2_5	EVF2_4A	12.000	187.149	0.002	185,499.555	3,759.839	47,000.142	Free Surface	1.714	0.266	0.155	0.266	0.220	0.694	1,198,908.685	No	0.266	1.714
194	EVF2_6A-EVF2_5	EVF2_6A	EVF2_5	12.000	46.711	0.004	185,499.555	3,759.839	47,000.142	Free Surface	2.019	0.237	0.123	0.237	0.220	0.870	1,508,900.022	No	0.237	2.019
195	EVF2_6-EVF2_5A	EVF2_6	EVF2_5A	10.000	220.000	0.003	185,499.555	3,759.839	47,000.142	Free Surface	1.841	0.328	0.233	0.274	0.232	0.727	796,540.917	No	0.274	1.841
196	EVF2_7-EVF2_6A	EVF2_7	EVF2_6A	12.000	46.512	0.002	185,499.555	3,759.839	47,000.142	Free Surface	1.674	0.270	0.160	0.270	0.220	0.671	1,159,743.687	No	0.270	1.674
197	EVF2_8-EVF2_7	EVF2_8	EVF2_7	12.000	65.379	0.003	185,499.555	3,759.839	47,000.142	Free Surface	1.828	0.254	0.141	0.254	0.220		1,312,395.588	No	0.254	1.828
198	EVF3_47-EVF3_48	EVF3_47	EVF3_48	21.000	497.618		2,081,721.867	64,274.376	803,440.497	Free Surface	2.362	0.553	0.590	0.967	0.652		3,526,083.241	No	0.967	2.362
199	EVF3_48-EVF1A2_1 EVF4_46-EVF3_47	EVF3_48 EVF4_46	EVF1A2_1 EVF3 47	21.000 21.000	317.062 505.900	0.001	2,081,721.867 2,081,721.867	64,274.376 64,274.376	803,440.497 803,440.497	Free Surface Free Surface	2.394 2.382	0.547 0.549	0.580 0.584	0.957 0.960	0.652 0.652		3,588,728.736 3,566,357.378	No Yes	0.957 0.964	2.394 2.372
200	FMF4 4 4-TOE 2970	FMF4 4 4	TOE 2970	12.000	395.686	0.004	441,439.646	10,249.916	128,115.312	Free Surface	2.619	0.366	0.287	0.366	0.344		1,539,983.914	No	0.366	2.619
202	FMF6 1-FMF6 4 6	FMF6 1	FMF6 4 6	8.000	115.487	0.068	296,858.843	6,409.438	80,115.810	Free Surface	6.819	0.248	0.134	0.165	0.317		2,207,498.480	No	0.165	6.819
203	FMF6_2-FMF6_1	FMF6_2	FMF6_1	8.000	150.000	0.012	296,858.843	6,409.438	80,115.810	Free Surface	3.648	0.390	0.321	0.260	0.317	1.461	924,118.990	No	0.260	3.648
204	FMF6_4_6-TOE_2973	FMF6_4_6	TOE_2973	12.000	142.272	0.004	441,439.646	10,249.916	128,115.312	Free Surface	2.722	0.356	0.272	0.356	0.344	0.937	1,624,287.031	No	0.356	2.722
205	FMF7_3-FMF6_2	FMF7_3	FMF6_2	8.000	270.000	0.009	296,858.843	6,409.438	80,115.810	Free Surface	3.356	0.415	0.360	0.277	0.317	1.296	824,426.197	No	0.277	3.356
206	FMF7_4-FMF7_3	FMF7_4	FMF7_3	8.000	430.000	0.009	296,858.843	6,409.438	80,115.810	Free Surface	3.313	0.419	0.367	0.279	0.317	1.272	809,976.682	No	0.279	3.313
207	FMF7_5-FMF7_4	FMF7_5	FMF7_4	8.000	352.996	0.010	296,858.843	6,409.438	80,115.810	Free Surface	3.405	0.410	0.353	0.274	0.317	1.323	841,091.527	No	0.274	3.405
208	FMF8_10-FMF8_9	FMF8_10 FMF8_11	FMF8_9	8.000 8.000	91.023 71.269	0.005	296,858.843 296,858.843	6,409.438 6,409.438	80,115.810 80,115.810	Free Surface Free Surface	2.550 2.547	0.513	0.521	0.342 0.342	0.317	0.864 0.863	569,349.967 568,446.303	No No	0.342 0.342	2.550 2.547
209	FMF8_11-FMF8_10 FMF8_1-FMF8_6	FMF8 1	FMF8_10 FMF8_6	8.000	90.764	0.004	296,858.843	6,409.438	80,115.810	Free Surface	6.769	0.513	0.522	0.342	0.317		2,184,769.012	No	0.342	6.769
211	FMF8 2-FMF8 1	FMF8 2	FMF8_0	8.000	74.020	0.000	296,858.843	6,409.438	80,115.810	Free Surface	3.509	0.401	0.130	0.160	0.317	1.382	876,399.929	No	0.267	3.509
212	FMF8 3-FMF8 2	FMF8_3	FMF8_2	8.000	130.706	0.012	296,858.843	6,409.438	80,115.810	Free Surface	3.612	0.393	0.326	0.262	0.317	1.441	911,811.000	No	0.262	3.612
213	FMF8_4-FMF8_3	FMF8_4	FMF8_3	8.000	103.656	0.009	296,858.843	6,409.438	80,115.810	Free Surface	3.345	0.416	0.362	0.277	0.317	1.289	820,637.465	No	0.277	3.345
214	FMF8_6-FMF7_5	FMF8_6	FMF7_5	8.000	160.553	0.017	296,858.843	6,409.438	80,115.810	Free Surface	4.189	0.352	0.265	0.235	0.317	1.779	1,118,294.473	No	0.235	4.189
215	FMF8_8-FMF8_4	FMF8_8	FMF8_4	8.000	206.870	0.017	296,858.843	6,409.438	80,115.810	Free Surface	4.136	0.355	0.270	0.237	0.317	1.747	1,098,701.288	No	0.237	4.136
216	FMF8_9-FMF8_8	FMF8_9	FMF8_8	8.000	200.000	0.005	296,858.843	6,409.438	80,115.810	Free Surface	2.662	0.496	0.492	0.330	0.317	0.922	602,849.761	No	0.330	2.662
217	FMF9_10-FMF9_11	FMF9_10	FMF9_11	8.000	279.830	0.012	139,232.949	2,769.119	34,616.147	Free Surface	2.953	0.262	0.150	0.175	0.214	1.475	925,419.375	No	0.175	2.953
218	FMF9_11-FMF9_12 FMF9_12-FMF9_13	FMF9_11 FMF9_12	FMF9_12 FMF9_13	8.000 8.000	252.130 39.140	0.007	139,232.949 139,232.949	2,769.119 2,769.119	34,616.147 34,616.147	Free Surface Free Surface	2.485 2.493	0.297 0.296	0.192	0.198 0.197	0.214	1.160 1.166	726,669.964 730,217.431	No No	0.198 0.197	2.485 2.493
220	FMF9_12-FMF9_13	FMF9_12	FMF9_13	8.000	54.240	0.007	139,232.949	2,769.119	34,616.147	Free Surface	2.493	0.290	0.180	0.197	0.214	1.234	772,698.419	No	0.197	2.493
221	FMF9 15-FMF9 23	FMF9 15	FMF9 23	8.000	49.960	0.007	139,232.949	2,769.119	34,616.147	Free Surface	2.418	0.302	0.199	0.202	0.214	1.117	699,828.864	No	0.202	2.418
222	FMF9 1-TOE 2710	FMF9 1	TOE 2710	10.000	71.040	0.008	688,345.896	17,340.473	216,750.158	Free Surface	3.856	0.505	0.509	0.421	0.459	1.180	1,353,395.699	Yes	0.545	2.820
223	FMF9_22-FMF9_9	FMF9_22	FMF9_9	8.000	371.380	0.004	139,232.949	2,769.119	34,616.147	Free Surface	1.960	0.352	0.266	0.235	0.214	0.832	522,713.730	No	0.235	1.960
224	FMF9_23-FMF9_35	FMF9_23	FMF9_35	8.000	44.080	0.007	139,232.949	2,769.119	34,616.147	Free Surface	2.475	0.297	0.193	0.198	0.214	1.154	722,799.434	No	0.198	2.475
225	FMF9_35-FMF9_22	FMF9_35	FMF9_22	8.000	118.160	0.006	139,232.949	2,769.119	34,616.147	Free Surface	2.265	0.317	0.218	0.211	0.214	1.019	638,801.265	No	0.211	2.265
226	FMF9_3-FMF8_11	FMF9_3 FMF9_9	FMF8_11 FMF9_10	8.000 8.000	240.000 281.570	0.005	139,232.949 139,232.949	2,769.119 2,769.119	34,616.147 34,616.147	Free Surface Free Surface	2.158 2.557	0.328	0.233	0.219 0.194	0.214	0.953 1.208	597,353.575 756,648.937	No No	0.219 0.194	2.158 2.557
227	FMF9_9-FMF9_10 GVF1 0-GVF1 36	GVF1 0	GVF1 36	8.000	204.942	0.008	215,385.419	4,400.638	54,999.339	Free Surface	5.778	0.231	0.104	0.194	0.214	3.156	1,992,874.077	No	0.148	5.778
229	GVF1 100-GVF1 101	GVF1 100	GVF1 101	8.000	115.699	0.022	496,034.920	11,760.476	147,000.905	Free Surface	5.250	0.436	0.394	0.291	0.414	1.968	1,259,413.660	No	0.291	5.250
230	GVF1 101-GVF1 102	GVF1 101	GVF1 102	8.000	335.002	0.013	496,034.920	11,760.476	147,000.905	Free Surface	4.252	0.513	0.523	0.342	0.414	1.440	948,739.808	No	0.342	4.252
231	GVF1_102-GVF1_103	GVF1_102	GVF1_103	8.000	55.341	0.012	496,034.920	11,760.476	147,000.905	Free Surface	4.129	0.526	0.544	0.350	0.414	1.377	912,285.351	No	0.350	4.129
232	GVF1_103-GVF1_104	GVF1_103	GVF1_104	8.000	52.260	0.008	496,034.920	11,760.476	147,000.905	Free Surface	3.657	0.580	0.637	0.387	0.414	1.141	778,406.631	No	0.387	3.657
233	GVF1_104-GVF1_105	GVF1_104	GVF1_105	8.000	145.575	0.026	496,034.920	11,760.476	147,000.905	Free Surface	5.549	0.418	0.365	0.279	0.414	2.132	1,357,921.256	No	0.279	5.549
234	GVF1_105-GVF1_106	GVF1_105	GVF1_106	8.000	69.468	0.037	496,034.920	11,760.476	147,000.905	Free Surface	6.363	0.377	0.303	0.252	0.414	2.596	1,638,025.872	No	0.252	6.363
235	GVF1_106-GVF1_107 GVF1_107-GVF1_108	GVF1_106 GVF1_107	GVF1_107 GVF1_108	8.000 8.000	40.229 130.785	0.030	496,034.920 496,034.920	11,760.476 11,760.476	147,000.905 147,000.905	Free Surface Free Surface	5.849 6.495	0.402	0.340	0.268 0.248	0.414	2.300	1,459,036.051 1,685,040.195	No No	0.268 0.248	5.849 6.495
237	GVF1_107-GVF1_108 GVF1_108-GVF1_109	GVF1_107	GVF1_100	8.000	99.765	0.020	496,034.920	11,760.476	147,000.905	Free Surface	5.107	0.445	0.409	0.240	0.414	1.890	1,213,079.383	No	0.297	5.107
238	GVF1 109-GVF1 111	GVF1 109	GVF1 111	8.000	210.244	0.098	496,034.920	11,760.476	147,000.905	Free Surface	9.003	0.293	0.187	0.195	0.414		2,650,918.354	No	0.195	9.003
239	GVF1_111-GVF1_113	GVF1_111	GVF1_113	8.000	223.339	0.017	496,034.920	11,760.476	147,000.905	Free Surface	4.719	0.473	0.455	0.315	0.414	1.683	1,090,421.306	No	0.315	4.719
240	GVF1_113-GVF1_114	GVF1_113	GVF1_114	8.000	39.937	0.009	496,034.920	11,760.476	147,000.905	Free Surface	3.794	0.563	0.607	0.375	0.414	1.209	816,534.936	No	0.375	3.794
241	GVF1_114-GVF1_115	GVF1_114	GVF1_115	8.000	72.568	0.010	496,034.920	11,760.476	147,000.905	Free Surface	3.915	0.548	0.583	0.366	0.414	1.270	850,846.058	No	0.366	3.915
242	GVF1_115-GVF1_116	GVF1_115	GVF1_116	8.000	41.819	0.012	496,034.920	11,760.476	147,000.905	Free Surface	4.243	0.514	0.524	0.343	0.414	1.435	945,977.845	No	0.343	4.243
243	GVF1_116-GVF1_117	GVF1_116 GVF1_117	GVF1_117 ECF1 118	12.000 12.000	40.907 319.483	0.003	754,436.852 911,770.441	19,329.113 24,189.111	241,600.229 302,350.926	Free Surface Free Surface	2.825 3.811	0.521 0.477	0.535	0.521 0.477	0.455	0.774 1.103	1,410,003.553 1.974.006.450	No No	0.521 0.477	2.825 3.811
244	GVF1_117-ECF1_118 GVF1_36-GVF1_37	GVF1_117	GVF1_116	8.000	227.819	0.000	215,385.419	4,400.638	54,999.339	Free Surface	3.016	0.354	0.462	0.477	0.268	1.103	802.756.597	No	0.236	3.016
246	GVF1_30-GVF1_37 GVF1_37-GVF1_40	GVF1_30	GVF1_37	8.000	112.963		215,385.419	4,400.638	54,999.339	Free Surface	2.783	0.375	0.300	0.250	0.268	1.139	718,352.275	No	0.250	2.783
247	GVF1 40-GVF1 41	GVF1_40	GVF1_41	8.000	79.896	0.009	215,385.419	4,400.638	54,999.339	Free Surface	2.977	0.357	0.273	0.238	0.268	1.253	788,361.419	No	0.238	2.977
248	GVF1_41-GVF1_48	GVF1_41	GVF1_48	8.000			215,385.419	4,400.638	54,999.339	Free Surface	3.574	0.313	0.212	0.208	0.268		1,015,806.873	No	0.208	3.574
249	GVF1_48-GVF1_50	GVF1_48	GVF1_50	8.000	155.948			4,400.638	54,999.339	Free Surface	3.559	0.314	0.213	0.209	0.268		1,009,879.222	No	0.209	3.559
250	GVF1_50-GVF1_51	GVF1_50	GVF1_51	8.000	261.911			4,400.638	54,999.339	Free Surface	3.780	0.300	0.196	0.200	0.268		1,098,295.807	No	0.200	3.780
251	GVF1_51-GVF1_52	GVF1_51	GVF1_52	10.000	141.579		341,665.428	7,568.637	94,599.324	Free Surface	2.540	0.406	0.347	0.339		0.888	984,481.446	No	0.339	2.540
252	GVF1_52-GVF1_53	GVF1_52	GVF1_53	10.000	86.625	0.005	341,665.428	7,568.637	94,599.324	Free Surface	2.629	0.396	0.331	0.330	0.318		1,032,056.782	No	0.330	2.629
253	GVF1_53-GVF1_56 GVF1_56-GVF1_57	GVF1_53 GVF1_56	GVF1_56 GVF1_57	10.000 10.000	84.916 59.986	0.006	341,665.428 341,665.428	7,568.637 7,568.637	94,599.324 94,599.324	Free Surface Free Surface	2.960 2.479	0.363 0.414	0.281	0.302 0.345		1.105 0.857	1,215,168.899 952,430.183	No No	0.302 0.345	2.960 2.479
255	GVF1_56-GVF1_57 GVF1_57-GVF1_58	GVF1_56 GVF1_57	GVF1_57 GVF1_58	10.000	135.171		341,665.428	7,568.637	94,599.324	Free Surface	2.479	0.414	0.358	0.345	0.318	0.859	954,010.335	No	0.345	2.479
256	GVF1 58-GVF1 59	GVF1 58	GVF1_59	10.000			341,665.428	7,568.637	94,599.324	Free Surface	2.830	0.375	0.299	0.312			1,142,103.592	No	0.312	2.830
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	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Unpeakable Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)		Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth (ft)	Adjusted Velocity
257	GVF1 59-GVF1 60	GVF1 59	GVF1 60	10.000	183.929	0.005	341,665.428	7,568.637	94,599.324	Free Surface	2.699	0.388	0.319	0.324	0.318	0.969	1,069,948.622	No	0.324	2.699
258	GVF1_60-GVF1_61	GVF1_60	GVF1_61	12.000	184.669	0.003	341,665.428	7,568.637	94,599.324	Free Surface	2.113	0.355	0.271	0.355	0.302	0.728	1,261,822.207	No	0.355	2.113
259	GVF1_61-GVF1_78	GVF1_61	GVF1_78	12.000	63.774	0.005	341,665.428	7,568.637	94,599.324	Free Surface	2.635	0.303	0.199	0.303	0.302	0.994	1,715,481.944	No	0.303	2.635
260	GVF1_78-GVF1_80	GVF1_78	GVF1_80	12.000	209.783	0.002	341,665.428	7,568.637	94,599.324	Free Surface	1.953	0.377	0.302	0.377	0.302		1,132,388.242	No	0.377	1.953
261	GVF1_80-GVF1_90	GVF1_80	GVF1_90	12.000	224.665	0.002	341,665.428	7,568.637	94,599.324	Free Surface	1.983	0.373	0.296	0.373	0.302		1,156,110.201	No	0.373	1.983
262	GVF1_90-GVF1_91	GVF1_90	GVF1_91	12.000	52.638	0.002	341,665.428	7,568.637	94,599.324	Free Surface	2.090	0.358	0.275	0.358	0.302		1,242,996.882	No	0.358	2.090
263	GVF1_91-GVF1_116 GVF1_95-GVF1_96	GVF1_91 GVF1_95	GVF1_116 GVF1_96	12.000 8.000	200.994 76.100	0.018	341,665.428 496,034.920	7,568.637 11,760.476	94,599.324 147,000.905	Free Surface Free Surface	4.225 4.898	0.216 0.460	0.103 0.433	0.216 0.307	0.302		3,328,739.672 1,146,508.437	No No	0.216 0.307	4.225 4.898
265	GVF1_95-GVF1_90 GVF1_96-GVF1_97	GVF1 96	GVF1_97	8.000		0.030	496,034.920	11,760.476	147,000.905	Free Surface	5.888	0.400	0.337	0.267	0.414		1,472,658.535	No	0.267	5.888
266	GVF1 97-GVF1 98	GVF1 97	GVF1 98	8.000	114.319	0.033	496,034.920	11,760.476	147,000.905	Free Surface	6.056	0.392	0.324	0.261	0.414	2.418	1,530,300.191	No	0.261	6.056
267	GVF1_98-GVF1_99	GVF1_98	GVF1_99	8.000	92.578	0.048	496,034.920	11,760.476	147,000.905	Free Surface	6.960	0.353	0.268	0.236	0.414	2.949	1,853,624.894	No	0.236	6.960
268	GVF1_99-GVF1_100	GVF1_99	GVF1_100	8.000	81.192	0.048	496,034.920	11,760.476	147,000.905	Free Surface	6.949	0.354	0.268	0.236	0.414	2.942	1,849,699.823	No	0.236	6.949
269	HWY52_10-HWY52_11	HWY52_10	HWY52_11	24.000	846.399	0.004	8,065,105.788	318,872.040	3,985,945.859	Free Surface	5.408	0.689	0.820	1.377	1.270	0.854	9,841,403.736	No	1.377	5.408
270	HWY52_11-HWY52_12	HWY52_11	HWY52_12	24.000			8,267,214.367	328,334.276	4,104,231.735	Free Surface	5.440	0.701	0.838	1.401	1.286		9,862,350.656	Yes	1.605	4.732
271	HWY52_12-TOE_2904		TOE_2904	36.000			8,267,214.367	328,334.276	4,104,231.735	Free Surface	2.694	0.637	0.734	1.910	1.137		11,264,072.713	Yes	2.407	2.104
272	HWY52_1-HWY52_2	HWY52_1	HWY52_2				5,871,820.499	219,137.677	2,739,246.169	Free Surface	5.095	0.553 0.515	0.591	1.106 1.029	1.076 1.076		9,932,906.547	No No	1.106 1.029	5.095 5.577
273	HWY52_2-HWY52_3 HWY52_3-HWY52_4	HWY52_2 HWY52_3	HWY52_3 HWY52_4	24.000 24.000			5,871,820.499 5,871,820.499	219,137.677 219,137.677	2,739,246.169 2,739,246.169	Free Surface Free Surface	5.577 5.659	0.515	0.525 0.515	1.029	1.076		11,186,622.998 11,407,795.711	No	1.029	5.659
275	HWY52_3-HWY52_4 HWY52_4-HWY52_5	HWY52_4	HWY52_5				5,871,820.499	219,137.677	2,739,246.169	Free Surface	5.103	0.552	0.590	1.105	1.076		9,951,084.187	No	1.105	5.103
276	HWY52 5-HWY52 6	HWY52 5	HWY52 6	24.000			7,775,695.767	305,396.525	3,817,496.163	Free Surface	11.605	0.365	0.284	0.730	1.246		27,357,606.246	Yes	0.935	8.346
277	HWY52 6-HWY52 7	HWY52 6	HWY52 7	24.000			7,775,695.767	305,396.525	3,817,496.163	Free Surface	5.874	0.620	0.707	1.241	1.246		11,001,508.941	No	1.241	5.874
278	HWY52_7-HWY52_8	HWY52_7	HWY52_8	24.000	982.740	0.005	7,775,695.767	305,396.525	3,817,496.163	Free Surface	5.877	0.620	0.706	1.240	1.246	1.009	11,006,634.371	No	1.240	5.877
279	HWY52_8-HWY52_9	HWY52_8	HWY52_9	24.000	1,745.531	0.012	8,040,841.418	317,738.760	3,971,779.144	Free Surface	8.367	0.479	0.465	0.958	1.268	1.709	17,307,674.328	Yes	1.125	6.838
280	HWY52_9-HWY52_10	HWY52_9	HWY52_10	24.000			8,040,841.418	317,738.760	3,971,779.144	Free Surface	5.332	0.696	0.830	1.391	1.268		9,682,028.669	No	1.391	5.332
281	125_10-125_11	125_10	125_11	18.000			1,945,731.935	59,336.618	741,710.601	Free Surface	2.467	0.652	0.760	0.978	0.660		2,561,321.452	No	0.978	2.467
282	125_11-125_12	125_11	125_12	18.000			1,945,731.935	59,336.618	741,710.601	Free Surface	2.539	0.636	0.733	0.954	0.660		2,654,227.110	No	0.954	2.539
283	125_12-125_13	125_12	125_13	18.000			1,945,731.935	59,336.618	741,710.601	Free Surface	2.465	0.653	0.761	0.979	0.660		2,557,714.201	No	0.979	2.465
284 285	125_13-125_14	125_13	I25_14 I25_15	18.000 18.000			1,945,731.935 2,436,637.470	59,336.618 77,437.411	741,710.601 967,976.276	Free Surface Free Surface	2.436 2.546	0.659 0.781	0.772 0.954	0.989 1.172	0.660 0.742		2,521,242.547 2,554,527.990	Yes No	1.030 1.172	2.327 2.546
286	125_14-125_15 125_15-125_16	I25_14 I25_15	125_15	18.000			2,436,637.470	77,437.411	967,976.276	Free Surface	2.550	0.781	0.952	1.172	0.742		2,559,390.262	No	1.172	2.550
287	125_15-125_16	125_16	125_17	18.000			2,436,637.470	77,437.411	967,976.276	Free Surface	2.541	0.783	0.956	1.174	0.742		2,549,137.288	No	1.174	2.541
288	125 17-125 18	125 17	125 18	18.000			2,782,514.430	90,606.206	1,132,584.054	Free Surface	8.719	0.323	0.226	0.484	0.795		12,328,705.003	No	0.484	8.719
289	125_18-125_19	125_18	125_19	18.000	615.110	0.023	2,782,514.430	90,606.206	1,132,584.054	Free Surface	8.160	0.339	0.247	0.508	0.795	2.359	11,243,987.478	Yes	0.663	5.712
290	125_19-125_20	125_19	125_20	18.000	350.670	0.005	3,427,538.237	115,950.196	1,449,385.374	Free Surface	4.678	0.612	0.692	0.918	0.887	0.936	4,950,031.529	No	0.918	4.678
291	125_1-125_2	125_1	125_2	8.000			229,621.442	4,721.758	59,018.378	Free Surface	3.206	0.355	0.269	0.236	0.277	1.356	852,383.725	Yes	0.259	2.827
292	125_20-125_21	125_20	125_21	18.000			3,427,538.237	115,950.196	1,449,385.374	Free Surface	4.674	0.613	0.693	0.919	0.887		4,943,382.511	No	0.919	4.674
293	125_21-125_22	125_21	125_22	18.000			3,427,538.237	115,950.196	1,449,385.374	Free Surface	5.745	0.518	0.530	0.776	0.887		6,467,408.972	No	0.776	5.745
294	125_22-125_23	125_22	125_23	18.000			3,427,538.237	115,950.196	1,449,385.374	Free Surface	7.813	0.408	0.350	0.613	0.887		9,789,705.498	Yes	0.697	6.590
295	125_23-125_24	125_23 125_24	125_24 125_25	18.000 24.000			4,095,879.211 4,095,879.211	143,143.146 143,143.146	1,789,301.566 1,789,301.566	Free Surface Free Surface	5.864 2.960	0.588 0.645	0.651 0.747	0.882 1.289	0.973	1.208 0.493	6,287,793.609 5,480,374.998	Yes No	0.911 1.289	5.645 2.960
296	125_24-125_25 125_25-125_26	125_25	125_26	24.000			4,095,879.211	143,143.146	1,789,301.566	Free Surface	2.967	0.643	0.747	1.287	0.891		5,496,072.039	No	1.287	2.967
298	125 26-125 27	125 26	125 27	24.000			4,370,744.010	154,570.982	1,932,146.632	Free Surface	4.329	0.498	0.496	0.996	0.922		8,805,912.290	Yes	1.028	4.156
299	125 27-125 28	125_27	125_28	24.000			4,370,744.010	154,570.982	1,932,146.632	Free Surface	3.577	0.580	0.638	1.161	0.922	0.644	6,850,195.904	No	1.161	3.577
300	125_28-125_29	125_28	125_29	24.000	690.810	0.001	4,370,744.010	154,570.982	1,932,146.632	Free Surface	3.242	0.630	0.723	1.260	0.922	0.550	6,042,595.868	No	1.260	3.242
301	125_29-125_30	125_29	125_30	24.000	2,626.620	0.007	4,645,185.603	166,112.577	2,076,414.418	Free Surface	5.994	0.406	0.347	0.813	0.952	1.352	13,386,284.582	Yes	1.023	4.445
302	125_2-125_3	125_2	125_3	8.000	354.910		881,379.722	23,232.951	290,414.771	Free Surface	6.380	0.589	0.652	0.392	0.550	1.970	1,350,907.908	Yes	0.439	5.599
303	125_30-125_31	125_30	125_31	24.000			4,867,270.153	175,543.134	2,194,299.974	Free Surface	3.385	0.667	0.784	1.333	0.975	0.549	6,209,171.960	No	1.333	3.385
304	125_31-125_32	125_31	125_32	24.000			4,867,270.153	175,543.134	2,194,299.974	Free Surface	3.398	0.664	0.780	1.329	0.975		6,240,031.494	No	1.329	3.398
305	125_32-125_33 125_33-125_34	125_32 125_33	125_33 125_34	24.000 24.000			4,867,270.153 4,867,270.153	175,543.134 175,543.134	2,194,299.974 2,194,299.974	Free Surface Free Surface	3.387 3.388	0.666	0.783 0.783	1.333 1.332	0.975 0.975		6,214,355.271 6,217,881.876	No No	1.333 1.332	3.387 3.388
306	125_33-125_34	125_33	125_34	24.000			4,867,270.153	175,543.134	2,194,299.974	Free Surface	3.385	0.667	0.784	1.333	0.975		6,209,983.139	No	1.333	3.385
308	125_34-125_35	125_35	125_36	24.000			4,867,270.153	175,543.134	2,194,299.974	Free Surface	4.017	0.576	0.631	1.152	0.975		7,714,323.017	Yes	1.173	3.934
309	I25_66-HWY52_1	125_36	HWY52 1	24.000			5,701,788.054	211,656.880	2,645,729.724	Free Surface	4.107	0.646	0.751	1.293	1.060		7,597,281.363	No	1.293	4.107
310	125_3-125_4	125_3	125_4	12.000			881,379.722	23,232.951	290,414.771	Free Surface	2.858	0.585	0.646	0.585	0.494		1,364,818.812	No	0.585	2.858
311	125_4-125_5	125_4	125_5	12.000	198.800	0.010	1,273,552.656	35,927.986	449,107.031	Free Surface	4.866	0.512	0.521	0.512	0.599	1.348	2,445,202.202	No	0.512	4.866
312	125_5-125_6	125_5	125_6	12.000	307.689	0.009	1,273,552.656	35,927.986	449,107.031	Free Surface	4.841	0.514	0.524	0.514	0.599	1.337	2,428,226.428	No	0.514	4.841
313	125_6-125_7	125_6	125_7	12.000			1,273,552.656	35,927.986	449,107.031	Free Surface	4.691	0.527	0.547	0.527	0.599		2,329,279.156	No	0.527	4.691
314	125_7-125_8	125_7	125_8	12.000			1,273,552.656	35,927.986	449,107.031	Free Surface	4.679	0.528	0.549	0.528	0.599		2,321,366.854	Yes	0.570	4.259
315	125_8-125_9	125_8	125_9	15.000			1,273,552.656	35,927.986	449,107.031	Free Surface	2.730	0.570	0.619	0.712	0.559		2,056,167.396	No	0.712	2.730
316	125_9-125_10 KEE1_10_KEE1_1	I25_9 KEE1_10	I25_10 KEE1_1	15.000	964.580		1,945,731.935	59,336.618	741,710.601	Free Surface	5.214	0.477	0.461	0.596	0.698		4,221,921.089	Yes	0.692	4.318
317 🔲	KEF1_10-KEF1_1 KEF1_1A-KEF1_2A	KEF1_10 KEF1_1A	KEF1_1 KEF1_2A	12.000 12.000	425.192 304.802		24,481.431 0.000	479.520 0.000	6,000.478 0.000	Free Surface Free Surface	0.838	0.107	0.024	0.107	0.079		1,014,852.200 1,118,928.838	Yes No	0.264 0.000	0.228
319	KEF1_1A-KEF1_ZA KEF1_1-KEF1_80	KEF1_1A	KEF1_2A KEF1_80	12.000	111.462		439,652.210	10,199.516	127,500.432	Free Surface	2.160	0.422	0.371	0.422	0.344		1,1184,548.524	No	0.422	2.160
320	KEF1 2A-KEF1 3A	KEF1 2A	KEF1 3A	12.000	190.988		0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000			1,158,870.443	No	0.000	0.000
	rsday October 31, 2019, Tip																, ,	-		

	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Unpeakable Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)		Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth (ft)	Adjusted Velocity
321	KEF1_2-KEF1_1	KEF1_2	KEF1_1	12.000	128.808	0.002	422,221.341	9,719.996	121,499.954	Free Surface	1.966	0.440	0.399	0.440	0.337	0.599	1,056,910.315	No	0.440	1.966
322	KEF1_3A-KEF1_4	KEF1_3A	KEF1_4	12.000	265.620	0.002	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,138,143.873	No	0.000	0.000
323	KEF1_3-KEF1_2	KEF1_3	KEF1_2	12.000	39.537	0.003	422,221.341	9,719.996	121,499.954	Free Surface	2.457	0.372	0.294	0.372	0.337	0.826	1,434,221.176	Yes	0.406	2.186
324	KEF1_4-KEF1_5	KEF1_4	KEF1_5	12.000	97.079	0.002	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,046,665.307	No	0.000	0.000
325	KEF1_5-KEF1_6	KEF1_5	KEF1_6	12.000	126.404	0.002	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000		1,134,362.985	No	0.000	0.000
326	KEF1_6-KEF1_7	KEF1_6	KEF1_7	12.000	300.782	0.003	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000		1,281,839.995	No	0.000	0.000
327	KEF1_7-KEF1_8	KEF1_7	KEF1_8	12.000	129.689	0.001	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	850,629.580	No	0.000	0.000
328	KEF1_80-KEF1_81	KEF1_80	KEF1_81 KEF1_82	12.000 12.000	67.889 250.893	0.003	439,652.210 439,652.210	10,199.516	127,500.432 127,500.432	Free Surface	2.249 2.212	0.409	0.351	0.409 0.414	0.344	0.715 0.698	1,251,614.374	No No	0.409 0.414	2.249 2.212
329 330	KEF1_81-KEF1_82 KEF1_82-KEF1_83	KEF1_81 KEF1_82	KEF1_62 KEF1_83	12.000	254.412	0.002	439,652.210	10,199.516 10,199.516	127,500.432	Free Surface Free Surface	2.212	0.414	0.359	0.414	0.344		1,223,144.117 1,086,419.681	No	0.414	2.212
331	KEF1_83-TOE_2859	KEF1 83	TOE 2859	12.000		0.002	439,652.210	10,199.516	127,500.432	Free Surface	3.172	0.318	0.403	0.318	0.344		2,011,085.908	No	0.318	3.172
332	KEF1 8-KEF1 9	KEF1 8	KEF1 9	12.000	250.713	0.002	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000		1,203,016.022	No	0.000	0.000
333	KEF1 9-KEF1 10	KEF1 9	KEF1 10	12.000		0.003	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,388,512.128	Yes	0.024	0.000
334	KFF1 10-KFF1 9	KFF1 10	KFF1 9	12.000	223.577	0.002	230,360.489	4,740.478	59,250.218	Free Surface	1.572	0.331	0.236	0.331	0.246	0.564	975,375.446	No	0.331	1.572
335	KFF1 11-KFF1 10	KFF1_11	KFF1_10	12.000	287.986	0.001	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	896,523.512	Yes	0.130	0.000
336	KFF1_14-KFF1_11	KFF1_14	KFF1_11	12.000	334.039	0.001	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	957,955.485	No	0.000	0.000
337	KFF1_15-KFF1_14	KFF1_15	KFF1_14	12.000	345.637	0.002	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,084,657.167	No	0.000	0.000
338	KFF1_16-KFF1_15	KFF1_16	KFF1_15	12.000	234.800	0.002	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,243,115.538	No	0.000	0.000
339	KFF1_9-KEF1_3	KFF1_9	KEF1_3	12.000	283.847	0.002	230,360.489	4,740.478	59,250.218	Free Surface	1.704	0.312	0.211	0.312	0.246	0.632	1,090,939.541	No	0.312	1.704
340	LCFA_10-LCFA_9	LCFA_10	LCFA_9	8.000	313.750	0.007	190,276.794	3,862.079	48,278.862	Free Surface	2.728	0.348	0.260	0.232	0.251	1.166	732,621.515	No	0.232	2.728
341	LCFA_11-LCFA_10	LCFA_11	LCFA_10	8.000	349.730	0.007	190,276.794	3,862.079	48,278.862	Free Surface	2.732	0.347	0.259	0.232	0.251	1.169	734,256.516	No	0.232	2.732
342 343	LCFA_12-LCFA_11	LCFA_12 LCFA_13	LCFA_11 LCFA 12	8.000 8.000	136.970 127.450	0.006	190,276.794 190,276.794	3,862.079 3,862.079	48,278.862 48,278.862	Free Surface Free Surface	2.486 2.837	0.372	0.295 0.246	0.248 0.225	0.251	1.022	644,264.831 773,653.723	No No	0.248 0.225	2.486 2.837
344	LCFA_13-LCFA_12 LCFA_14-LCFA_13	LCFA_13	LCFA_12	8.000	231.150	0.008	190,276.794	3,862.079	48,278.862	Free Surface	2.613	0.359	0.276	0.223	0.251	1.097	690.180.006	No	0.239	2.613
345	LCFA_14-LCFA_13	LCFA 15	LCFA 14	8.000	166.040	0.007	190,276,794	3,862.079	48,278.862	Free Surface	2.639	0.356	0.270	0.238	0.251	1.113	699,836.302	No	0.238	2.639
346	LCFA 16-LCFA 15	LCFA 16	LCFA_15	8.000	153.370		190,276.794	3,862.079	48,278.862	Free Surface	3.008	0.324	0.227	0.216	0.251	1.338	838,955.698	No	0.216	3.008
347	LCFA 17-LCFA 16	LCFA 17	LCFA 16	8.000	253.950	0.034	190,276.794	3,862.079	48,278.862	Free Surface	4.689	0.236	0.122	0.157	0.251	2.481	1,562,036.128	No	0.157	4.689
348	LCFA 1-EVF1A1 52	LCFA_1	EVF1A1_52	21.000	283.048	0.002		71,356.293	891,970.224	Free Surface	3.366	0.448	0.414	0.785	0.683	0.766	5,492,249.176	Yes	0.923	2.735
349	LCFA_3-LCFA_1	LCFA_3	LCFA_1	8.000	197.180	0.029	323,321.952	7,081.917	88,529.727	Free Surface	5.131	0.323	0.226	0.215	0.331	2.286	1,433,080.656	Yes	0.500	1.781
350	LCFA_4-LCFA_3	LCFA_4	LCFA_3	8.000	231.800	0.004	323,321.952	7,081.917	88,529.727	Free Surface	2.428	0.571	0.622	0.381	0.331	0.766	519,716.515	No	0.381	2.428
351	LCFA_5-LCFA_4	LCFA_5	LCFA_4	8.000	301.080	0.004	323,321.952	7,081.917	88,529.727	Free Surface	2.485	0.560	0.604	0.374	0.331	0.794	535,566.343	No	0.374	2.485
352	LCFA_6-LCFA_5	LCFA_6	LCFA_5	8.000	162.080	0.005	290,208.864	6,242.398	78,029.251	Free Surface	2.648	0.489	0.481	0.326	0.313	0.925	603,400.714	No	0.326	2.648
353	LCFA_7-LCFA_6	LCFA_7	LCFA_6	8.000	116.630	0.007	290,208.864	6,242.398	78,029.251	Free Surface	2.966	0.448	0.413	0.299	0.313	1.094	702,592.425	No	0.299	2.966
354	LCFA_8-LCFA_7	LCFA_8	LCFA_7	8.000	97.600	0.007	190,276.794	3,862.079	48,278.862	Free Surface	2.619	0.358	0.275	0.239	0.251	1.100	692,301.666	No	0.239	2.619
355	LCFA_9-LCFA_8	LCFA_9	LCFA_8 LCFA_7	8.000 8.000	78.140 119.310	0.006	190,276.794 121,054.937	3,862.079 2,380.319	48,278.862 29,750.389	Free Surface	2.464 1.967	0.375	0.299	0.250 0.212	0.251	1.009 0.885	636,580.370 554,638.832	No No	0.250 0.212	2.464 1.967
356	LCFB_1-LCFA_7 LCFB 2-LCFB 1	LCFB_1 LCFB 2	LCFA_7	8.000	129.900	0.004	121,054.937	2,380.319	29,750.389	Free Surface Free Surface	2.262	0.317	0.218	0.212	0.199	1.076	674,009.407	No	0.212	2.262
358	LCFB_2-LCFB_1	LCFB 3	LCFB 2	8.000	219.450	0.007	121,054.937	2,380.319	29,750.389	Free Surface	2.350	0.279	0.170	0.186	0.199	1.134	710,650.679	No	0.186	2.350
359	LCFB 4-LCFB 3	LCFB 4	LCFB 3	8.000	93.380	0.008	121,054.937	2,380.319	29,750.389	Free Surface	2.454	0.271	0.160	0.180	0.199	1.205	755,183.569	No	0.180	2.454
360	NMS 10-NMS 9	NMS 10	NMS 9	10.000	29.440	0.040	525,599.802	12,599.995	157,499.941	Free Surface	6.520	0.280	0.171	0.233	0.399		3,079,396.698	No	0.233	6.520
361	NMS 11-NMS 10	NMS_11	NMS_10	10.000		0.010	525,599.802	12,599.995	157,499.941	Free Surface	3.951	0.403	0.342	0.336	0.399	1.388	1,538,131.757	No	0.336	3.951
362	NMS_12-NMS_11	NMS_12	NMS_11	10.000	400.000	0.008	525,599.802	12,599.995	157,499.941	Free Surface	3.641	0.429	0.382	0.357	0.399	1.233	1,375,746.867	No	0.357	3.641
363	NMS_13-NMS_12	NMS_13	NMS_12	10.000	400.000	0.008	525,599.802	12,599.995	157,499.941	Free Surface	3.641	0.429	0.382	0.357	0.399	1.233	1,375,746.867	No	0.357	3.641
364	NMS_14-NMS_13	NMS_14	NMS_13	10.000	89.260	0.009	525,599.802	12,599.995	157,499.941	Free Surface	3.796	0.415	0.361	0.346	0.399	1.310	1,456,163.333	No	0.346	3.796
365	NMS_15-NMS_14	NMS_15	NMS_14	10.000	119.200	0.010	525,599.802	12,599.995	157,499.941	Free Surface	3.961	0.402	0.341	0.335	0.399		1,543,284.642	No	0.335	3.961
366	NMS_16-NMS_15	NMS_16	NMS_15	10.000	374.790	0.007	525,599.802	12,599.995	157,499.941	Free Surface	3.465	0.445	0.409	0.371	0.399		1,286,027.298	No	0.371	3.465
367	NMS_17-NMS_16	NMS_17	NMS_16	10.000	332.270	0.020	525,599.802	12,599.995	157,499.941	Free Surface	5.082	0.335	0.242	0.279	0.399		2,175,999.523	No	0.279	5.082
368	NMS_18-NMS_17	NMS_18	NMS_17 NMS_18	10.000	332.270 104.120	0.033	525,599.802 525,599.802	12,599.995 12,599.995	157,499.941 157,499.941	Free Surface	6.081 5.876	0.294	0.188	0.245 0.251	0.399		2,793,529.425 2,662,586.687	No No	0.245 0.251	6.081 5.876
369	NMS_19-NMS_18 NMS 1-FMF9 1	NMS_19 NMS_1	FMF9 1	10.000	114.510	0.030	525,599.802	12,599.995	157,499.941	Free Surface Free Surface	5.876 7.528	0.301	0.197	0.251	0.399		3,767,473.447	No	0.251	7.528
370	NMS_1-FMF9_1 NMS_20-NMS_19	NMS 20	NMS 19	10.000	98.110	0.000	525,599.802	12,599.995	157,499.941	Free Surface	3.949	0.403	0.342	0.210	0.399		1,537,269.246	No	0.336	3.949
372	NMS 2-NMS-1	NMS 2	NMS 1	10.000	87.230	0.040	525,599.802	12,599.995	157,499.941	Free Surface	6.516	0.280	0.171	0.233	0.399		3,076,616.155	No	0.233	6.516
373	NMS 3-NMS 2	NMS_3	NMS_2	10.000	113.730	0.010	525,599.802	12,599.995	157,499.941	Free Surface	3.955	0.403	0.341	0.336	0.399	1.389	1,539,956.471	No	0.336	3.955
374	NMS_4-NMS_3	NMS_4	NMS_3	10.000	270.690	0.010		12,599.995	157,499.941	Free Surface	3.948	0.403	0.342	0.336	0.399	1.386	1,536,170.126	No	0.336	3.948
375	NMS_5-NMS_4	NMS_5	NMS_4	10.000	55.800	0.030	525,599.802	12,599.995	157,499.941	Free Surface	5.885	0.301	0.197	0.251	0.399	2.439	2,668,892.495	No	0.251	5.885
376	NMS_6-NMS_5	NMS_6	NMS_5	10.000	56.570	0.030	525,599.802	12,599.995	157,499.941	Free Surface	5.881	0.301	0.197	0.251	0.399	2.437	2,666,397.603	No	0.251	5.881
377	NMS_7-NMS_6	NMS_7	NMS_6	10.000	55.470		525,599.802	12,599.995	157,499.941	Free Surface	5.873	0.301	0.198	0.251	0.399		2,660,838.404	No	0.251	5.873
378	NMS_8-NMS_7	NMS_8	NMS_7	10.000		0.010	525,599.802	12,599.995	157,499.941	Free Surface	3.951	0.403	0.342	0.336	0.399		1,538,131.757	No	0.336	3.951
379	NMS_9-NMS_8	NMS_9	NMS_8	10.000	400.000		525,599.802	12,599.995	157,499.941	Free Surface	3.715	0.422	0.372	0.352	0.399		1,413,910.415	No	0.352	3.715
380	OGF1_17-OGF1_18	OGF1_17	OGF1_18	10.000		0.016	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000		1,932,538.745	No	0.000	0.000
381	OGF1_18-OGF1_25	OGF1_18	OGF1_25	10.000		0.014	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000		1,816,667.672	No	0.000	0.000
382 383	OGF1_1-OGF1_2	OGF1_1	OGF1_2	10.000	389.725 202.386		0.000	0.000	0.000	Free Surface Free Surface	0.000	0.000	0.000	0.000	0.000		1,579,556.344	No Vec	0.000	0.000
	OGF1_25-OGF1_75	OGF1_25 OGF1_2	OGF1_75 OGF1_3	10.000 10.000	76.361		0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000		1,123,609.766 1,099,236.929	Yes No	0.013	0.000
384	OGF1_2-OGF1_3			10.000	70.301	0.005	0.000	0.000	0.000	i ree ouriace	0.000	0.000	0.000	0.000	0.000	0.000	1,033,230.323	INU	0.000	0.000

	ID	From ID	To ID	Diameter	Length	Slope	Total Flow	Unpeakable Flow	Peakable Flow	Flow Type	Velocity	d/D	q/Q			Froude	Full Flow	Backwater	Adjusted Depth	Adjusted Velocity
385	OGF1 3-OGF1 4	OGF1 3	OGF1 4	(in) 10.000	(ft) 302.094	0.018	(gpd) 0.000	(gpd) 0.000	(gpd) 0.000	Free Surface	(ft/s) 0.000	0.000	0.000	(ft) 0.000	0.000	Number 0.000	(gpd) 2,048,825.511	Adjustment No	(ft) 0.000	0.000
386	OGF1_3-OGF1_4 OGF1_4-OGF1_5	OGF1_3	OGF1_4	10.000	93.410	0.010	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000		1,583,489.455	No	0.000	0.000
387	OGF1 5-OGF1 17	OGF1 5	OGF1 17	10.000	49.146	0.013	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,741,483.745	No	0.000	0.000
388	OGF1 69-OGF1 70	OGF1 69	OGF1 70	10.000	90.809	0.005	243,587.423	5,073.118	63,400.296	Free Surface	2.459	0.324	0.228	0.270	0.267		1,070,666.651	No	0.270	2.459
389	OGF1 70-OGF1 71	OGF1_70	OGF1_71	10.000	96.964	0.005	243,587.423	5,073.118	63,400.296	Free Surface	2.421	0.328	0.232	0.273	0.267		1,047,841.622	No	0.273	2.421
390	OGF1_71-OGF1_72	OGF1_71	OGF1_72	10.000	93.080	0.002	243,587.423	5,073.118	63,400.296	Free Surface	1.607	0.445	0.408	0.371	0.267	0.532	596,524.643	No	0.371	1.607
391	OGF1_72-OGF1_73	OGF1_72	OGF1_73	10.000	85.671	0.009	243,587.423	5,073.118	63,400.296	Free Surface	3.054	0.277	0.168	0.231	0.267	1.324	1,448,715.520	Yes	0.254	2.681
392	OGF1_73-OGF1_74	OGF1_73	OGF1_74	10.000	191.425	0.004	243,587.423	5,073.118	63,400.296	Free Surface	2.383	0.332	0.238	0.277	0.267	0.935	1,024,951.498	No	0.277	2.383
393	OGF1_74-OGF1_75	OGF1_74	OGF1_75	10.000		0.009	243,587.423	5,073.118	63,400.296	Free Surface	3.061	0.277	0.168	0.231	0.267	1.328	1,453,305.584	Yes	0.244	2.837
394	OGF1_75-TOE_2622	OGF1_75	TOE_2622	10.000	194.676	0.006	243,587.423	5,073.118	63,400.296	Free Surface	2.640	0.308	0.206	0.257	0.267		1,182,188.388	No	0.257	2.640
395	OGF2_29-OGF2_31	OGF2_29	OGF2_31	8.000 8.000	229.146 236.759	0.011	58,141.418 58,141.418	1,140.480 1,140.480	14,250.235 14,250.235	Free Surface Free Surface	2.216 2.843	0.174 0.146	0.066	0.116 0.097	0.136 0.136	1.377	884,315.641 1,260,843.418	No No	0.116 0.097	2.216 2.843
396	OGF2_31-OGF2_32 OGF2_32-OGF2_33	OGF2_31 OGF2_32	OGF2_32 OGF2_33	8.000			58,141.418	1,140.480	14,250.235	Free Surface	2.758	0.146	0.048	0.097	0.136	1.855	1,207,535.197	No	0.100	2.758
398	OGF2_32-OGF2_33 OGF2_33-OGF2_34	OGF2_32	OGF2_33	8.000	190.439	0.020	58,141.418	1,140.480	14,250.235	Free Surface	2.072	0.149	0.072	0.100	0.136	1.257	803,865.810	No	0.121	2.072
399	OGF2 34-OGF2 46	OGF2 34	OGF2 46	8.000	282.567	0.009	58.141.418	1,140.480	14,250.235	Free Surface	2.075	0.182	0.072	0.121	0.136	1.260	805,885.247	No	0.121	2.075
400	OGF2 46-OGF2 49	OGF2 46	OGF2 49	8.000	124.327	0.015	58,141.418	1,140.480	14,250.235	Free Surface	2.465	0.161	0.056	0.108	0.136	1.593	1,029,214.197	No	0.108	2.465
401	OGF2_49-OGF2_50	OGF2_49	OGF2_50	8.000	119.294	0.011	58,141.418	1,140.480	14,250.235	Free Surface	2.194	0.175	0.067	0.117	0.136	1.359	871,847.331	No	0.117	2.194
402	OGF2_50-OGF2_65	OGF2_50	OGF2_65	8.000	185.079	0.002	58,141.418	1,140.480	14,250.235	Free Surface	1.273	0.256	0.144	0.171	0.136	0.644	404,119.324	Yes	0.218	0.908
403	OGF2_65-OGF2_68	OGF2_65	OGF2_68	10.000	168.652	0.003	243,587.423	5,073.118	63,400.296	Free Surface	1.998	0.378	0.303	0.315	0.267	0.729	803,297.351	No	0.315	1.998
404	OGF2_68-OGF1_69	OGF2_68	OGF1_69	10.000	289.307	0.010	243,587.423	5,073.118	63,400.296	Free Surface	3.171	0.270	0.160	0.225	0.267	1.394	1,526,638.745	Yes	0.248	2.775
405	OTF1_101-OTF1_102	OTF1_101	OTF1_102	12.000	360.260	0.003	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,263,957.034	No	0.000	0.000
406	OTF1_102-OTF1_103	OTF1_102	OTF1_103	12.000	415.146	0.001	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	776,382.060	Yes	0.280	0.000
407	OTF1_103-TOE_2798	OTF1_103 OTF1_108	TOE_2798	12.000			533,097.683	12,813.115	160,162.500	Free Surface	3.509	0.340	0.248	0.340	0.380		2,146,766.242	Yes	0.352	3.341
408	OTF1_108-TOE_3005	OTF1_108	TOE_3005 OTF1_37	16.000 8.000	25.799 188.540	0.261	712,349.879 0.000	18,056.153 0.000	225,696.875 0.000	Free Surface Free Surface	13.048 0.000	0.111	0.026	0.148 0.000	0.406	7.238 0.000	27,512,267.951 505.707.818	Yes No	0.453 0.000	2.635 0.000
410	OTF1_30-OTF1_37 OTF1_37-OTF1_43	OTF1 37	OTF1_37	8.000		0.004	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	567.011.375	Yes	0.160	0.000
411	OTF1 43-OTF1 44	OTF1 43	OTF1_44	8.000	466.022	0.004	246,573.487	5,146.558	64,337.736	Free Surface	2.302	0.480	0.466	0.320	0.287	0.814	528,688.388	Yes	0.325	2.255
412	OTF1 44-OTF1 65	OTF1 44	OTF1 65	8.000	469.331	0.003	246,573.487	5,146.558	64,337.736	Free Surface	2.209	0.496	0.493	0.331	0.287	0.765	499,939.787	No	0.331	2.209
413	OTF1 46-OTF1 47	OTF1 46	OTF1 47	10.000	453.820	0.000	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	144,404.768	No	0.000	0.000
414	OTF1_47-OTF1_48	OTF1_47	OTF1_48	10.000	474.640	0.004	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	978,277.047	No	0.000	0.000
415	OTF1_48-OTF1_62	OTF1_48	OTF1_62	10.000	436.432	0.003	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	842,696.068	Yes	0.108	0.000
416	OTF1_60A-OTF1_61A	OTF1_60A	OTF1_61A	24.000	31.746		2,370,386.200	74,951.972	936,914.047	Free Surface	3.965	0.336	0.243	0.671	0.671		9,764,428.122	No	0.671	3.965
417	OTF1_61A-TOE_2825	OTF1_61A	TOE_2825	24.000	191.263		2,370,386.200	74,951.972	936,914.047	Free Surface	4.238	0.320	0.221	0.639	0.671		10,711,431.840	No	0.639	4.238
418	OTF1_62-OTF1_64	OTF1_62	OTF1_64	10.000	483.405	0.003	114,238.037	2,240.639	27,999.349	Free Surface	1.575	0.259	0.147	0.216	0.181	0.708	775,872.865	No	0.216	1.575
419	OTF1_64-OTF1_82	OTF1_64	OTF1_82	10.000	469.703	0.003	114,238.037	2,240.639	27,999.349	Free Surface	1.631	0.253	0.140	0.211	0.181	0.743	815,396.316	Yes	0.212	1.615
420 421	OTF1_65-OTF1_80	OTF1_65 OTF1_80	OTF1_80 OTF1_96	8.000 8.000	484.534 428.652	0.004	246,573.487 246,573.487	5,146.558 5,146.558	64,337.736 64,337.736	Free Surface Free Surface	2.368 2.346	0.470 0.473	0.449	0.313 0.315	0.287 0.287	0.848 0.836	549,097.814 542,038.596	Yes No	0.314 0.315	2.357 2.346
421	OTF1_80-OTF1_96 OTF1_82-OTF1_87	OTF1_80	OTF1_90	10.000	444.471	0.004	114,238.037	2,240.639	27,999.349	Free Surface	1.598	0.473	0.433	0.313	0.287	0.723	792,524.443	Yes	0.244	1.328
423	OTF1_82-OTF1_87	OTF1 87	OTF1 96	10.000	387.699	0.003	196,147.234	3,988.798	49,849.901	Free Surface	1.940	0.329	0.234	0.274	0.101	0.765	837,713.068	No	0.274	1.940
424	OTF1 88-OTF1 89	OTF1 88	OTF1_89	8.000	321.471	0.015	68,135.014	1,336.319	16,699.674	Free Surface	2.618	0.173	0.065	0.115	0.148	1.632	1,048,414.908	Yes	0.667	0.302
425	OTF1 89-OTF1 90	OTF1_89	OTF1_90	8.000	329.236	-0.007	68,135.014	1,336.319	16,699.674	Pressurized	0.302	1.000		0.667	0.000	0.065	, ,	No	0.667	0.302
426	OTF1_90-OTF1_92	OTF1_90	OTF1_92	8.000	164.601	0.004	68,135.014	1,336.319	16,699.674	Free Surface	1.666	0.237	0.123	0.158	0.148	0.879	553,217.651	No	0.158	1.666
427	OTF1_92-OTF1_93	OTF1_92	OTF1_93	8.000	20.322	0.005	68,135.014	1,336.319	16,699.674	Free Surface	1.754	0.228	0.114	0.152	0.148	0.944	595,084.768	No	0.152	1.754
428	OTF1_93-OTF1_94	OTF1_93	OTF1_94	8.000	373.404	0.008	68,135.014	1,336.319	16,699.674	Free Surface	2.070	0.203	0.091	0.136	0.148	1.184	751,463.852	No	0.136	2.070
429	OTF1_94-OTF1_95	OTF1_94	OTF1_95	8.000		0.023	68,135.014	1,336.319	16,699.674	Free Surface	3.009	0.157	0.053	0.105	0.148	1.973	1,278,202.011	Yes	0.186	1.323
430	OTF1_95-OTF1_96	OTF1_95	OTF1_96	8.000	386.157	0.004	181,669.053	3,677.759	45,974.863	Free Surface	2.146	0.401	0.339	0.268	0.245	0.845	535,724.847	No	0.268	2.146
431	OTF1_96-OTF1_97	OTF1_96	OTF1_97	12.000	9.000	0.033	533,097.683	12,813.115	160,162.500	Free Surface	6.018	0.231	0.117	0.231	0.380		4,566,521.855	No	0.231	6.018
432	OTF1_97-OTF1_98	OTF1_97 OTF1_98	OTF1_98 OTF1_103	12.000 12.000	180.000 300.000	0.006 0.007	533,097.683 533.097.683	12,813.115 12,813.115	160,162.500 160,162.500	Free Surface Free Surface	3.191 3.509	0.364	0.283	0.364 0.340	0.380	1.085 1.241	1,882,825.195 2,146,751.017	No No	0.364 0.340	3.191 3.509
433	OTF1_98-OTF1_103 RMF1_114-RMF1_118	RMF1_114	RMF1 118	12.000	321.098	0.007	727,517.711	18,509.753	231,369.033	Free Surface	6.118	0.340	0.248	0.340	0.380		4,121,788.264	No	0.340	6.118
434	RMF1_118-AIF1_119	RMF1 118	AIF1 119	12.000		0.027	727,517.711	18,509.753	231,369.033	Free Surface	3.368	0.441	0.402	0.441	0.447		1,807,858.922	No	0.441	3.368
436	SCC 01	SCC 21	TOE 2948	15.000	100.000		1,677,410.276	49,780.781	622,243.926	Free Surface	2.858	0.693	0.827	0.867	0.646		2,028,108.090	Yes	1.044	2.370
437	SCC_10	SCC_12	SCC_13	15.000	375.000		1,677,410.276	49,780.781	622,243.926	Free Surface	2.858	0.693	0.827	0.867	0.646		2,028,108.090	No	0.867	2.858
438	SCC_11	SCC_11A	SCC_12	15.000	145.690	0.002	1,677,410.276	49,780.781	622,243.926	Free Surface	2.852	0.695	0.829	0.869	0.646	0.565	2,023,299.745	No	0.869	2.852
439	SCC_12	SCC_11	SCC_11A	12.000	356.110	0.023	370,813.201	8,340.477	104,244.441	Free Surface	4.722	0.212	0.098	0.212	0.315	2.158	3,765,224.279	Yes	0.440	1.722
440	SCC_13	SCC_10	SCC_11	12.000			370,813.201	8,340.477	104,244.441	Free Surface	2.497	0.334	0.241	0.334			1,541,006.959	No	0.334	2.497
441	SCC_14	SCC_09	SCC_10	12.000	100.000		370,813.201	8,340.477	104,244.441	Free Surface	3.402	0.267	0.156	0.267			2,372,834.360	No	0.267	3.402
442	SCC_15	SCC_08	SCC_09	12.000	413.000		370,813.201	8,340.477	104,244.441	Free Surface	3.568	0.258	0.146	0.258			2,537,263.705	No	0.258	3.568
443	SCC_16	SCC_07	SCC_08	12.000	412.000		370,813.201	8,340.477	104,244.441	Free Surface	3.188	0.280	0.171	0.280			2,166,091.507	No	0.280	3.188
444	SCC_17	SCC_06	SCC_07	10.000	375.000		340,594.455	7,539.837	94,245.085	Free Surface	3.119	0.348	0.260	0.290			1,307,562.782	No	0.290	3.119
445	SCC_18 SCC_19	SCC_05 SCC_04	SCC_06 SCC_05	10.000	150.000 200.000		340,594.455 340,594.455	7,539.837 7,539.837	94,245.085 94,245.085	Free Surface Free Surface	3.061 3.083	0.353 0.351	0.267	0.294			1,274,578.305 1,286,893.357	No No	0.294 0.293	3.061 3.083
447	SCC_19 SCC_2	SCC_04 SCC_20	SCC_05	15.000			1,677,410.276	49,780.781	622,243.926	Free Surface	2.858	0.693	0.827	0.293	0.646		2,028,108.090	No	0.293	2.858
448	SCC 20	SCC_20	SCC_21	10.000			340,594.455	7,539.837	94,245.085	Free Surface	3.119	0.348	0.260	0.290			1,307,617.610	No	0.290	3.119
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	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Unpeakable Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)		Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth (ft)	Adjusted Velocity
449	SCC_21	SCC_02	SCC_03	10.000	577.000	0.007	340,594.455	7,539.837	94,245.085	Free Surface	3.156	0.345	0.256	0.288	0.318	1.212	1,329,365.083	No	0.288	3.156
450	SCC_22	SCC_01	SCC_02	8.000	443.000	0.011	191,831.394	3,895.199	48,695.022	Free Surface	3.174	0.313	0.213	0.209	0.252	1.439	901,253.048	No	0.209	3.174
451	SCC_3	SCC_19	SCC_20	15.000	415.000	0.002	1,677,410.276	49,780.781	622,243.926	Free Surface	2.858	0.693	0.827	0.867	0.646	0.567	2,028,108.090	No	0.867	2.858
452	SCC_4	SCC_18	SCC_19	15.000	485.000	0.002	1,677,410.276	49,780.781	622,243.926	Free Surface	2.845	0.696	0.831	0.870	0.646		2,017,626.841	No	0.870	2.845
453	SCC_5	SCC_17	SCC_18	15.000	275.000	0.002	1,677,410.276	49,780.781	622,243.926	Free Surface	2.858	0.693	0.827	0.867	0.646		2,028,108.090	No	0.867	2.858
454	SCC_6	SCC_16	SCC_17	15.000	513.000	0.002		49,780.781	622,243.926	Free Surface	2.862	0.693	0.825	0.866	0.646	0.569	2,032,057.671	No	0.866	2.862
455	SCC_7	SCC_15	SCC_16	15.000	512.000	0.002	1,677,410.276	49,780.781	622,243.926	Free Surface	2.853	0.695	0.829	0.868	0.646	0.566	2,024,143.065	No	0.868	2.853
456	SCC_8	SCC_14	SCC_15 SCC 14	15.000 15.000	500.000	0.002		49,780.781	622,243.926 622,243.926	Free Surface	2.858 2.846	0.693 0.696	0.827	0.867 0.870	0.646 0.646	0.567 0.563	2,028,108.090	No No	0.867 0.870	2.858
457	SCC_9 SUN 10-SUN 11	SCC_13 SUN 10	SUN 11	8.000	402.750	0.002	1,677,410.276 229,561.839	49,780.781 4,720.318	58,999.658	Free Surface Free Surface	4.395	0.090	0.031	0.870	0.040	2.110	2,017,942.070 1,321,950.703	No	0.188	2.846 4.395
459	SUN 11-SUN 12	SUN 11	SUN_11	8.000	319.400		229,561.839	4,720.318	58,999.658	Free Surface	5.800	0.232	0.114	0.154	0.277	3.098	1,951,946.703	Yes	0.176	4.833
460	SUN 12-SUN 13	SUN 12	SUN_13	8.000	400.080	0.004	229,561.839	4,720.318	58,999.658	Free Surface	2.362	0.445	0.409	0.297	0.277	0.874	561,059.875	No	0.297	2.362
461	SUN 13-SUN 14	SUN 13	SUN 14	8.000	338.740		229,561.839	4,720.318	58,999.658	Free Surface	3.196	0.355	0.271	0.237	0.277	1.350	848,653.125	No	0.237	3.196
462	SUN 14-SUN 15	SUN 14	SUN 15	8.000	319.320	0.023	229,561.839	4,720.318	58,999.658	Free Surface	4.330	0.285	0.177	0.190	0.277	2.067	1,294,902.337	No	0.190	4.330
463	SUN 15-ECF1 44	SUN_15	ECF1_44	8.000	698.510	0.004	229,561.839	4,720.318	58,999.658	Free Surface	2.209	0.469	0.448	0.313	0.277	0.792	512,563.154	Yes	0.654	1.022
464	SUN_1-SUN_2	SUN_1	SUN_2	8.000	388.620	0.017	229,561.839	4,720.318	58,999.658	Free Surface	3.883	0.308	0.206	0.206	0.277	1.776	1,112,216.324	No	0.206	3.883
465	SUN_2-SUN_3	SUN_2	SUN_3	8.000	390.550	0.015	229,561.839	4,720.318	58,999.658	Free Surface	3.689	0.320	0.222	0.213	0.277	1.652	1,035,587.450	No	0.213	3.689
466	SUN_3-SUN_4	SUN_3	SUN_4	8.000	397.140		229,561.839	4,720.318	58,999.658	Free Surface	2.937	0.378	0.304	0.252	0.277	1.197	755,521.919	No	0.252	2.937
467	SUN_4-SUN_5	SUN_4	SUN_5	8.000	184.760	0.006	229,561.839	4,720.318	58,999.658	Free Surface	2.681	0.405	0.344	0.270	0.277	1.050	666,364.813	No	0.270	2.681
468	SUN_5-SUN_6	SUN_5	SUN_6	8.000	334.880	0.005	229,561.839	4,720.318	58,999.658	Free Surface	2.412	0.438	0.398	0.292	0.277	0.901	577,144.885	No	0.292	2.412
469	SUN_6-SUN_7	SUN_6	SUN_7	8.000	247.010		229,561.839	4,720.318	58,999.658	Free Surface	2.417	0.438	0.397	0.292	0.277	0.904	578,835.635	No	0.292	2.417
470	SUN_7-SUN_8 SUN 8-SUN 9	SUN_7 SUN 8	SUN_8 SUN 9	8.000 8.000	269.850 274.930	0.005	229,561.839 229.561.839	4,720.318 4,720.318	58,999.658 58,999.658	Free Surface Free Surface	2.413 4.235	0.438	0.398	0.292 0.193	0.277	0.901 2.004	577,374.239 1,255,309.417	No No	0.292 0.193	2.413 4.235
471	SUN 9-SUN 10	SUN_8	SUN 10	8.000	373.700	0.022	229,561.839	4,720.318	58,999.658	Free Surface	4.233	0.296	0.103	0.193	0.277	1.922	1,203,402.692	No	0.193	4.233
473	TOE 2576-TOE 2577	TOE_2576	TOE 2577	18.000	282.794	0.005	1,395,420.811	40,033.425	500,421.412	Free Surface	3.951	0.348	0.260	0.522	0.555	1.126	5,370,802.322	No	0.522	3.951
474	TOE 2577-TOE 2578	TOE_2577	TOE 2578	18.000	270.433	0.015	1,395,420.811	40,033.425	500,421.412	Free Surface	5.703	0.267	0.156	0.400	0.555		8,957,466.948	No	0.400	5.703
475	TOE 2578-TOE 2579	TOE_2578	TOE_2579	18.000	293.969	0.015	1,395,420.811	40,033.425	500,421.412	Free Surface	5.694	0.267	0.156	0.401	0.555		8,939,632.045	No	0.401	5.694
476	TOE_2579-TOE_2981	TOE_2579	TOE_2981	18.000	91.682	0.009	1,395,420.811	40,033.425	500,421.412	Free Surface	4.781	0.303	0.199	0.454	0.555	1.472	6,999,656.252	No	0.454	4.781
477	TOE_2580-TOE_2978	TOE_2580	TOE_2978	18.000	103.702	0.005	1,395,420.811	40,033.425	500,421.412	Free Surface	3.732	0.363	0.281	0.544	0.555	1.039	4,964,591.669	No	0.544	3.732
478	TOE_2581-TOE_2979	TOE_2581	TOE_2979	18.000	84.929	0.004	1,464,016.590	42,373.424	529,672.121	Free Surface	3.764	0.373	0.297	0.560	0.569	1.030	4,932,785.490	No	0.560	3.764
479	TOE_2582-TOE_2980	TOE_2582	TOE_2980	18.000	25.848	0.005	1,464,016.590	42,373.424	529,672.121	Free Surface	3.815	0.370	0.291	0.555	0.569		5,024,681.737	Yes	0.562	3.747
480	TOE_2583-TOE_2584	TOE_2583	TOE_2584	18.000	397.733	0.004	1,464,016.590	42,373.424	529,672.121	Free Surface	3.537	0.391	0.323	0.587	0.569		4,528,752.063	No	0.587	3.537
481	TOE_2584-CHF3A_15	TOE_2584	CHF3A_15	18.000	394.000	0.004	1,464,016.590	42,373.424	529,672.121	Free Surface	3.617	0.385	0.313	0.577	0.569	0.973	4,669,916.990	No	0.577	3.617
482	TOE_2585-CHF1A_C1	TOE_2585	CHF1A_C1	18.000	230.196	0.010	1,517,559.701	44,213.743	552,671.792	Free Surface	5.158	0.305	0.202	0.457	0.580		7,529,828.380	No	0.457 0.517	5.158
483	TOE_2586-TOE_2587 TOE 2587-TOE 2588	TOE_2586 TOE_2587	TOE_2587 TOE_2588	18.000 18.000	230.190 93.140	0.008	1,685,789.987 1,685,789.987	50,073.101 50,073.101	625,921.684 625,921.684	Free Surface Free Surface	4.838 6.745	0.344	0.255 0.160	0.517 0.406	0.612 0.612	1.386 2.207	6,611,064.070 10,504,890.108	No No	0.406	4.838 6.745
485	TOE 2588-TOE 2589	TOE_2588	TOE_2589	18.000	492.495	0.020	1,685,789.987	50,073.101	625,921.684	Free Surface	7.208	0.271	0.146	0.400	0.612		11,530,311.680	No	0.400	7.208
486	TOE 2589-TOE 2590	TOE 2589	TOE 2590	18.000	115.180	0.023	1,806,179.362	54,332.620	679,171.424	Free Surface	7.195	0.272	0.140	0.408	0.635		11,185,690.250	No	0.408	7.195
487	TOE 2590-TOE 2591	TOE_2590	TOE 2591	18.000	23.959		1,806,179.362	54,332.620	679,171.424	Free Surface	10.192	0.212	0.099	0.319	0.635		18,266,219.977	Yes	0.717	3.351
488	TOE 2591-TOE 2743	TOE 2591	TOE 2743	30.000	231.417	0.003	8,439,632.825	336,447.233	4,205,550.096	Free Surface	4.783	0.544	0.576	1.360	1.215		14,662,594.587	No	1.360	4.783
489	TOE_2592-TOE_2593	TOE_2592	TOE_2593	8.000	52.704	0.006	171,490.918	3,460.319	43,250.384	Free Surface	2.433	0.350	0.264	0.234	0.238	1.035	650,612.893	No	0.234	2.433
490	TOE_2593-GVF1_95	TOE_2593	GVF1_95	8.000	189.327	0.015	171,490.918	3,460.319	43,250.384	Free Surface	3.417	0.274	0.164	0.183	0.238	1.667	1,044,475.552	No	0.183	3.417
491	TOE_2594-TOE_2595	TOE_2594	TOE_2595	15.000	178.668	0.003	911,770.441	24,189.111	302,350.926	Free Surface	2.938	0.414	0.359	0.518	0.470	0.829	2,538,906.603	No	0.518	2.938
492	TOE_2595-TOE_2596	TOE_2595	TOE_2596	15.000	210.662	0.002	911,770.441	24,189.111	302,350.926	Free Surface	2.486	0.470	0.450	0.588	0.470		2,024,920.664	No	0.588	2.486
493	TOE_2596-TOE_2597	TOE_2596	TOE_2597	30.000	111.976	0.003	911,770.441	24,189.111	302,350.926	Free Surface	2.537	0.171	0.063	0.426	0.386		14,399,580.685	No	0.426	2.537
494	TOE_2597-TOE_2598	TOE_2597	TOE_2598	30.000	103.462	0.001	911,770.441	24,189.111	302,350.926	Free Surface	2.094	0.195	0.083	0.487	0.386		10,964,496.126	No	0.487	2.094
495	TOE_2598-TOE_2591	TOE_2598 TOE 2609	TOE_2591 TOE 2747	15.000 18.000	231.956 443.041	0.022	911,770.441 1.104.689.959	24,189.111 30,359.509	302,350.926 379,477.297	Free Surface Free Surface	5.923 2.605	0.249	0.136	0.311	0.470		6,724,468.009 3,305,231.616	No No	0.311	5.923 2.605
496	TOE_2609-TOE_2747 TOE 2610-TOE 2609	TOE_2609	TOE 2609	18.000	80.972		1,104,689.959	30,359.509	379,477.297	Free Surface	5.004	0.396	0.334	0.372	0.492		8,195,229.564	Yes	0.597	4.370
498	TOE 2612-TOE 2610	TOE_2612	TOE 2610	18.000	148.443	0.012	1,104,689.959	30,359.509	379,477.297	Free Surface	5.125	0.244	0.130	0.366	0.492		8,473,788.030	No	0.366	5.125
499	TOE 2615-TOE 2619	TOE 2615	TOE 2619	30.000	285.463			340,587.232	4,257,296.477	Free Surface	4.119	0.621	0.708	1.552	1.221		12,051,538.778	No	1.552	4.119
500	TOE_2619-TOE_2994	TOE_2619	TOE_2994	30.000	191.828		8,527,437.046	340,587.232	4,257,296.477	Free Surface	4.635	0.563	0.608	1.407	1.221		14,024,341.801	No	1.407	4.635
501	TOE_2620-TOE_2989	TOE_2620	TOE_2989	12.000	238.521	0.004	243,587.423	5,073.118	63,400.296	Free Surface	2.329	0.260	0.147	0.260	0.254	0.955	1,651,578.715	No	0.260	2.329
502	TOE_2621-TOE_2620	TOE_2621	TOE_2620	12.000	178.316	0.015	243,587.423	5,073.118	63,400.296	Free Surface	3.567	0.192	0.081	0.192	0.254	1.717	3,014,402.982	Yes	0.226	2.834
503	TOE_2622-TOE_2621	TOE_2622	TOE_2621	12.000	277.449		243,587.423	5,073.118	63,400.296	Free Surface	2.520	0.245	0.132	0.245	0.254		1,845,198.621	No	0.245	2.520
504		TOE_2623	TOE_2622	10.000	399.765		0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000		2,444,846.898	No	0.000	0.000
505	TOE_2624-TOE_2623	TOE_2624	TOE_2623	10.000	400.696		0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000		2,458,872.660	No	0.000	0.000
506	TOE_2625-TOE_2624	TOE_2625	TOE_2624	10.000	334.859		0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000		1,951,446.396	No	0.000	0.000
507	TOE_2626-OGF2_29	TOE_2626	OGF2_29	8.000	159.127		58,141.418	1,140.480 26,832.950	14,250.235 335,401.794	Free Surface	3.160	0.136	0.040	0.091			1,465,679.145 4,462,273.317	No	0.091	3.160
508	TOE_2628-CSF1_C3A TOE 2629-TOE 2628	TOE_2628 TOE 2629	CSF1_C3A TOE_2628	18.000 15.000	133.826 253.572		995,266.653 995,266.653	26,832.950	335,401.794	Free Surface Free Surface	3.146 3.828	0.321	0.223	0.481 0.454	0.466 0.492		3,534,157.522	No No	0.481 0.454	3.146 3.828
509	TOE 2629-TOE 2628	TOE_2630	TOE_2984	15.000	284.795		995,266.653	26,832.950	335,401.794	Free Surface	2.719	0.363	0.262	0.454	0.492		2,215,971.138	No	0.454	2.719
510	TOE 2631-TOE 2630	TOE_2631	TOE_2630	15.000	274.927		995,266.653	26,832.950	335,401.794	Free Surface	3.786	0.366	0.286	0.367			3,481,166.216	Yes	0.472	3.626
512	TOE 2635-TOE 2636	TOE 2635	TOE 2636	10.000	403.088		0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000			718,678.955	No	0.000	0.000
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	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Unpeakable Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)		Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth (ft)	Adjusted Velocity
513	TOE 2636-TOE 2639	TOE_2636	TOE 2639	10.000	391.446	0.001	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	532,974.852	Yes	0.139	0.000
514	TOE 2637-TOE 2638	TOE_2637	TOE_2638	12.000	41.365	0.025	727,517.711	18,509.753	231,369.033	Free Surface	5.973	0.289	0.183	0.289	0.447	2.309	3,984,985.969	No	0.289	5.973
515	TOE_2638-TOE_2639	TOE_2638	TOE_2639	12.000	49.033	0.014	727,517.711	18,509.753	231,369.033	Free Surface	4.858	0.336	0.243	0.336	0.447	1.729	2,988,489.806	No	0.336	4.858
516	TOE_2639-RMF1_114	TOE_2639	RMF1_114	12.000	110.713	0.013	727,517.711	18,509.753	231,369.033	Free Surface	4.638	0.348	0.260	0.348	0.447	1.619	2,802,550.445	No	0.348	4.638
517	TOE_2640-TOE_2637	TOE_2640	TOE_2637	12.000	271.203	0.018	727,517.711	18,509.753	231,369.033	Free Surface	5.248	0.318	0.219	0.318	0.447	1.927	3,327,509.254	Yes	0.478	3.032
518	TOE_2646-ARF1_37	TOE_2646	ARF1_37	8.000	44.839	0.002	230,360.489	4,740.478	59,250.218	Free Surface	1.601	0.609	0.687	0.406	0.277	0.482	335,186.855	No	0.406	1.601
519	TOE_2647-TOE_2646	TOE_2647 TOE 2648	TOE_2646 TOE 2650	8.000 15.000	316.906 410.019	0.005	230,360.489 1,628,909.646	4,740.478 48,080.142	59,250.218 600,990.974	Free Surface Free Surface	2.470 3.550	0.432	0.387	0.288 0.702	0.277	0.931	595,196.711 2,687,541.477	No No	0.288 0.702	2.470 3.550
520	TOE_2648-TOE_2650 TOE 2649-TOE 2648	TOE_2048	TOE_2630	15.000			1,628,909.646	48,080.142	600,990.974	Free Surface	3.582	0.558	0.599	0.702	0.636	0.839	2,719,066.029	No	0.702	3.582
522	TOE 2650-TOE 2656	TOE 2650	TOE 2656	15.000	392.350	0.018	1,704,033.205	50,715.341	633,928.081	Free Surface	6.600	0.361	0.279	0.451	0.651	2.016	6,109,130.732	No	0.451	6.600
523	TOE 2651-TOE 2652	TOE 2651	TOE 2652	15.000	16.899	0.004	1,704,033.205	50,715.341	633,928.081	Free Surface	3.822	0.549	0.584	0.686	0.651	0.904	2,918,726.550	Yes	0.702	3.717
524	TOE_2652-TOE_2653	TOE_2652	TOE_2653	15.000	381.367	0.004	1,704,033.205	50,715.341	633,928.081	Free Surface	3.619	0.574	0.627	0.717	0.651	0.831	2,718,097.714	No	0.717	3.619
525	TOE_2653-TOE_2654	TOE_2653	TOE_2654	15.000	404.066	0.004	1,704,033.205	50,715.341	633,928.081	Free Surface	3.608	0.575	0.629	0.719	0.651	0.827	2,707,267.370	No	0.719	3.608
526	TOE_2654-TOE_2655	TOE_2654	TOE_2655	15.000	378.306	0.010	1,781,793.386	53,467.180	668,322.468	Free Surface	5.470	0.430	0.384	0.537	0.666	1.510	4,645,683.290	No	0.537	5.470
527	TOE_2655-TOE_2745	TOE_2655	TOE_2745	30.000	21.210			215,691.759	2,696,138.345	Free Surface	3.867	0.478	0.463	1.196	0.998	0.707	12,505,252.071	Yes	1.703	2.518
528	TOE_2656-TOE_2651	TOE_2656	TOE_2651	15.000	399.309	0.026	1,704,033.205	50,715.341	633,928.081	Free Surface	7.506	0.329	0.233	0.411	0.651	2.419	7,301,159.433	Yes	0.448	6.659
529	TOE_2657-TOE_2659	TOE_2657	TOE_2659	8.000 8.000	194.240 352.520	0.014	397,758.275 397,758.275	9,053.277	113,160.917 113,160.917	Free Surface Free Surface	4.163 4.090	0.440	0.400	0.293 0.297	0.369	1.552 1.513	994,603.317 971,164.311	No No	0.293 0.297	4.163 4.090
530	TOE_2659-TOE_2660 TOE 2660-TOE 2661	TOE_2659 TOE 2660	TOE_2660 TOE 2661	8.000	302.430			9,053.277 9,053.277	113,160.917	Free Surface	3.756	0.446	0.410	0.297	0.369	1.335	865,777.808	No	0.297	3.756
532	TOE 2661-TOE 2663	TOE 2661	TOE_2001	8.000	87.840	0.010	397,758.275	9,053.277	113,160.917	Free Surface	3.741	0.477	0.459	0.317	0.369	1.327	861,076.924	No	0.317	3.741
533	TOE 2662-TOE 2664	TOE 2662	TOE 2664	15.000	222.675		1,628,909.646	48,080.142	600,990.974	Free Surface	5.600	0.395	0.329	0.493	0.636	1.626	4,956,574.417	Yes	0.591	4.408
534	TOE_2663-ECF4_135	TOE_2663	ECF4_135	8.000	379.848		397,758.275	9,053.277	113,160.917	Free Surface	4.130	0.442	0.404	0.295	0.369	1.534	983,940.543	Yes	0.469	2.343
535	TOE_2664-TOE_2649	TOE_2664	TOE_2649	15.000	258.002	0.004	1,628,909.646	48,080.142	600,990.974	Free Surface	3.629	0.552	0.589	0.690	0.636	0.856	2,766,306.867	Yes	0.693	3.605
536	TOE_2673-VRF1D_702	TOE_2673	VRF1D_702	10.000	248.890	0.016	537,427.831	12,935.515	161,700.419	Free Surface	4.663	0.362	0.281	0.302	0.403	1.742	1,915,504.132	No	0.302	4.663
537	TOE_2710-TOE_2712	TOE_2710	TOE_2712	10.000	172.785	0.004	1,001,163.394	27,020.150	337,750.433	Pressurized	2.840	1.000	1.023	0.833	0.551	0.548	979,015.931	No	0.833	2.840
538	TOE_2711-TOE_2715	TOE_2711	TOE_2715	10.000	182.798	0.005	1,001,163.394	27,020.150	337,750.433	Free Surface	3.610	0.734	0.889	0.612	0.558	0.833	1,126,213.727	Yes	0.817	2.853
539	TOE_2712-TOE_2713	TOE_2712	TOE_2713	10.000	121.612		1,001,163.394	27,020.150	337,750.433	Pressurized	2.840	1.000	1.058	0.833	0.542	0.548	945,986.116	No	0.833	2.840
540	TOE_2713-TOE_2714	TOE_2713	TOE_2714	10.000	90.763	0.004	1,001,163.394	27,020.150	337,750.433	Pressurized	2.840	1.000	1.034	0.833	0.548	0.548	968,703.910	Yes	0.833	2.840
541	TOE_2714-TOE_2711 TOE_2715-TOE_2716	TOE_2714 TOE 2715	TOE_2711 TOE 2716	10.000	315.857 176.202		1,001,163.394	27,020.150 27,020.150	337,750.433 337,750.433	Pressurized Pressurized	2.840	1.000	1.035	0.833	0.548	0.548	967,616.016 802.803.628	No No	0.833 0.833	2.840 2.840
543	TOE_2716-TOE_2716	TOE 2716	TOE_2710	10.000	105.642		1,001,163.394	27,020.150	337,750.433	Pressurized	2.840	1.000	1.071	0.833	0.498	0.548	934,562.798	No	0.833	2.840
544	TOE 2717-TOE 2718	TOE 2717	TOE 2718	10.000	389.846		1,001,163.394	27,020.150	337,750.433	Free Surface	5.675	0.500	0.501	0.417	0.558	1.747	1,999,814.376	Yes	0.586	3.783
545	TOE 2718-TOE 2719	TOE_2718	TOE_2719	10.000	404.424			27,020.150	337,750.433	Pressurized	2.840	1.000	1.010	0.833	0.555	0.548	991,356.795	No	0.833	2.840
546	TOE_2719-TOE_2720	TOE_2719	TOE_2720	10.000	399.685	0.009	1,001,163.394	27,020.150	337,750.433	Free Surface	4.442	0.610	0.690	0.509	0.558	1.195	1,451,641.644	No	0.509	4.442
547	TOE_2720-TOE_2721	TOE_2720	TOE_2721	10.000	400.184	0.004	1,001,163.394	27,020.150	337,750.433	Pressurized	2.840	1.000	1.014	0.833	0.554	0.548	987,655.294	No	0.833	2.840
548	TOE_2721-TOE_2722	TOE_2721	TOE_2722	10.000	267.435	0.026	1,001,163.394	27,020.150	337,750.433	Free Surface	6.620	0.444	0.407	0.370	0.558	2.194	2,459,871.545	No	0.370	6.620
549	TOE_2722-TOE_2723	TOE_2722	TOE_2723	10.000	130.770			27,020.150	337,750.433	Free Surface	6.572	0.447	0.411	0.372	0.558		2,435,995.502	No	0.372	6.572
550	TOE_2723-TOE_2724	TOE_2723	TOE_2724	10.000	402.800	0.029	1,001,163.394	27,020.150	337,750.433	Free Surface	6.898	0.430	0.385	0.359	0.558	2.330	2,601,206.353	Yes	0.372	6.581
551	TOE_2724-TOE_2725	TOE_2724	TOE_2725	10.000	396.385		1,001,163.394	27,020.150	337,750.433	Free Surface	3.936	0.678	0.802	0.565	0.558	0.976	1,248,116.180	No	0.565	3.936
552	TOE_2725-TOE_2726	TOE_2725 TOE_2726	TOE_2726 TOE 2727	10.000	403.987 395.385	0.007	1,001,163.394 1,001,163.394	27,020.150 27,020.150	337,750.433 337,750.433	Free Surface Free Surface	4.077 6.585	0.657 0.446	0.768	0.548 0.372	0.558 0.558	1.037 2.178	1,303,194.099 2,442,479.847	No No	0.548 0.372	4.077 6.585
554	TOE_2726-TOE_2727 TOE_2727-TOE_2728	TOE 2727	TOE 2728	10.000	165.621	0.023		27,020.150	337,750.433	Free Surface	8.337	0.373	0.297	0.311	0.558	3.061	3,372,033.353	No	0.311	8.337
555	TOE 2728-TOE 2729	TOE 2728	TOE 2729	10.000	61.077			27,020.150	337,750.433	Free Surface	8.045	0.384	0.312	0.320	0.558	2.908	3,209,925.693	No	0.320	8.045
556	TOE 2729-TOE 2730	TOE 2729	TOE 2730	10.000	275.532	0.024	1,001,163.394	27,020.150	337,750.433	Free Surface	6.440	0.454	0.422	0.378	0.558	2.108	2,369,718.404	Yes	0.383	6.327
557	TOE_2730-TOE_2992	TOE_2730	TOE_2992	10.000	316.366	0.009	1,001,163.394	27,020.150	337,750.433	Free Surface	4.551	0.598	0.668	0.498	0.558	1.243	1,497,819.128	No	0.498	4.551
558	TOE_2731-TOE_2960	TOE_2731	TOE_2960	8.000	328.578	0.016	314,412.832	6,850.077	85,623.808	Free Surface	4.094	0.373	0.297	0.249	0.326	1.681	1,059,992.645	Yes	0.302	3.165
559	TOE_2732-TOE_2731	TOE_2732	TOE_2731	8.000	341.462	0.005	314,412.832	6,850.077	85,623.808	Free Surface	2.727	0.509	0.515	0.339	0.326	0.929	610,771.602	No	0.339	2.727
560	TOE_2733-TOE_2732	TOE_2733	TOE_2732	8.000	191.801	0.006	314,412.832	6,850.077	85,623.808	Free Surface	2.823	0.495	0.492	0.330	0.326	0.978	639,516.219	No	0.330	2.823
561	TOE_2734-TOE_2615	TOE_2734	TOE_2615	30.000	429.624		8,439,632.825	336,447.233	4,205,550.096	Free Surface	6.831	0.413	0.357	1.032	1.215		23,658,516.928	No	1.032	6.831
562	TOE_2735-TOE_2734	TOE_2735	TOE_2734 TOE 2735	30.000 30.000	244.751 359.070	0.002		336,447.233	4,205,550.096	Free Surface	4.683	0.554 0.570	0.592 0.621	1.384	1.215 1.215		14,257,598.474	No No	1.384 1.426	4.683 4.513
563	TOE_2736-TOE_2735 TOE 2737-TOE 2905	TOE_2736 TOE 2737	TOE_2/35	30.000	464.000	0.002	8,439,632.825 8,439,632,825	336,447.233 336,447.233	4,205,550.096 4,205,550.096	Free Surface Free Surface	4.513 4.623	0.570	0.621	1.426 1.398	1.215		13,592,145.780 14,020,712.700	Yes	1.426	4.513
565	TOE_2737-TOE_2905 TOE 2738-TOE 2737	TOE 2738	TOE_2905	30.000	403.282		-,,	336,447.233	4,205,550.096	Free Surface	4.023	0.619	0.602	1.546	1.215		11.997.131.701	No	1.546	4.096
566	TOE 2739-TOE 2738	TOE 2739	TOE 2738	30.000	499.467		8,439,632.825	336,447.233	4,205,550.096	Free Surface	4.494	0.573	0.625	1.431	1.215		13,513,742.914	Yes	1.489	4.285
567	TOE 2740-TOE 2739	TOE_2740	_	30.000	498.367		8,439,632.825	336,447.233	4,205,550.096	Free Surface	4.335	0.590	0.654	1.474	1.215		12,899,064.525	No	1.474	4.335
568		TOE_2741		30.000			8,439,632.825	336,447.233	4,205,550.096	Free Surface	4.135	0.614	0.695	1.534			12,143,367.452	No	1.534	4.135
569	TOE_2742-TOE_2741	TOE_2742		30.000			8,439,632.825	336,447.233	4,205,550.096	Free Surface	4.578	0.564	0.610	1.410			13,844,924.620	Yes	1.422	4.530
570	TOE_2743-TOE_2742	TOE_2743		30.000			8,439,632.825	336,447.233	4,205,550.096	Free Surface	5.342	0.498	0.497	1.246			16,970,973.773	Yes	1.278	5.174
571	TOE_2744-TOE_2591	TOE_2744		30.000			6,739,789.605	257,925.503	3,224,027.746	Pressurized	2.124	1.000	7.401	2.500		0.237	910,610.783	No	2.500	2.124
572	TOE_2745-TOE_2744	TOE_2745		27.000			5,793,544.666	215,691.759	2,696,138.345	Free Surface	5.137	0.452	0.420	1.017	1.030		13,806,136.114	Yes	2.250	2.254
573	TOE_2746-TOE_2744	TOE_2746		18.000			1,459,861.334	42,233.744	527,889.401	Free Surface	4.300	0.338	0.246	0.507	0.568		5,935,798.422	No	0.507	4.300
574	TOE_2747-ECF5_204	TOE_2747		18.000			1,328,325.158	37,766.866	472,062.062	Free Surface	4.138	0.324	0.228	0.487	0.541		5,837,719.525	No	0.487	4.138
575	TOE_2748-TOE_2749 TOE 2749-TOE 2750	TOE_2748 TOE_2749		12.000 12.000			1,679,194.804 1,679,194.804	49,842.701 49,842.701	623,027.285 623,027.285	Free Surface Free Surface	5.449 5.128	0.585	0.645 0.697	0.585 0.615	0.691		2,602,387.765 2,407,531.959	No No	0.585 0.615	5.449 5.128
576	10E_2/49-10E_2/50	TUE_2/49	TOE_2/50	12.000	J9J.95U	0.009	1,019,194.004	45,042.701	023,027.203	riee Sullace	5.120	0.615	0.097	0.015	0.091	1.202	2,407,001.909	INU	0.015	5.120

	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Unpeakable Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)		Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth (ft)	Adjusted Velocity
577	TOE 2750-TOE 2751	TOE_2750	TOE_2751	12.000		0.020	1,679,194.804	49,842.701	623,027.285	Free Surface	6.902	0.484	0.472	0.484	0.691	1.982	3,553,960.140	No	0.484	6.902
578	TOE_2751-TOE_2752	TOE_2751	TOE_2752	15.000	391.732		1,679,194.804	49,842.701	623,027.285	Free Surface	6.090	0.379	0.305	0.474	0.646	1.810	5,499,118.473	No	0.474	6.090
579	TOE_2752-TOE_2753	TOE_2752	TOE_2753	15.000	398.557	0.010	1,679,194.804	49,842.701	623,027.285	Free Surface	5.287	0.421	0.371	0.527	0.646	1.477	4,531,817.796	No	0.527	5.287
580	TOE_2753-TOE_2754	TOE_2753	TOE_2754	15.000	349.938	0.011	1,679,194.804	49,842.701	623,027.285	Free Surface	5.530	0.407	0.349	0.509	0.646	1.576	4,818,135.047	No	0.509	5.530
581	TOE_2754-TOE_2755	TOE_2754	TOE_2755	15.000	130.982	0.008	1,679,194.804	49,842.701	623,027.285	Free Surface	4.825	0.452	0.420	0.565	0.646	1.292	4,001,938.556	No	0.565	4.825
582	TOE_2755-TOE_2759	TOE_2755	TOE_2759	15.000	312.151		1,679,194.804	49,842.701	623,027.285	Free Surface	5.213	0.426	0.378	0.532	0.646	1.447	4,445,843.679	No	0.532	5.213
583	TOE_2756-TOE_2757	TOE_2756	TOE_2757	15.000	72.934	0.010		52,547.020	656,832.713	Free Surface	5.409	0.429	0.382	0.536	0.661	1.496	4,598,754.788	No	0.536	5.409
584	TOE_2757-TOE_2760 TOE 2758-TOE 2761	TOE_2757 TOE 2758	TOE_2760 TOE 2761	15.000 18.000	417.818 414.191	0.015	1,755,877.147 1,755,877.147	52,547.020 52,547.020	656,832.713 656,832.713	Free Surface Free Surface	6.200 2.781	0.387	0.317 0.571	0.483 0.812	0.661	1.821 0.606	5,542,104.941 3,074,643.302	No No	0.483 0.812	6.200 2.781
586	TOE 2759-TOE 2756	TOE 2759	TOE 2756	15.000	315.756		1,755,877.147	52,547.020	656,832.713	Free Surface	5.495	0.423	0.374	0.529	0.661	1.531	4,698,940.442	No	0.529	5.495
587	TOE 2760-TOE 2817	TOE 2760	TOE 2817	15.000	413.357	0.019		52,547.020	656,832.713	Free Surface	6.824	0.360	0.278	0.450	0.661	2.088	6,324,722.609	No	0.450	6.824
588	TOE 2761-TOE 2762	TOE_2761	TOE 2762	18.000	69.865	0.004		52,547.020	656,832.713	Free Surface	3.643	0.439	0.398	0.658	0.625	0.907	4,411,329.400	Yes	0.731	3.177
589	TOE_2762-TOE_2764	TOE_2762	TOE_2764	18.000	489.494	0.002	1,755,877.147	52,547.020	656,832.713	Free Surface	2.817	0.536	0.562	0.804	0.625	0.618	3,126,773.703	No	0.804	2.817
590	TOE_2763-TOE_2765	TOE_2763	TOE_2765	18.000	466.966	0.002	1,755,877.147	52,547.020	656,832.713	Free Surface	2.987	0.512	0.520	0.767	0.625	0.676	3,378,307.134	Yes	0.818	2.756
591	TOE_2764-TOE_2763	TOE_2764	TOE_2763	18.000	478.193	0.002	1,755,877.147	52,547.020	656,832.713	Free Surface	3.102	0.497	0.494	0.745	0.625	0.715	3,552,946.925	Yes	0.756	3.043
592	TOE_2765-TOE_2766	TOE_2765	TOE_2766	18.000	164.304		1,755,877.147	52,547.020	656,832.713	Free Surface	2.560	0.579	0.636	0.869	0.625	0.533	2,759,106.316	No	0.869	2.560
593	TOE_2766-TOE_2767	TOE_2766	TOE_2767	18.000	181.632			52,547.020	656,832.713	Free Surface	2.892	0.525	0.542	0.787	0.625	0.644	3,237,177.498	No	0.787	2.892
594	TOE_2767-TOE_2768	TOE_2767	TOE_2768 TOE 2914	18.000 18.000	352.648	0.005	1,755,877.147	52,547.020 52,547.020	656,832.713 656,832.713	Free Surface	4.183 5.826	0.395	0.330 0.208	0.593 0.465	0.625	1.108 1.771	5,326,808.805 8,422,695.282	No Yes	0.593 0.613	4.183 4.004
595	TOE_2768-TOE_2914 TOE 2769-TOE 2770	TOE_2768 TOE 2769	TOE_2914	18.000	498.501	0.013	1,755,877.147 1,755,877.147	52,547.020	656,832.713	Free Surface Free Surface	3.043	0.504	0.208	0.465	0.625	0.695	3,464,114.064	Yes	0.613	3.030
596	TOE 2770-TOE 2771	TOE 2770	TOE_2770	18.000	498.301	0.002	1,755,877.147	52,547.020	656,832.713	Free Surface	3.043	0.504	0.513	0.761	0.625	0.686	3,422,652.098	No	0.759	3.016
598	TOE 2771-TOE 2772	TOE 2771	TOE 2772	18.000			1,763,800.151	52,826.380	660,333.351	Free Surface	4.295	0.389	0.320	0.583	0.627		5,514,173.479	Yes	0.660	3.646
599	TOE 2772-TOE 2773	TOE 2772	TOE 2773	18.000		0.002		52,826.380	660,333.351	Free Surface	3.162	0.491	0.485	0.736	0.627	0.734	3,639,557.647	Yes	0.869	2.570
600	TOE_2773-TOE_2774	TOE_2773	TOE_2774	18.000	259.869	0.004	1,763,800.151	52,826.380	660,333.351	Free Surface	3.746	0.431	0.386	0.646	0.627	0.943	4,574,583.703	Yes	1.428	1.572
601	TOE_2774-TOE_2775	TOE_2774	TOE_2775	18.000	352.134	-0.000	1,763,800.151	52,826.380	660,333.351	Pressurized	1.544	1.000		1.500	0.000	0.222		No	1.500	1.544
602	TOE_2775-TOE_2776	TOE_2775	TOE_2776	18.000	499.799	0.002		52,826.380	660,333.351	Free Surface	2.645	0.566	0.613	0.849	0.627	0.560	2,875,663.264	Yes	0.910	2.432
603	TOE_2776-TOE_2777	TOE_2776	TOE_2777	18.000			1,763,800.151	52,826.380	660,333.351	Free Surface	2.253	0.648	0.753	0.972	0.627	0.432	2,343,226.326	No	0.972	2.253
604	TOE_2777-TOE_2778	TOE_2777	TOE_2778	18.000	448.684		1,763,800.151	52,826.380	660,333.351	Free Surface	2.325	0.630	0.724	0.946	0.627	0.455	2,437,004.677	Yes	0.957	2.293
605	TOE_2778-TOE_2779	TOE_2778	TOE_2779	18.000			1,763,800.151 1,763,800,151	52,826.380	660,333.351	Free Surface	2.262	0.646	0.749	0.969	0.627		2,354,025.025	Yes	1.122	1.926
606	TOE_2779-TOE_2780 TOE 2780-TOE 2781	TOE_2779 TOE 2780	TOE_2780 TOE 2781	18.000 18.000	471.667 294.427	0.001	1,763,800.151	52,826.380 52,826.380	660,333.351 660,333.351	Free Surface Free Surface	2.241 2.291	0.651 0.638	0.758 0.737	0.976 0.958	0.627	0.428	2,327,876.216 2,392,881.049	Yes Yes	1.374 1.500	1.609 1.544
608	TOE 2781-TOE 2782	TOE 2781	TOE 2782	18.000	388.136	0.000		52,826.380	660,333.351	Pressurized	1.544	1.000	1.421	1.500	0.522		1,241,461.108	No	1.500	1.544
609	TOE_2782-TOE_2783	TOE_2782	TOE_2783	21.000			1,763,800.151	52,826.380	660,333.351	Free Surface	2.266	0.500	0.501	0.876	0.599	0.481	3,521,797.912	Yes	0.951	2.044
610	TOE_2783-TOE_2786	TOE_2783	TOE_2786	21.000	499.183	0.002	1,763,800.151	52,826.380	660,333.351	Free Surface	2.840	0.421	0.369	0.736	0.599	0.671	4,775,511.323	Yes	1.423	1.303
611	TOE_2784-TOE_2785	TOE_2784	TOE_2785	21.000	128.890	0.001	1,970,122.223	60,216.457	752,722.277	Free Surface	2.334	0.534	0.558	0.934	0.634	0.476	3,532,789.790	Yes	0.934	2.333
612	TOE_2785-TOE_2788	TOE_2785	TOE_2788	21.000	278.260	0.001	1,970,122.223	60,216.457	752,722.277	Free Surface	2.332	0.534	0.558	0.935	0.634	0.475	3,528,657.765	Yes	1.005	2.133
613	TOE_2786-TOE_2784	TOE_2786	TOE_2784	21.000			1,970,122.223	60,216.457	752,722.277	Pressurized	1.267	1.000	1.327	1.750	0.547	0.169	1,484,689.154	No	1.750	1.267
614	TOE_2787-EVF4_46	TOE_2787	EVF4_46	21.000	494.801	0.000		60,216.457	752,722.277	Pressurized	1.267	1.000	1.393	1.750	0.534	0.169	1,414,443.287	No	1.750	1.267
615	TOE_2788-TOE_2787	TOE_2788	TOE_2787	21.000	503.608			60,216.457	752,722.277	Free Surface	2.903	0.450	0.417	0.788	0.634	0.659	4,728,573.115	Yes	1.451 1.006	1.430
616	TOE_2789-TOE_2791 TOE 2790-TOE 2789	TOE_2789 TOE_2790	TOE_2791 TOE 2789	24.000 21.000	498.890 174.406		2,370,386.200 2,370,386.200	74,951.972 74,951.972	936,914.047 936,914.047	Free Surface Free Surface	2.346 2.458	0.498	0.497	0.996 1.041	0.671	0.468 0.465	4,769,872.434 3,573,648.055	Yes No	1.006	2.317 2.458
618	TOE_2790-TOE_2789 TOE 2791-TOE 2792	TOE 2791	TOE 2792	24.000			2,370,386.200	74,951.972	936,914.047	Free Surface	2.289	0.508	0.514	1.016	0.671	0.451	4,616,077.651	No	1.016	2.289
619	TOE 2792-TOE 2793	TOE 2792	TOE 2793	24.000	420.700		2,370,386.200	74,951.972	936,914.047	Free Surface	2.711	0.445	0.409	0.891	0.671	0.579	5,794,430.136	No	0.891	2.711
620	TOE 2793-TOE 2794	TOE_2793	TOE_2794	24.000	381.015	0.002		74,951.972	936,914.047	Free Surface	3.003	0.412	0.356	0.824	0.671	0.672	6,659,926.961	Yes	0.883	2.744
621	TOE_2794-TOE_2795	TOE_2794	TOE_2795	24.000	455.331	0.001	2,370,386.200	74,951.972	936,914.047	Free Surface	2.524	0.471	0.450	0.941	0.671	0.521	5,262,886.803	Yes	1.032	2.242
622	TOE_2795-OTF1_60A	TOE_2795	OTF1_60A	24.000	214.510	0.001	2,370,386.200	74,951.972	936,914.047	Free Surface	2.018	0.562	0.606	1.124	0.671	0.372	3,909,765.156	No	1.124	2.018
623	TOE_2798-TOE_2799	TOE_2798	TOE_2799	12.000		0.002	712,349.879	18,056.153	225,696.875	Free Surface	2.413	0.564	0.610	0.564	0.442	0.626	1,166,983.883	No	0.564	2.413
624	TOE_2799-OTF1_108	TOE_2799	OTF1_108	16.000	33.367	0.002		18,056.153	225,696.875	Free Surface	2.401	0.364	0.283	0.485	0.406		2,519,550.956	No	0.485	2.401
625	TOE_2800-TOE_2825	TOE_2800	TOE_2825	36.000	57.809		8,908,551.717	358,643.385	4,482,993.352	Free Surface	10.238	0.245	0.132	0.736	1.182		67,464,814.133	Yes	0.857	8.270
626	TOE_2801-TOE_2612	TOE_2801	TOE_2612 TOE 2801	18.000	141.337	0.016		30,359.509	379,477.297	Free Surface	5.502	0.232	0.118	0.348	0.492	1.957 0.999	9,366,308.345	No No	0.348 0.492	5.502
627	TOE_2802-TOE_2801 TOE 2803-TOE 2802	TOE_2802 TOE 2803	TOE_2801	18.000 18.000	250.167 194.718	0.004	1,104,689.959 1,104,689.959	30,359.509 30,359.509	379,477.297 379,477.297	Free Surface Free Surface	3.391 3.201	0.328	0.252	0.492 0.513	0.492	0.999	4,754,776.317 4,389,857.843	No	0.492	3.391 3.201
629	TOE 2804-TOE 2803	TOE 2804	TOE_2802	18.000			1,104,689.959	30,359.509	379,477.297	Free Surface	3.155	0.342	0.257	0.513	0.492	0.902	4,303,159.363	No	0.513	3.155
630	TOE 2805-VPF1 718	TOE_2805	VPF1_718	18.000			1,364,381.466	38,979.345	487,251.177	Free Surface	4.867	0.294	0.188	0.441	0.548		7,240,963.795	No	0.441	4.867
631	TOE_2806-TOE_2805	TOE_2806	TOE_2805	18.000			1,364,381.466	38,979.345	487,251.177	Free Surface	5.097	0.285	0.177	0.427	0.548		7,723,387.698	No	0.427	5.097
632	TOE_2807-TOE_2806	TOE_2807	TOE_2806	18.000	443.273	0.004	1,364,381.466	38,979.345	487,251.177	Free Surface	3.676	0.361	0.278	0.541	0.548	1.026	4,903,668.343	No	0.541	3.676
633	TOE_2808-TOE_2819	TOE_2808		18.000			1,364,381.466	38,979.345	487,251.177	Free Surface	5.036	0.287	0.180	0.430	0.548		7,596,070.360	No	0.430	5.036
634	TOE_2809-VRGC2_526		VRGC2_526	10.000	56.047			14,977.434	187,225.850	Free Surface	6.542	0.310	0.208	0.258	0.430		2,920,079.797	No	0.258	6.542
635	TOE_2817-TOE_2818	TOE_2817		15.000			1,755,877.147	52,547.020	656,832.713	Free Surface	7.607	0.333	0.239	0.416	0.661		7,350,359.292	Yes	0.543	5.318
636	TOE_2818-TOE_2758	TOE_2818	TOE_2758	18.000			1,755,877.147	52,547.020	656,832.713	Free Surface	3.562	0.446	0.410	0.669			4,279,919.147	Yes	0.741	3.124
637	TOE_2819-TOE_2807	TOE_2819 TOE_2825	TOE_2826	18.000 36.000			1,364,381.466 10,461,209.696	38,979.345 433,595.357	487,251.177 5,419,907.399	Free Surface Free Surface	4.162 6.283	0.329	0.234	0.494 1.178	0.548 1.285		5,823,534.025 32,111,628.908	No Yes	0.494 1.255	4.162 5.776
638	TOE_2825-TOE_2826 TOE 2826-TOE 2827	TOE 2826		36.000			10,461,209.696	433,595.357	5,419,907.399	Free Surface	4.216	0.534	0.558	1.602	1.285		18,745,463.271	No	1.602	4.216
640	TOE 2827-TOE 2828			36.000			10,461,209.696	433,595.357	5,419,907.399	Free Surface	5.411	0.440	0.400	1.319			26,183,894.176	Yes	1.352	5.237
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	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Unpeakable Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)		Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth (ft)	Adjusted Velocity
641	TOE_2828-TOE_2921	TOE_2828	TOE_2921	36.000	166.924	0.001	10,461,209.696	433,595.357	5,419,907.399	Free Surface	4.108	0.545	0.577	1.635	1.285	0.630	18,121,603.712	No	1.635	4.108
642	TOE_2829-TOE_2830	TOE_2829	TOE_2830	36.000	96.097	0.003	10,461,209.696	433,595.357	5,419,907.399	Free Surface	5.340	0.444	0.407	1.332	1.285	0.933	25,723,528.003	Yes	1.405	4.982
643	TOE_2830-TOE_2831	TOE_2830	TOE_2831	36.000	278.883	0.002		433,595.357	5,419,907.399	Free Surface	4.297	0.526	0.544	1.578	1.285		19,223,088.990	No	1.578	4.297
644	TOE_2831-TOE_2832	TOE_2831	TOE_2832	36.000	59.748		10,461,209.696	433,595.357	5,419,907.399	Free Surface	4.118	0.544	0.576	1.632	1.285		18,173,766.148	No	1.632	4.118
645	TOE_2832-TOE_2833	TOE_2832	TOE_2833	36.000	113.979		10,461,209.696	433,595.357	5,419,907.399	Free Surface	4.949	0.471	0.451	1.412	1.285		23,208,726.628	Yes	1.427	4.883
646	TOE_2833-TOE_2834	TOE_2833	TOE_2834	36.000			10,461,209.696	433,595.357	5,419,907.399	Free Surface	4.250	0.530	0.552	1.591	1.285		18,949,299.698	No	1.591	4.250
647	TOE_2834-TOE_2835	TOE_2834	TOE_2835	36.000	399.855	0.002		433,595.357	5,419,907.399	Free Surface	4.790	0.483	0.471	1.448	1.285		22,215,470.195	No	1.448	4.790
648	TOE_2835-TOE_2836 TOE 2836-TOE 2837	TOE_2835 TOE 2836	TOE_2836 TOE 2837	36.000 36.000	405.150 394.145	0.002	10,461,209.696 10,461,209.696	433,595.357 433,595.357	5,419,907.399 5,419,907.399	Free Surface Free Surface	4.560 4.335	0.502	0.503 0.538	1.505 1.566	1.285 1.285		20,807,629.358	No Yes	1.505 1.690	4.560 3.945
649	TOE 2837-TOE 2839	TOE 2837	TOE_2839	36.000	242.437	0.002		433,595.357	5,419,907.399	Free Surface	3.381	0.641	0.742	1.923	1.285		14,105,792.535	No	1.923	3.381
651	TOE 2838-TOE 2840	TOE 2838	TOE 2840	36.000	279.046	0.002		433,595.357	5,419,907.399	Free Surface	4.116	0.544	0.576	1.633	1.285		18,166,539.006	No	1.633	4.116
652	TOE 2839-TOE 2838	TOE_2839	TOE_2838	36.000	223.808		10,461,209.696	433,595.357	5,419,907.399	Free Surface	4.176	0.538	0.565	1.614	1.285		18,517,468.952	No	1.614	4.176
653	TOE 2840-TOE 2841	TOE_2840	TOE 2841	36.000	262.834		10,461,209.696	433,595.357	5,419,907.399	Free Surface	4.661	0.493	0.488	1.479	1.285		21,420,316.629	No	1.479	4.661
654	TOE 2841-TOE 2843	TOE_2841	TOE_2843	36.000	36.626	0.004	10,461,209.696	433,595.357	5,419,907.399	Free Surface	5.669	0.424	0.375	1.273	1.285	1.018	27,897,440.007	No	1.273	5.669
655	TOE_2842-TOE_2844	TOE_2842	TOE_2844	36.000	444.636	0.003	10,461,209.696	433,595.357	5,419,907.399	Free Surface	5.263	0.449	0.415	1.347	1.285	0.914	25,221,921.417	No	1.347	5.263
656	TOE_2843-TOE_2842	TOE_2843	TOE_2842	36.000	93.563	0.006	10,461,209.696	433,595.357	5,419,907.399	Free Surface	6.860	0.368	0.289	1.104	1.285	1.339	36,226,643.146	Yes	1.125	6.683
657	TOE_2844-TOE_2845	TOE_2844	TOE_2845	36.000	17.372	0.020	10,461,209.696	433,595.357	5,419,907.399	Free Surface	10.500	0.270	0.160	0.811	1.285	2.433	65,508,663.780	Yes	1.384	5.081
658	TOE_2845-TOE_2846	TOE_2845	TOE_2846	36.000	184.327	0.002		433,595.357	5,419,907.399	Free Surface	4.396	0.516	0.528	1.549	1.285		19,812,880.516	No	1.549	4.396
659	TOE_2846-TOE_2847	TOE_2846	TOE_2847	36.000	229.186		10,461,209.696	433,595.357	5,419,907.399	Free Surface	4.662	0.493	0.488	1.479	1.285		21,429,504.184	No	1.479	4.662
660	TOE_2847-TOE_2848	TOE_2847	TOE_2848	36.000	80.877	0.004		433,595.357	5,419,907.399	Free Surface	6.159	0.399	0.335	1.196	1.285		31,240,984.972	No	1.196	6.159
661	TOE_2848-TOE_2849	TOE_2848	TOE_2849	36.000 36.000	459.682 343.100	0.005		433,595.357	5,419,907.399	Free Surface	6.345	0.390	0.321	1.170 0.968	1.285		32,541,157.345	No	1.170	6.345 8.212
662	TOE_2849-TOE_2920 TOE_2850-TOE_2851	TOE_2849 TOE 2850	TOE_2920 TOE 2851	36.000	249.280	0.010	10,461,209.696 10,461,209.696	433,595.357 433,595.357	5,419,907.399 5,419,907.399	Free Surface Free Surface	8.212 7.945	0.323	0.225	0.968	1.285 1.285		46,476,512.118 44,388,011.310	No Yes	0.968 1.015	7.687
664	TOE 2851-TOE 2853	TOE 2851	TOE 2853	36.000	20.430	0.009		433,595.357	5,419,907.399	Free Surface	6.135	0.330	0.236	1.199	1.285		31,079,112.582	No	1.199	6.135
665	TOE 2852-TOE 2860	TOE 2852	TOE 2860	36.000	359.537	0.002		443,794.873	5,547,407.831	Free Surface	4.328	0.531	0.553	1.593	1.298		19,287,627.371	No	1.593	4.328
666	TOE 2853-TOE 2852	TOE 2853	TOE 2852	36.000	60.002	0.004		443,794.873	5,547,407.831	Free Surface	5.954	0.415	0.360	1.245	1.298		29,614,860.035	Yes	1.389	5.156
667	TOE 2854-TOE 2853	TOE 2854	TOE 2853	12.000	398.579	0.004		10,199.516	127,500.432	Free Surface	2.640	0.363	0.282	0.363	0.344	0.899	1,559,749.936	No	0.363	2.640
668	TOE 2855-TOE 2854	TOE_2855	TOE_2854	12.000	386.083	0.002	439,652.210	10,199.516	127,500.432	Free Surface	2.059	0.438	0.396	0.438	0.344	0.629	1,109,717.588	No	0.438	2.059
669	TOE_2856-TOE_2855	TOE_2856	TOE_2855	12.000	226.541	0.003	439,652.210	10,199.516	127,500.432	Free Surface	2.351	0.396	0.331	0.396	0.344	0.762	1,329,421.551	No	0.396	2.351
670	TOE_2857-TOE_2856	TOE_2857	TOE_2856	12.000	76.848	0.003	439,652.210	10,199.516	127,500.432	Free Surface	2.401	0.390	0.321	0.390	0.344	0.785	1,368,340.727	No	0.390	2.401
671	TOE_2858-TOE_2857	TOE_2858	TOE_2857	12.000	348.353	0.011	439,652.210	10,199.516	127,500.432	Free Surface	3.775	0.280	0.171	0.280	0.344	1.485	2,563,756.376	No	0.280	3.775
672	TOE_2859-TOE_2858	TOE_2859	TOE_2858	12.000		0.004		10,199.516	127,500.432	Free Surface	2.776	0.350	0.263	0.350	0.344	0.965	1,671,256.976	No	0.350	2.776
673	TOE_2860-TOE_2861	TOE_2860	TOE_2861	36.000	403.356	0.002		443,794.873	5,547,407.831	Free Surface	4.143	0.550	0.586	1.650	1.298		18,209,827.948	No	1.650	4.143
674	TOE_2861-TOE_2862	TOE_2861	TOE_2862	36.000	62.240	0.006		443,794.873	5,547,407.831	Free Surface	7.012	0.367	0.288	1.102	1.298		37,066,579.448	Yes	1.553	4.468
675	TOE_2862-TOE_2863 TOE 2863-TOE 2864	TOE_2862 TOE 2863	TOE_2863 TOE 2864	36.000 36.000	159.775 205.062	0.001		443,794.873 443,794.873	5,547,407.831 5,547,407.831	Free Surface Free Surface	3.698 4.846	0.604	0.679 0.476	1.812 1.457	1.298		15,716,935.916 22,417,712.211	No No	1.812 1.457	3.698 4.846
677	TOE 2864-TOE 2865	TOE_2864	TOE_2865	36.000	114.615	0.002		443,794.873	5,547,407.831	Free Surface	5.448	0.444	0.470	1.332	1.298		26,243,125.882	Yes	1.415	5.031
678	TOE 2865-TOE 2866	TOE 2865	TOE 2866	36.000	284.715		10,669,190.484	443,794.873	5,547,407.831	Free Surface	4.177	0.546	0.580	1.639	1.298		18,407,998.604	No	1.639	4.177
679	TOE 2866-TOE 2867	TOE 2866	TOE 2867	36.000	270.608		10,669,190.484	443,794.873	5,547,407.831	Free Surface	4.184	0.546	0.578	1.637	1.298		18,447,596.010	No	1.637	4.184
680	TOE 2867-TOE 2868	TOE 2867	TOE 2868	36.000	370.460	0.003		446,114.712	5,576,407.980	Free Surface	5.465	0.444	0.407	1.333	1.301		26,315,252.924	Yes	1.376	5.240
681	TOE 2868-TOE 2869	TOE_2868	TOE_2869	36.000	408.607	0.002	10,716,390.039	446,114.712	5,576,407.980	Free Surface	4.464	0.520	0.534	1.560	1.301	0.707	20,061,486.848	No	1.560	4.464
682	TOE_2869-TOE_2870	TOE_2869	TOE_2870	36.000	396.171	0.002	10,716,390.039	446,114.712	5,576,407.980	Free Surface	4.278	0.538	0.565	1.614	1.301	0.662	18,967,088.030	No	1.614	4.278
683	TOE_2870-TOE_2871	TOE_2870	TOE_2871	36.000	396.576		10,716,390.039	446,114.712	5,576,407.980	Free Surface	4.350	0.531	0.553	1.592	1.301		19,389,949.386	No	1.592	4.350
684	TOE_2871-TOE_2872	TOE_2871	TOE_2872	36.000	400.375	0.002		446,114.712	5,576,407.980	Free Surface	4.159	0.550	0.586	1.651	1.301		18,277,493.798	No	1.651	4.159
685	TOE_2872-TOE_2873	TOE_2872	TOE_2873	36.000	381.197		10,716,390.039	446,114.712	5,576,407.980	Free Surface	4.582	0.509	0.516	1.528	1.301		20,770,239.554	Yes	1.600	4.326
686	TOE_2873-TOE_2874	TOE_2873	TOE_2874	36.000	56.391	0.001		446,114.712	5,576,407.980	Free Surface	3.844	0.587	0.650	1.761	1.301		16,497,998.692	No	1.761	3.844
687	TOE_2874-TOE_2875	TOE_2874	TOE_2875	36.000	68.032		10,716,390.039	446,114.712	5,576,407.980	Free Surface	4.532	0.514	0.524	1.541	1.301		20,469,178.536	No	1.541	4.532
688	TOE_2875-TOE_2876 TOE 2876-TOE 2877	TOE_2875 TOE 2876	TOE_2876 TOE 2877	36.000 36.000	48.547 329.140		10,716,390.039	446,114.712 446,114.712	5,576,407.980 5,576,407.980	Free Surface Free Surface	4.831 4.589	0.489	0.481	1.466 1.526	1.301		22,289,471.205 20,809,040.903	No Yes	1.466 1.538	4.831 4.544
690	TOE 2877-TOE 2878	TOE 2877	TOE 2878	36.000			10,716,390.039	446,114.712	5,576,407.980	Free Surface	4.163	0.550	0.515	1.650	1.301		18,301,672.579	No	1.650	4.163
691	TOE 2878-TOE 2879	TOE 2878	TOE 2879	36.000	361.008		10,716,390.039	446,114.712	5,576,407.980	Free Surface	4.326	0.533	0.557	1.600	1.301		19,248,269.871	No	1.600	4.326
692	TOE 2879-TOE 2880	TOE_2879	TOE_2880	36.000	33.270		10,716,390.039	446,114.712	5,576,407.980	Free Surface	4.137	0.553	0.590	1.658	1.301		18,152,727.646	No	1.658	4.137
693	TOE_2880-TOE_2881	TOE_2880	TOE_2881	36.000	195.334		10,716,390.039	446,114.712	5,576,407.980	Free Surface	5.342	0.452	0.420	1.356	1.301		25,515,851.106	Yes	1.461	4.852
694	TOE_2881-TOE_2882	TOE_2881	TOE_2882	36.000	209.365	0.001	10,716,390.039	446,114.712	5,576,407.980	Free Surface	4.114	0.555	0.595	1.666	1.301	0.624	18,018,305.840	No	1.666	4.114
695	TOE_2882-TOE_2883	TOE_2882	TOE_2883	36.000	151.038	0.002	10,834,244.480	451,915.030	5,648,907.633	Free Surface	4.304	0.540	0.569	1.620	1.309	0.665	19,050,775.400	No	1.620	4.304
696	TOE_2883-TOE_2884	TOE_2883		36.000			10,834,244.480	451,915.030	5,648,907.633	Free Surface	4.443	0.527	0.545	1.580			19,868,163.099	No	1.580	4.443
697	TOE_2884-TOE_2885	TOE_2884		36.000			10,834,244.480	451,915.030	5,648,907.633	Free Surface	4.378	0.533	0.556	1.598	1.309		19,488,193.635	No	1.598	4.378
698	TOE_2885-TOE_2886	TOE_2885	TOE_2886	36.000			10,834,244.480	451,915.030	5,648,907.633	Free Surface	4.862	0.490	0.484	1.471			22,398,228.728	Yes	1.476	4.841
699	TOE_2886-TOE_2887	TOE_2886	_	36.000			11,797,402.399	499,735.972	6,246,655.728	Free Surface	4.831	0.527	0.546	1.581			21,593,423.325	No	1.581	4.831
700	TOE_2887-TOE_2888		TOE_2888	36.000			11,797,402.399	499,735.972	6,246,655.728	Free Surface	5.303	0.490	0.483	1.469	1.368		24,442,188.395	Yes	1.628	4.660
701	TOE_2888-TOE_2889	TOE_2888 TOE_2889	TOE_2889 TOE_2890	36.000 36.000			11,797,402.399 11,869,696.373	499,735.972 503,354.690	6,246,655.728 6,291,891.871	Free Surface Free Surface	3.806 5.621	0.642 0.470	0.743 0.450	1.926 1.411	1.368		15,873,859.216 26,369,429.043	No No	1.926 1.411	3.806 5.621
702 703	TOE_2889-TOE_2890 TOE 2890-TOE 2891	TOE_2890		36.000			11,869,696.373	503,354.690	6,291,891.871	Free Surface	5.420	0.470	0.450	1.411			25,116,262.417	No	1.411	5.420
704	TOE 2891-TOE 2892		TOE_2892	36.000			11,869,696.373	503,354.690	6,291,891.871	Free Surface	6.723	0.410	0.353	1.231			33,624,471.351	Yes	1.431	5.696
, 57	. JL_2001-10L_2092	.02_2001	. 0	55.000	JUZ	0.000	. 1,000,000.070	555,554.000	3,201,001.011	. 100 Suridos	J., 20	0.710	0.000	01			-5,52 .,77 1.001	. 33		0.000

150   150		ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Unpeakable Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)		Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth (ft)	Adjusted Velocity
200   100	705	TOE_2892-TOE_2893	TOE_2892	TOE_2893			0.002				Free Surface		0.590	0.654		1.373	0.616				4.235
TOT 2 1995 FOR 2 2895 TOT 2 1995	706	TOE_2893-TOE_2894	TOE_2893	TOE_2894	36.000	388.679	0.002	11,869,696.373	503,354.690	6,291,891.871	Free Surface	4.997	0.516	0.527	1.547	1.373	0.795	22,532,603.400	No	1.547	4.997
100		TOE_2894-TOE_2895																			
Total   Control   Contro			_	_																	
1.00				_				77										., .,.			
Tot   Company																					
Trg_										., . ,											
Tell   Fig.   Tell   Sept.   Tell   Sept.   Tell   Sept.   S																					
Total   Program   Total   Program   Total   Program																					
TOT_SOMPTON_2005   TOT_SOMPTON_2005   TOT_SOMPTON_2005   SOUTH   TOT_SOMPTON_2005   SOUTH   TOT_SOMPTON_2005   SOUTH   TOT_SOMPTON_2005   TOT_SOMPTON_2005   SOUTH   TOT_SOMPTON_2005	715	TOE_2902-TOE_2903	TOE_2902	TOE_2903	36.000	388.341	0.002	11,869,696.373	503,354.690	6,291,891.871	Free Surface	4.757	0.536	0.562	1.609	1.373	0.738	21,119,930.531	Yes	1.916	3.854
THE   THE   PRINCE   THE   PRINCE   SAFE	716	TOE_2903-TOE_2904	TOE_2903	TOE_2904	36.000	413.543	0.002	11,869,696.373	503,354.690	6,291,891.871	Free Surface	4.483	0.563	0.608	1.688	1.373	0.673	19,538,514.789	Yes	2.678	2.757
The	717			_							Pressurized										
Total   Tota																					
TOE_2091-TOE_2091   TOE_2091   TOE_2091   TOE_2091   TOE_2091   TOE_2091   TOE_2091   TOE_2091   TOE_2091   TOE_2091   TOE_2091-TOE_2099   TOE_2091   TOE_2091-TOE_2099   TOE_2091   TOE_2091-TOE_2099   TOE										,,								.,,			
Total   Process   Total   Pr																					
Total   Process   Total   Pr																					
Total   Part   Total   Total   Part   Total   Part   Total   Part   Total   Part   P				_																	
Trigs   Trig																					
Toc.   Sept. Toc.   Sept. Toc.   Sept. S			_	_																	
TOC_2944-TOC_2945   TOC_2944-TOC_2945   TOC_2944   TOC_2945   TO			TOE_2941	TOE_2942	12.000	359.851	0.010	449,090.255	10,460.156	130,749.071	Free Surface	3.720	0.287	0.180	0.287	0.348	1.443	2,491,257.696	No	0.287	3.720
Total   Tota				_													2.187				
Total   Tota								-,													
Total   Total   September   Total   September   Total   September   Total   September				_						,											
Total Sept-Trong 2048   Tota				_																	
Tot   September   Tot   Sept																					
Tot: 2849-WPF1   Tot: 2859   WPF1   Tot: 2859   WPF1   St.000   \$0.5002   \$0.001   \$2.400,01615655   70.085.261   \$7.001   \$7.0			_	_																	
TOE_2895																					
Top: 2984-Top: 2985   Top: 2			_	_																	
Tots 2004-TOTE 2006		_				215.000							1.000	1.017	3.000	1.710			No		
Total   Total   Zage	737	TOE_2960-TOE_2748	TOE_2960	TOE_2748	12.000	375.067	0.016	1,679,194.804	49,842.701	623,027.285	Free Surface	6.369	0.515	0.526	0.515	0.691	1.757	3,192,365.157	No	0.515	6.369
Total   Tota	738	TOE_2962-TOE_2960	TOE_2962	TOE_2960	12.000	141.655	0.002	1,001,163.394	27,020.150	337,750.433	Pressurized	1.972	1.000	1.016	1.000	0.524	0.348	985,693.500	No	1.000	1.972
Total   Total   Total   2986   Tot																					
Totg. 2987-TOTG. 2986   TOTG. 2987   TOTG. 2988   TOTG. 2987   TOTG. 2988   TOTG. 2987   TOTG. 2987   TOTG. 2988   TOTG. 2988   TOTG. 2988   TOTG. 2987   TOTG. 2987   TOTG. 2987   TOTG. 2988   TOTG.			_	_																	
Total   Tota																					
Tot   December   Tot			_	_																	
Total   Tota				_																	
Total   Tota																					
ToE_2973-FMF4_4   TOE_2973 FMF4_4   TOE_2973 F			TOE_2971	TOE_2972	12.000	245.041	0.004	588,071.003	14,389.915	179,866.012	Free Surface	3.011	0.409	0.351	0.409	0.400	0.957	1,675,804.058	No	0.409	3.011
ToE_2977-TOE_2733   TOE_2978   TOE_2733   8.000   117.630   0.033   261.029.714   5.009.438   88,873.734   Free Surface   5.067   0.279   0.170   0.186   0.296   2.416   5.562,743.993   Yes   0.258   3.236	747	TOE_2972-TOE_2968	TOE_2972	TOE_2968	12.000	140.000	0.006	588,071.003	14,389.915	179,866.012	Free Surface	3.288	0.383	0.311	0.383	0.400	1.086	1,890,719.351	No	0.383	3.288
TOE_2978-TOE_2581   TOE_2978-TOE_2582   TOE_2979   TOE_2582   18.000   26.826   0.006   1,464,016.590   42,373.424   529,672.121   Free Surface   4.154   0.347   0.259   0.521   0.568   1.85   5,652,198.509   No   0.521   4.154     TOE_2979-TOE_2582   TOE_2980   TOE_2583   18.000   26.6276   0.005   1,464,016.590   42,373.424   529,672.121   Free Surface   3.786   0.372   0.295   0.558   0.569   1.038   4,971.130.152   No   0.558   3.786     TOE_2981-CDE_2563   TOE_2980   TOE_2583   18.000   370.537   0.004   1,464,016.590   42,373.424   529,672.121   Free Surface   3.682   0.360   0.306   0.559   0.569   0.998   0.569   0.998   3.682     TOE_2981-CHF3C_8   TOE_2981   CHF3C_8   18.000   138.500   0.009   1,395,420.811   40,033.425   500,421.412   Free Surface   4.782   0.303   0.199   0.454   0.555   1.472   7,001.296.122   No   0.454   4.782     TOE_2983-TOE_2983   TOE_2983   TOE_2983   18.000   147.819   0.030   1,395,420.811   40,033.425   500,421.412   Free Surface   0.000   0.	748																				
TOE_2997_TOE_2582   TOE_2990_TOE_2582   TOE_2990_TOE_2583   TOE_2990_TOE_2593   TOE_2990_TOE_2593   TOE_2990_TOE_2593   TOE_2990_TOE_2593   TOE_2990_TOE_2593   TOE_2990_TOE_2590_TOE_2593   TOE_2990_TOE_250_TOE_2500_TOE_25																					
TOE_298-TOE_2583   TOE_2980   TOE_2583   TOE_2981   CHF3C_8   18.000   370.537   0.004   1,464,016.590   42,373.424   529,672.121   Free Surface   3.682   0.380   0.306   0.569   0.569   0.598   4,784,926.938   No   0.569   3.682			_	_																	
TOE_2981-CHF3C_8 TOE_2983 TOE_2983 ROE_2983 ROE_2984 ROE_2984 ROE_2984 ROE_2984 ROE_2984 ROE_2984 ROE_2984 ROE_2985 ROE																					
ToE_982-ToE_983 TOE_2983 TOE_2983 18.000 41.744 0.02 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 10,460,971.448 Yes 0.067 0.000 755   ToE_2983-ToE_2576 TOE_2983 TOE_2576 18.000 147.819 0.030 1.395.420.811 40,033.425 500.421.412 Free Surface 7.376 0.222 0.108 0.334 0.555 2.684 12,866,766.666 Yes 0.368 6.427   ToE_2984-ToE_2629 TOE_2984 TOE_2629 15.000 239.270 0.010 995,266.653 26,832.950 335,401.794 Free Surface 4.635 0.316 0.216 0.395 0.492 1.528 4,607,657.122 No 0.395 4.635   ToE_2985-CFF1_31 TOE_2985 CFF1_31 12.000 328.016 0.007 443,720.065 10,313.276 128,900.111 Free Surface 3.259 0.314 0.213 0.314 0.345 1.205 2,080,710.568 No 0.314 3.259   ToE_2986-TOE_2985 TOE_2986 TOE_2985 12.000 26.296 0.009 443,720.065 10,313.276 128,900.111 Free Surface 3.599 0.292 0.186 0.292 0.345 1.385 2,389,490.090 No 0.292 3.599   TOE_2987-TOE_2991 TOE_2997 TOE_2991 12.000 403.065 0.004 331,997.094 7,313.757 91,399.646 Free Surface 2.540 0.304 0.201 0.304 0.297 0.955 1,648,076.623 No 0.304 2.540   TOE_2988-TOE_2988 TOE_2988 TOE_2988 12.000 398.629 0.005 331,997.094 7,313.757 91,399.646 Free Surface 2.633 0.297 0.192 0.297 0.297 1.004 1,732,840.209 No 0.297 2.636   TOE_2999-TOE_2986 TOE_2988 TOE_2988 12.000 388.629 0.005 331,997.094 7,313.757 91,399.646 Free Surface 2.630 0.295 0.295 1.099 43,244.669 No 0.295 2.636   TOE_2999-TOE_2986 TOE_2991 TOE_2986 10.000 401.146 0.006 331,997.094 7,313.757 91,399.646 Free Surface 2.630 0.295 0.295 1.099 943,244.669 No 0.295 3.667   TOE_2999-TOE_2986 TOE_2991 TOE_2986 10.000 401.146 0.006 331,997.094 7,313.757 91,399.646 Free Surface 2.630 0.295 0.295 1.099 943,244.669 No 0.295 3.667   TOE_2999-TOE_2986 TOE_2991 TOE_2986 10.000 401.146 0.006 331,997.094 7,313.757 91,399.646 Free Surface 2.823 0.282 0.174 0.282 0.297 1.107 1,910,305.541 No 0.282 2.823   TOE_2991-TOE_2986 TOE_2991 TOE_2986 10.000 401.146 0.006 331,997.094 7,313.757 91,399.646 Free Surface 4.730 0.579 0.636 0.483 0.558 0.295 0.199 943,244.669 No 0.295 0.295 0.295 0.295 0.295 0.295 0.295 0.295 0.295 0.295 0.2			_	_																	
TOE_2983_TOE_2576 TOE_2983 TOE_2576 TOE_2983 TOE_2576 TOE_2984 TOE_2629 TOE_2984 TOE_2629 TOE_2984 TOE_2629 TOE_2984 TOE_2629 TOE_2984 TOE_2629 TOE_2985 TOE_2985 TOE_2986 TOE_2986 TOE_2985 TOE_2986 TOE_2986 TOE_2985 TOE_2986 TOE_2986 TOE_2985 TOE_2986 TOE_2986 TOE_2986 TOE_2985 TOE_2986 TO																					
TOE_2984_TOE_2629  TOE_2984 TOE_2629  15.000  239.270  0.010  995.266.653  26,832.950  335,401.794  Free Surface  4.635  0.316  0.216  0.395  0.492  1.528  4,607,657.122  No  0.395  4.635   757  TOE_2985_CFF1_31  TOE_2985  CFF1_31  12.000  328.016  0.007  443,720.065  10,313.276  128,900.111  Free Surface  3.259  0.314  0.213  0.314  0.345  1.205  2,080,710.568  No  0.314  3.259   758  TOE_2986_TOE_2985  TOE_2985  12.000  26.296  0.009  443,720.065  10,313.276  128,900.111  Free Surface  3.599  0.292  0.186  0.292  0.345  1.385  2,389,490.090  No  0.292  3.599   759  TOE_2987_TOE_2991  12.000  403.065  0.004  331,997.094  7,313.757  91,399.646  Free Surface  2.540  0.304  0.297  0.925  1,648,076.623  No  0.304  2.540   760  TOE_2988_TOE_2987  TOE_2988  TOE_2987  12.000  399.985  0.005  331,997.094  7,313.757  91,399.646  Free Surface  2.633  0.297  0.192  0.297  0.297  1.004  1,732,883.867  No  0.297  2.633   761  TOE_2998_TOE_2988  TOE_2988  TOE_2988  12.000  398.629  0.005  331,997.094  7,313.757  91,399.646  Free Surface  2.656  0.295  0.189  0.297  1.016  1,753,840.209  No  0.295  2.656   762  TOE_2990_CCF6_614  TOE_2990  CCF6_614  8.000  138.317  0.012  259,043.478  5,460.478  68,250.214  Free Surface  2.823  0.285  0.297  1.016  1,753,840.209  No  0.282  2.823   764  TOE_2991_TOE_2986  TOE_2991  TOE_2986  12.000  401.146  0.006  331,997.094  7,313.757  91,399.646  Free Surface  2.823  0.282  0.174  0.282  0.297  1.107  1,910,305.541  No  0.282  2.823   764  TOE_2991_TOE_2986  TOE_2991  TOE_2986  10.000  401.146  0.006  331,997.094  7,313.757  91,399.646  Free Surface  2.823  0.282  0.174  0.282  0.297  1.107  1,910,305.541  No  0.282  2.823   764  TOE_2991_TOE_2986  TOE_2991  TOE_2986  10.000  401.146  0.006  331,997.094  7,313.757  91,399.646  Free Surface  4.730  0.579  0.636  0.483  0.558  1.321  1,573,872.84  Yes  0.645																					
TOE_2986-TOE_2985 TOE_2986 TOE_2985 12.000 26.296 0.009 443,720.065 10,313.276 128,900.111 Free Surface 3.599 0.292 0.186 0.292 0.345 1.385 2,389,490.090 No 0.292 3.599 TOE_2987 TOE_2988 TOE_2			TOE_2984	TOE_2629	15.000	239.270	0.010	995,266.653	26,832.950	335,401.794	Free Surface	4.635	0.316	0.216	0.395	0.492	1.528	4,607,657.122	No	0.395	4.635
TOE_2997_TOE_2991 TOE_2997 TOE_2991 12.000 403.065 0.004 331,997.094 7,313.757 91,399.646 Free Surface 2.540 0.304 0.201 0.304 0.297 0.955 1,648,076.623 No 0.304 2.540  TOE_2988_TOE_2987 TOE_2988 TOE_2987 12.000 399.995 0.005 331,997.094 7,313.757 91,399.646 Free Surface 2.633 0.297 0.192 0.297 0.297 1.004 1,732,883.867 No 0.297 2.633  TOE_2989_TOE_2988 TOE_2989 TOE_2989 12.000 398.629 0.005 331,997.094 7,313.757 91,399.646 Free Surface 2.656 0.295 0.189 0.295 0.297 1.004 1,732,883.867 No 0.295 2.656  TOE_2999_CCF6_614 TOE_2990 CCF6_614 8.000 138.317 0.012 259,043.478 5460.478 68,250.214 Free Surface 3.567 0.358 0.275 0.239 0.295 1.499 943,244.669 No 0.239 3.567  TOE_2991_TOE_2996 TOE_2996 TOE_2996 12.000 401.146 0.006 331,997.094 7,313.757 91,399.646 Free Surface 2.823 0.282 0.174 0.282 0.297 1.107 1,910,305.541 No 0.282 2.823  TOE_2991_TOE_2962 TOE_2962 TOE_2962 10.000 403.999 0.010 1,001,163.394 27,020.150 337,750.433 Free Surface 4.730 0.579 0.636 0.483 0.558 1.321 1,573,887.284 Yes 0.645 3.418  TOE_2994_TOE_3005 TOE_2994 TOE_3005 30.000 7.270 0.041 8,527,437.046 340,587.232 4,257,296.477 Free Surface 4.092 0.459 0.432 0.383 0.444 1.329 1,497,533.844 No 0.383 4.092  TOE_3003_OGF1_1 TOE_3003_OGF1_1 TOE_3003_OGF1_1 10.000 177.139 0.023 0.000 0																					
TOE 2988 TOE 2987 TOE 2988 TOE 2987 TOE 2988 TOE 2987 TOE 2988 TOE 2987 TOE 2988 TOE			_	_																	
761 TOE_2988 TOE_2988 TOE_2988 TOE_2988 12.000 398.629 0.005 331,997.094 7,313.757 91,399.646 Free Surface 2.656 0.295 0.189 0.295 0.297 1.016 1,753,840.209 No 0.295 2.656  762 TOE_2990-CCF6_614 TOE_2990 CCF6_614 8.000 138.317 0.012 259,043.478 5,460.478 68,250.214 Free Surface 3.567 0.358 0.275 0.239 0.295 1.499 943,244.669 No 0.239 3.567  763 TOE_2991-TOE_2986 TOE_2991 TOE_2986 12.000 401.146 0.006 331,997.094 7,313.757 91,399.646 Free Surface 2.823 0.282 0.174 0.282 0.297 1.107 1,910.305.541 No 0.282 2.823  764 TOE_2992-TOE_2962 TOE_2992 TOE_2962 10.000 403.999 0.010 1,001,163.394 27,020.150 337,750.433 Free Surface 4.730 0.579 0.636 0.483 0.558 1.321 1,573,887.284 Yes 0.645 3.418  765 TOE_2994-TOE_3005 TOE_2994 TOE_3005 30.000 7.270 0.041 8.527,437.046 340,587.232 4,257,296.477 Free Surface 13.152 0.258 0.146 0.645 1.221 3.423 88,496,005.541 Yes 0.702 11.687  766 TOE_2997-VPFE_717 TOE_2997 VPFE_717 10.000 165.628 0.009 646,601.820 16,094.874 201,201.044 Free Surface 4.092 0.459 0.432 0.383 0.444 1.329 1,497,533.844 No 0.383 4.092  767 TOE_3003-OGF1_1 TOE_3003 OGF1_1 10.000 177.139 0.023 0.000 0.																					
TOE_2990-CCF6_614 TOE_2990 CCF6_614 8.000 138.317 0.012 259,043.478 5,460.478 68,250.214 Free Surface 3.567 0.358 0.275 0.239 0.295 1.499 943,244.669 No 0.239 3.567 TOE_2991-TOE_2986 TOE_2991 TOE_2986 12.000 401.146 0.006 331,997.094 7,313.757 91,399.646 Free Surface 2.823 0.282 0.174 0.282 0.297 1.107 1,910,305.541 No 0.282 2.823 TOE_2992-TOE_2962 TOE_2992 TOE_2992 TOE_2992 TOE_2992 TOE_2994 TOE_3005 30.000 7.270 0.041 8,527,437.046 340,587.232 4,257,296.477 Free Surface 13.152 0.258 0.146 0.645 1.321 1,573,848 Ves 0.6702 11.687 TOE_2994-TOE_3005 TOE_2994 TOE_3005 30.000 7.270 0.041 8,527,437.046 340,587.232 4,257,296.477 Free Surface 13.152 0.258 0.146 0.645 1.221 3,423 58,496,052.384 No 0.383 4.092 TOE_3003 OGF1_1 TOE_3003 OGF1_1 10.000 177.139 0.023 0.000 0.000 0.000 0.000 Free Surface 0.000 0.0																					
763 TOE_2991-TOE_2986 TOE_2991 TOE_2986 12.000 401.146 0.006 331,997.094 7,313.757 91,399.646 Free Surface 2.823 0.282 0.174 0.282 0.297 1.107 1,910,305.541 No 0.282 2.823 764 TOE_2992-TOE_2962 TOE_2962 10.000 403.999 0.010 1,001,163.394 27,020.150 337,750.433 Free Surface 4.730 0.579 0.636 0.483 0.558 1.321 1,573,887.284 Yes 0.645 3.418 TOE_2994-TOE_3005 TOE_2994-TOE_3005 30.000 7.270 0.014 1,527,437.046 340,587.232 4,257,296.477 Free Surface 13.152 0.258 0.146 0.645 1.221 3.423 58,496,005.541 No 0.282 2.823 1.457,3887.284 Yes 0.645 3.418 TOE_2994-TOE_3005 TOE_2994-TOE_3005 TOE_2994-TOE_3005 TOE_2994-TOE_3005 TOE_3005 0.000 185.628 0.009 646,601.820 16,594.874 201,201.044 Free Surface 4.092 0.459 0.452 0.383 0.444 1.329 1,497,533.844 No 0.383 4.092 TOE_3003-OGFI_1 TOE_30				_																	
764 TOE_2992_TOE_2962 TOE_2962 TOE_2962 10.000 403.999 0.010 1,001,163.394 27,020.150 337,750.433 Free Surface 4.730 0.579 0.636 0.483 0.558 1.321 1,573,887.284 Yes 0.645 3.418 765 TOE_2994_TOE_3005 TOE_2994 TOE_3005 30.000 7.270 0.041 8,527,437.046 340,587.232 4,257,296.477 Free Surface 13.152 0.258 0.146 0.645 1.221 3.423 58,496,005.541 Yes 0.702 11.687 TOE_2997_VPFE_717 TOE_2997_VPFE_717 10.000 165.628 0.009 646,601.820 16,094.874 201,201.044 Free Surface 4.092 0.459 0.432 0.383 0.444 1.329 1,497,533.844 No 0.383 4.092 TOE_3003_OGF1_1 TOE_3003_OGF1_1 TOE_3003_OGF1_1 10.000 177.139 0.023 0.000 0.000 0.000 0.000 Free Surface 0.000 0.																					
765 TOE_2994_TOE_3005 TOE_2994 TOE_3005 30.000 7.270 0.041 8,527,437.046 340,587.232 4,257,296.477 Free Surface 13.152 0.258 0.146 0.645 1.221 3.423 58,496,005.541 Yes 0.702 11.687 TOE_2997_VPFE_717 TOE_2997_VPFE_717 10.000 165.628 0.009 646,601.820 16,094.874 201,201.044 Free Surface 4.092 0.459 0.432 0.383 0.444 1.329 1,497,533.844 No 0.383 4.092 TOE_3003_OGF1_1 TOE_3003_OGF1_1 TOE_3003_OGF1_1 10.000 177.139 0.023 0.000																					
766 TOE_2997_VPFE_717 TOE_2997 VPFE_717 10.000 165.628 0.009 646.601.820 16.094.874 201,201.044 Free Surface 4.092 0.459 0.459 0.459 0.432 0.383 0.444 1.329 1,497,533.844 No 0.383 4.092 767 TOE_3003_OGF1_1 TOE_3003_OGF1_1 10.000 177.139 0.023 0.000 0.0																					
767 TOE_3003-OGF1_1 TOE_3003 OGF1_1 10.000 1777.139 0.023 0.000 0.																					
768 TOE_3005-TOE_2800 TOE_3005 TOE_2800 36.000 9.211 0.018 8,908,551.717 358,643.385 4,482,993.352 Free Surface 9.818 0.253 0.140 0.758 1.182 2.358 63,615,880.152 No 0.758 9.818		TOE_3003-OGF1_1	TOE_3003	OGF1_1		177.139	0.023			0.000	Free Surface	0.000	0.000	0.000		0.000			No	0.000	0.000
	768	TOE_3005-TOE_2800	TOE_3005	TOE_2800	36.000	9.211	0.018	8,908,551.717	358,643.385	4,482,993.352	Free Surface	9.818	0.253	0.140	0.758	1.182	2.358	63,615,880.152	No	0.758	9.818

	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Unpeakable Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)		Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth (ft)	Adjusted Velocity
769	VPF1 103-VPF1 15A	VPF1_103	VPF1_15A	21.000	270.656	0.005	3,996,779.349	139,056.428	1,738,219.026	Free Surface	5.145	0.500	0.500	0.875	0.917	1.094	8,000,391.679	No	0.875	5.145
770	VPF1_11-VPF1_12	VPF1_11	VPF1_12	21.000	383.454	0.009	2,005,311.880	61,490.857	768,667.391	Free Surface	5.196	0.297	0.191	0.519	0.640	1.498	10,474,621.665	No	0.519	5.196
771	VPF1_126-VPF1_127	VPF1_126	VPF1_127	8.000	217.056	0.021	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,220,115.230	No	0.000	0.000
772	VPF1_127-VPF1_128	VPF1_127	VPF1_128	8.000	198.724	0.022	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,256,557.008	No	0.000	0.000
773	VPF1_128-VPF1_129	VPF1_128	VPF1_129	8.000		0.004	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	565,925.610	No	0.000	0.000
774	VPF1_129-VPF1_130	VPF1_129	VPF1_130	8.000			85,678.528	1,680.479	20,999.512	Free Surface	2.495	0.210	0.096	0.140	0.166	1.405	890,184.725	No	0.140	2.495
775	VPF1_12-VPF1_13	VPF1_12 VPF1_130	VPF1_13 ECF21 131	21.000 8.000		0.005	2,005,311.880 85,678.528	61,490.857 1,680.479	768,667.391 20,999.512	Free Surface Free Surface	4.349 4.023	0.337 0.150	0.245	0.590 0.100	0.640		8,177,844.604 1,753,907.078	No No	0.590 0.100	4.349 4.023
776	VPF1_130-ECF21_131 VPF1_13-VPF1_14	VPF1_130	VPF1 14	21.000	378.543			61,490.857	768,667.391	Free Surface	5.582	0.130	0.049	0.493	0.640		11,576,833.934	Yes	0.608	4.023
778	VPF1_13-VPF1_14 VPF1_14-VPF1_15	VPF1 14	VPF1 15	21.000				61,490.857	768,667.391	Free Surface	2.414	0.527	0.175	0.922	0.640		3,672,178.088	No	0.922	2.414
779	VPF1 15A-VPF1 16	VPF1 15A	VPF1 16	21.000	277.576		4,075,867.296	142,316.586	1.778.969.570	Free Surface	4.832	0.534	0.557	0.934	0.926		7,314,011.896	No	0.934	4.832
780	VPF1 15-VPF1 58	VPF1 15	VPF1 58	21.000	302.374	0.001	2,005,311.880	61,490.857	768,667.391	Free Surface	2.597	0.497	0.496	0.871	0.640		4,045,882.904	No	0.871	2.597
781	VPF1 16-VPF1 17	VPF1 16	VPF1 17	24.000	519.762	0.022	4,075,867.296	142,316.586	1,778,969.570	Free Surface	8.724	0.281	0.172	0.562	0.889	2.425	23,675,095.698	Yes	0.752	5.845
782	VPF1_17-VPF1_18A	VPF1_17	VPF1_18A	24.000	516.132	0.002	4,075,867.296	142,316.586	1,778,969.570	Free Surface	3.404	0.571	0.622	1.141	0.889	0.620	6,557,887.935	No	1.141	3.404
783	VPF1_18A-VPF1_19A	VPF1_18A	VPF1_19A	24.000	342.998	0.002	4,075,867.296	142,316.586	1,778,969.570	Free Surface	3.780	0.524	0.542	1.049	0.889	0.729	7,524,934.513	No	1.049	3.780
784	VPF1_19A-VPF1_20A	VPF1_19A	VPF1_20A	24.000	471.360	0.002	4,075,867.296	142,316.586	1,778,969.570	Free Surface	3.755	0.527	0.546	1.054	0.889	0.722	7,460,076.687	No	1.054	3.755
785	VPF1_1-VPF1_58	VPF1_1	VPF1_58	18.000			2,400,615.854	76,085.251	951,051.962	Free Surface	3.101	0.642	0.742	0.962	0.736		3,233,695.771	Yes	1.145	2.566
786	VPF1_20A-VPF1_21A	VPF1_20A	VPF1_21A	24.000			4,075,867.296	142,316.586	1,778,969.570	Free Surface	3.656	0.539	0.566	1.077	0.889		7,202,514.822	No	1.077	3.656
787	VPF1_21A-ECF21_22A		ECF21_22A	24.000	92.771		4,075,867.296	142,316.586	1,778,969.570	Free Surface	4.992	0.423	0.373	0.846	0.889		10,937,602.961	No	0.846	4.992
788	VPF1_32A-VPF1_11	VPF1_32A	VPF1_11	21.000	126.479	0.016		61,490.857	768,667.391	Free Surface	6.388	0.256	0.143	0.448	0.640		13,988,184.722	No	0.448	6.388
789 790	VPF1_58-VPF1_103 VPF1_718-VPF1_7	VPF1_58 VPF1_718	VPF1_103 VPF1_7	21.000 18.000	341.600		3,996,779.349 1,970,000.074	139,056.428 60,210.697	1,738,219.026 752,667.557	Free Surface Free Surface	3.627 5.605	0.667 0.347	0.785 0.258	1.168 0.520	0.917		5,092,850.578 7,633,266.557	No No	1.168 0.520	3.627 5.605
790	VPF1_/18-VPF1_/ VPF1_7-VPF1_8	VPF1_/16	VPF1_/ VPF1_8	18.000			1,970,000.074	60,210.697	752,667.557	Free Surface	5.769	0.347	0.238	0.520	0.664		7,944,680.409	No	0.520	5.769
792	VPF1_7-VPF1_8 VPF1_8-VPFE_10A	VPF1 8	VPFE 10A	18.000	430.730	0.005	1,970,000.074	60,210.697	752,667.557	Free Surface	4.102	0.437	0.396	0.656	0.664		4,974,554.461	No	0.656	4.102
793	VPFE 10A-VPF1 32A	VPFE_10A	VPF1 32A	18.000	393.415		1,970,000.074	60,210.697	752,667.557	Free Surface	4.895	0.383	0.311	0.574	0.664		6,331,436.904	No	0.574	4.895
794	VPFE 717-VPF1 718	VPFE 717	VPF1 718	10.000	222.961	0.026	646,601.820	16,094.874	201,201.044	Free Surface	5.904	0.349	0.262	0.291	0.444		2,472,239.579	No	0.291	5.904
795	VRF1D 702-VRF1D 703			10.000	264.156	0.036	537,427.831	12,935.515	161,700.419	Free Surface	6.300	0.291	0.185	0.243	0.403		2,909,236.636	No	0.243	6.300
796	VRF1D_703-VRF1D_704	VRF1D_703	VRF1D_704	10.000	273.597	0.022	537,427.831	12,935.515	161,700.419	Free Surface	5.329	0.329	0.233	0.274	0.403	2.104	2,304,210.739	No	0.274	5.329
797	VRF1D_704-VRF1D_705	VRF1D_704	VRF1D_705	10.000	119.786	0.022	537,427.831	12,935.515	161,700.419	Free Surface	5.280	0.331	0.236	0.276	0.403	2.076	2,274,792.718	No	0.276	5.280
798	VRF1D_705-VRF1D_707	VRF1D_705	VRF1D_707	10.000	128.235	0.023	537,427.831	12,935.515	161,700.419	Free Surface	5.364	0.327	0.231	0.273	0.403	2.123	2,325,003.942	No	0.273	5.364
799	VRF1D_707-VRF1D_708			10.000		0.019	537,427.831	12,935.515	161,700.419	Free Surface	4.996	0.344	0.255	0.287	0.403		2,106,963.549	No	0.287	4.996
800	VRF1D_708-VRF1D_709			10.000	114.157	0.009	537,427.831	12,935.515	161,700.419	Free Surface	3.855	0.418	0.364	0.348	0.403		1,475,150.080	No	0.348	3.855
801	VRF1D_709-VRF1D_710		_	10.000	81.755	0.005	537,427.831	12,935.515	161,700.419	Free Surface	3.051	0.500	0.500	0.416	0.403		1,075,888.658	No	0.416	3.051
802	VRF1D_710-VRF1D_711			10.000	135.900	0.005	537,427.831 537,427.831	12,935.515	161,700.419	Free Surface	3.060	0.499	0.498	0.415	0.403	0.944	1,079,993.881	No	0.415	3.060
803	VRF1D_711-VRF1D_712 VRF1D_712-VRF1D_713			10.000 10.000	117.552 119.736	0.005	537,427.831	12,935.515 12,935.515	161,700.419 161,700.419	Free Surface Free Surface	3.157 2.980	0.487 0.509	0.477 0.516	0.405 0.424	0.403		1,126,029.256 1,042,469.353	No No	0.405 0.424	3.157 2.980
805	VRF1D_713-VRF1D_713			10.000	146.622	0.005	537,427.831	12,935.515	161,700.419	Free Surface	2.991	0.508	0.510	0.424	0.403		1,042,469.333	No	0.424	2.991
806	VRF1D 714-VRF1D 715		_	10.000	144.757	0.007	537,427.831	12,935.515	161,700.419	Free Surface	3.569	0.443	0.405	0.369	0.403	1.186	1,328,573.212	No	0.369	3.569
807	VRF1D 715-VRF1D 716			10.000	186.765		537,427.831	12,935.515	161,700.419	Free Surface	5.085	0.340	0.249	0.283	0.403		2,159,085.065	No	0.283	5.085
808	VRF1D 716-TOE 2997			10.000	174.246	0.011	646,601.820	16,094.874	201,201.044	Free Surface	4.310	0.441	0.403	0.368	0.444		1,606,160.052	Yes	0.375	4.198
809	VRF1G_186-VRF1G_188			10.000	386.298	0.019	527,781.355	12,661.915	158,274.660	Free Surface	4.984	0.340	0.250	0.284	0.399	1.928	2,114,433.309	No	0.284	4.984
810	VRF1G_188-VRF1G_204	VRF1G_188	VRF1G_204	10.000	200.334	0.007	527,781.355	12,661.915	158,274.660	Free Surface	3.522	0.441	0.402	0.368	0.399	1.173	1,313,083.968	No	0.368	3.522
811	VRF1G_204-VRF1G_205	VRF1G_204	VRF1G_205	12.000	221.868	0.005	527,781.355	12,661.915	158,274.660	Free Surface	2.960	0.382	0.310	0.382	0.378	0.979	1,704,187.884	No	0.382	2.960
	VRF1G_205-VRGC2_206			12.000		0.004	527,781.355	12,661.915	158,274.660	Free Surface	2.912	0.387	0.317	0.387	0.378		1,665,730.837	No	0.387	2.912
	VRGC1_698-VRGC1_699			10.000	204.736		537,427.831	12,935.515	161,700.419	Free Surface	4.269	0.387	0.317	0.322	0.403		1,696,275.750	No	0.322	4.269
814	VRGC1_699-TOE_2673			10.000		0.019	537,427.831	12,935.515	161,700.419	Free Surface	4.983	0.345	0.256	0.288	0.403		2,098,929.430	No	0.288	4.983
	VRGC2_206-VRGC2_544			12.000	381.521	0.019	527,781.355	12,661.915	158,274.660	Free Surface	4.928	0.264	0.152	0.264	0.378		3,462,149.029 2.877.737.546	No	0.264 0.312	4.928
	VRGC2_526-VRGC2_527 VRGC2_527-VRGC2_543			12.000 12.000	333.897 365.877	0.013	608,261.449 802.747.863	14,977.434 20,797.912	187,225.850 259,976.062	Free Surface Free Surface	4.496 5.853	0.312	0.211	0.312 0.315	0.407		3,726,120.442	No Yes	0.312	4.496 5.807
	VRGC2_527-VRGC2_543 VRGC2_543-VRGC2_544			12.000	414.462	0.022	802,747.863	20,797.912	259,976.062	Free Surface	3.094	0.509	0.515	0.515	0.470		1,558,894.535	No	0.517	3.094
	VRGC2_543-VRGC2_544 VRGC2_544-VRGC2_545			12.000	424.950			33,459.827	418,250.723	Free Surface	5.244	0.461	0.435	0.461	0.580		2,758,815.575	No	0.461	5.244
	VRGC2 545-VRGC2 580			15.000		0.004	1,199,238.149	33,459.827	418,250.723	Free Surface	3.579	0.439	0.399	0.549	0.542		3,009,008.765	No	0.549	3.579
	VRGC2_580-VRGC2_581			15.000	232.815			33,459.827	418,250.723	Free Surface	3.873	0.414	0.358	0.517	0.542		3,349,445.450	No	0.517	3.873
	VRGC2_581-VRGC2_582			15.000	195.610	0.007	1,199,238.149	33,459.827	418,250.723	Free Surface	4.298	0.383	0.310	0.478	0.542	1.271	3,863,889.723	No	0.478	4.298
823	VRGC2_582-VRGC2_583	VRGC2_582	VRGC2_583	15.000	253.469	0.010	1,364,381.466	38,979.345	487,251.177	Free Surface	4.999	0.376	0.301	0.470	0.580	1.492	4,530,794.078	No	0.470	4.999
	VRGC2_583-TOE_2808			18.000	360.975	0.026	1,364,381.466	38,979.345	487,251.177	Free Surface	6.975	0.228	0.114	0.342	0.548		12,001,043.659	No	0.342	6.975
	VRGC4_365-VRGC4_366			10.000	246.280		543,202.321	13,099.675	163,750.978	Free Surface	2.967	0.515	0.526	0.429	0.406		1,032,620.091	No	0.429	2.967
	VRGC4_366-VRGC4_389			10.000	168.981	0.007	543,202.321	13,099.675	163,750.978	Free Surface	3.536	0.449	0.416	0.375	0.406		1,306,936.124	Yes	0.378	3.489
	VRGC4_389-VRGC4_415				189.101		543,202.321	13,099.675	163,750.978	Free Surface	3.443	0.459	0.431	0.382	0.406		1,260,514.724	No	0.382	3.443
	VRGC4_415-VRGC4_416			10.000	398.517		543,202.321	13,099.675	163,750.978	Free Surface	2.860	0.531	0.552	0.442	0.406	0.848	983,702.686	No	0.442	2.860
	VRGC4_416-VRGC4_417 VRGC4_417-VRGC4_418			10.000	383.546		543,202.321	13,099.675	163,750.978	Free Surface	3.328	0.471	0.451	0.392	0.406		1,203,978.104	No	0.392	3.328
	VRGC4_417-VRGC4_418 VRGC4_418-VRGC4_419			10.000 10.000	400.664 405.006		543,202.321 608,261.449	13,099.675 14,977.434	163,750.978 187,225.850	Free Surface Free Surface	7.580 3.813	0.257 0.463	0.145 0.437	0.214 0.386	0.406		3,754,304.275 1,390,518.069	No No	0.214 0.386	7.580 3.813
	VRGC4_418-VRGC4_419 VRGC4_419-VRGC4_420			10.000	192.748			14,977.434	187,225.850	Free Surface	4.973	0.463	0.305	0.316	0.430		1,997,285.306	No	0.300	4.973
	VRGC4_419-VRGC4_420		<del>_</del>	10.000	102.140	0.017	000,201.449	14,011.404	101,220.000	1 166 Ouriace	4.010	0.513	0.000	0.510	0.400	1.011	1,001,200.000	140	0.510	4.010

	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Unpeakable Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)		Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth (ft)	Adjusted Velocity
833	VRGC4_420-TOE_2809	VRGC4_420	TOE_2809	10.000		0.017	608,261.449	14,977.434	187,225.850	Free Surface	5.030	0.375	0.300	0.313	0.430	1.841	2,028,905.449	No	0.313	5.030
834	VRGC6_183-VRGC6_184	VRGC6_183	VRGC6_184	10.000	185.714	0.006	527,781.355	12,661.915	158,274.660	Free Surface	3.273	0.467	0.444	0.389	0.399	1.053	1,189,139.609	No	0.389	3.273
835	VRGC6_184-VRGC6_185	VRGC6_184	VRGC6_185	10.000	320.324	0.014	527,781.355	12,661.915	158,274.660	Free Surface	4.498	0.367	0.288	0.306	0.399	1.668	1,835,191.860	No	0.306	4.498
836	VRGC6_185-VRF1G_186			10.000	172.691	0.023	527,781.355	12,661.915	158,274.660	Free Surface	5.387	0.322	0.224	0.268	0.399	2.152	2,355,518.068	No	0.268	5.387
837	WCR10_1-I25_23	WCR10	125_23		2,558.000		648,832.482	16,161.114	202,023.284	Free Surface	4.992	0.560	0.603	0.373	0.475	1.596	1,076,226.721	Yes	0.578	3.124
838	WCR3_1	WCR3_80	TOE_2886	15.000	19.110	0.029	1,621,464.227	47,820.942	597,748.095	Free Surface	7.686	0.312	0.211	0.390	0.634		7,693,555.671	No	0.390	7.686
839	WCR3_10	WCR3_86A	WCR3_86B WCR3_86A	15.000 15.000			1,499,183.788	43,580.144 43,580.144	544,748.915 544,748.915	Free Surface Free Surface	4.967 4.945	0.406 0.407	0.346	0.507 0.509	0.609	1.419	4,336,086.901	No No	0.507 0.509	4.967 4.945
840	WCR3_11 WCR3_12	WCR3_87 WCR3_88	WCR3_66A WCR3_87	15.000	216.760	0.009	1,499,183.788 1,499,183.788	43,580.144	544,748.915	Free Surface	4.945	0.407	0.349	0.509	0.609		4,311,121.273 4,290,297.352	No	0.509	4.945
841	WCR3_12 WCR3_13	WCR3_89	WCR3_88	15.000	287.980	0.009	1,499,183.788	43,580.144	544,748.915	Free Surface	4.937	0.407	0.349	0.509	0.609		4,300,756.138	No	0.509	4.937
843	WCR3 14	WCR3 90	WCR3 89	15.000	252.970		1,499,183.788	43,580.144	544,748.915	Free Surface	6.022	0.352	0.265	0.440	0.609	1.868	5,652,464.771	No	0.440	6.022
844	WCR3 15	WCR3 91	WCR3 90	15.000	235.590	0.006	1,499,183.788	43,580.144	544,748.915	Free Surface	4.380	0.446	0.410	0.558	0.609		3,654,629.780	No	0.558	4.380
845	WCR3 16	WCR3_92	WCR3_91	15.000	257.920	0.007	1,499,183.788	43,580.144	544,748.915	Free Surface	4.385	0.446	0.410	0.557	0.609		3,660,060.214	No	0.557	4.385
846	WCR3_17	WCR3_93	WCR3_92	15.000	197.900	0.007	1,499,183.788	43,580.144	544,748.915	Free Surface	4.411	0.444	0.406	0.555	0.609	1.195	3,689,681.258	No	0.555	4.411
847	WCR3_18	WCR3_94	WCR3_93	15.000	235.700	0.021	1,499,183.788	43,580.144	544,748.915	Free Surface	6.734	0.324	0.227	0.405	0.609	2.187	6,598,520.663	No	0.405	6.734
848	WCR3_19	WCR3_94A	WCR3_94	15.000		0.006	1,499,183.788	43,580.144	544,748.915	Free Surface	4.297	0.453	0.421	0.566	0.609		3,560,944.034	No	0.566	4.297
849	WCR3_2	WCR3_81	WCR3_80	15.000	41.840	0.045	1,605,392.427	47,260.782	590,748.258	Free Surface	8.990	0.276	0.167	0.346	0.631	3.187	9,613,005.398	No	0.346	8.990
850	WCR3_20	WCR3_95	WCR3_94A	15.000			1,367,096.493	39,071.505	488,394.536	Free Surface	4.455	0.411	0.354	0.513	0.580		3,866,044.802	No	0.513	4.455
851	WCR3_21	WCR3_96	WCR3_95	15.000 15.000	399.710 343.810		1,367,096.493 1,367,096.493	39,071.505 39,071.505	488,394.536 488,394.536	Free Surface Free Surface	4.277 4.280	0.423	0.374	0.529 0.529	0.580		3,657,549.957 3,660,503.753	No No	0.529 0.529	4.277 4.280
852 <u> </u>	WCR3_22 WCR3_23	WCR3_97 WCR3_98	WCR3_96 WCR3_97	15.000			1,367,096.493	39,071.505	488,394.536	Free Surface	4.280 5.152	0.423	0.373	0.529	0.580		4,719,404.348	No	0.529	5.152
854	WCR3_23 WCR3_24	WCR3_98 WCR3_99	WCR3_97 WCR3_98	15.000	241.920	0.006	1,112,443.537	30,611.508	382,643.856	Free Surface	4.043	0.309	0.305	0.401	0.521		3,653,339.553	No	0.473	4.043
855	WCR3 25	WCR3 100	WCR3 99	15.000	236.560		1,112,443.537	30,611.508	382,643.856	Free Surface	6.360	0.272	0.162	0.340	0.521		6,858,104.151	No	0.340	6.360
856	_	WCR3 100A	_	15.000	235.090	0.007	1,112,443.537	30,611.508	382,643.856	Free Surface	4.056	0.378	0.303	0.472	0.521	1.208	3,670,450.588	No	0.472	4.056
857		WCR3_100B	WCR3_100A	15.000	244.690	0.006	1,112,443.537	30,611.508	382,643.856	Free Surface	4.045	0.378	0.304	0.473	0.521	1.203	3,655,666.350	No	0.473	4.045
858	WCR3_28	WCR3_101	WCR3_100B	15.000	243.950	0.007	1,112,443.537	30,611.508	382,643.856	Free Surface	4.049	0.378	0.304	0.473	0.521	1.205	3,661,206.717	No	0.473	4.049
859	WCR3_29	WCR3_102	WCR3_101	15.000	138.520	0.007	1,112,443.537	30,611.508	382,643.856	Free Surface	4.125	0.373	0.296	0.466	0.521	1.237	3,755,620.152	No	0.466	4.125
860	WCR3_3	WCR3_82	WCR3_81	15.000	68.170	0.006	1,605,392.427	47,260.782	590,748.258	Free Surface	4.448	0.465	0.441	0.581	0.631		3,643,391.080	No	0.581	4.448
861	WCR3_30	WCR3_103	WCR3_102	15.000	184.390		1,112,443.537	30,611.508	382,643.856	Free Surface	5.079	0.320	0.222	0.400	0.521	1.661	5,009,549.547	No	0.400	5.079
862	WCR3_31		WCR3_103	15.000	335.280		1,112,443.537	30,611.508	382,643.856	Free Surface	4.045	0.378	0.304	0.473	0.521		3,656,794.225	No	0.473	4.045
863	WCR3_32	WCR3_I14 WCR3_I13A	WCR3_I15 WCR3_I14	15.000 15.000	141.390		1,112,443.537 1,112,443.537	30,611.508	382,643.856 382,643.856	Free Surface	4.954 4.840	0.326 0.332	0.230	0.408 0.415	0.521 0.521	1.603 1.552	4,839,268.180 4,685,873.845	No No	0.408 0.415	4.954 4.840
864	WCR3_33 WCR3_34		WCR3_114 WCR3_113A	15.000	287.860		1,112,443.537	30,611.508 30,611.508	382,643.856	Free Surface Free Surface	3.386	0.332	0.237	0.413	0.521		2,866,383.922	No	0.541	3.386
866	WCR3 35	WCR3 I12	WCR3 I13	15.000	300.000	0.004	1,112,443.537	30.611.508	382,643.856	Free Surface	3.387	0.432	0.388	0.540	0.521	0.932	2,868,177.966	No	0.540	3.387
867	WCR3 36	WCR3 I11	WCR3 I12	15.000	166.950		1,112,443.537	30,611.508	382,643.856	Free Surface	5.371	0.308	0.205	0.384	0.521		5,414,662.181	No	0.384	5.371
868	WCR3_37	WCR3_I10	WCR3_I11	15.000	400.000	0.004	968,570.398	25,981.910	324,770.278	Free Surface	3.264	0.400	0.338	0.501	0.485	0.940	2,868,177.966	No	0.501	3.264
869	WCR3_38	WCR3_I9	WCR3_I10	15.000	400.000	0.004	968,570.398	25,981.910	324,770.278	Free Surface	3.264	0.400	0.338	0.501	0.485	0.940	2,868,177.966	No	0.501	3.264
870	WCR3_39	WCR3_I8	WCR3_I9	15.000	400.000	0.004	968,570.398	25,981.910	324,770.278	Free Surface	3.264	0.400	0.338	0.501	0.485	0.940	2,868,177.966	No	0.501	3.264
871	WCR3_4	WCR3_83	WCR3_82	15.000			1,605,392.427	47,260.782	590,748.258	Free Surface	4.457	0.464	0.439	0.580	0.631		3,653,434.289	No	0.580	4.457
872	WCR3_40	WCR3_I7	WCR3_I8	15.000	400.000	0.005	968,570.398	25,981.910	324,770.278	Free Surface	3.541	0.377	0.302	0.471	0.485		3,206,720.452	No	0.471	3.541
873	WCR3_41	WCR3_I6	WCR3_I7	15.000	361.260	0.005	968,570.398	25,981.910	324,770.278	Free Surface	3.543	0.377	0.302	0.471	0.485		3,210,003.073	No	0.471	3.543
874	WCR3_42 WCR3_43	WCR3_I5 WCR3_I4	WCR3_I6 WCR3_I5	15.000 15.000	314.500 314.500	0.005	808,357.797 808,357.797	20,972.152 20,972.152	262,144.701 262,144.701	Free Surface Free Surface	3.374 4.887	0.342	0.251	0.427 0.327	0.441	1.063	3,214,358.542 5,388,368.141	No No	0.427 0.327	3.374 4.887
875 <u> </u>	WCR3_43	WCR3-I 3	WCR3_I3	15.000	275.980	0.005	808,357.797	20,972.152	262,144.701	Free Surface	3.369	0.202	0.150	0.428	0.441	1.061	3,206,836.644	No	0.428	3.369
877	WCR3 45	WCR3 I2	WCR3-I 3	15.000	160.140	0.005	808,357.797	20,972.152	262,144.701	Free Surface	3.367	0.342	0.252	0.428	0.441		3,205,318.432	No	0.428	3.367
878	WCR3_46	WCR3_11A	WCR3_I2	15.000	432.890	0.004	808,357.797	20,972.152	262,144.701	Free Surface	3.119	0.362	0.280	0.453	0.441		2,883,409.647	No	0.453	3.119
879	WCR3_47	WCR3_I1	WCR3_11A	15.000	92.930	0.005	808,357.797	20,972.152	262,144.701	Free Surface	3.483	0.334	0.241	0.417	0.441	1.112	3,359,566.322	No	0.417	3.483
880		WCR3_H134		15.000	91.980	0.006	808,357.797	20,972.152	262,144.701	Free Surface	3.569	0.328	0.233	0.410	0.441	1.151	3,474,771.708	No	0.410	3.569
881	_	WCR3_H135		12.000	399.920		345,581.939	7,672.317	95,895.324	Free Surface	3.741	0.238	0.124	0.238	0.304		2,791,092.806	No	0.238	3.741
882	WCR3_5	WCR3_84	WCR3_83	15.000	224.580	0.007	1,605,392.427	47,260.782	590,748.258	Free Surface	4.460	0.464	0.439	0.580	0.631		3,656,511.879	No	0.580	4.460
883		WCR3_H136		12.000	283.570		345,581.939	7,672.317	95,895.324	Free Surface	2.926	0.283	0.175	0.283	0.304	1.145	1,976,071.522	No	0.283	2.926
884		WCR3_H137 WCR3_H138		12.000 12.000	287.840 328.190	0.006	345,581.939 345,581.939	7,672.317 7,672.317	95,895.324 95,895.324	Free Surface Free Surface	2.928 2.901	0.283 0.285	0.175	0.283 0.285	0.304	1.146 1.131	1,977,911.463 1,952,533.499	No No	0.283 0.285	2.928 2.901
886		WCR3_H130		12.000	246.720		345,581.939	7,672.317	95,895.324	Free Surface	2.898	0.285	0.177	0.285	0.304		1,952,533.499	No	0.285	2.898
887	_	WCR3_H140		12.000	227.850	0.000	345,581,939	7,672.317	95,895.324	Free Surface	3.567	0.246	0.177	0.246	0.304		2,609,441.060	No	0.246	3.567
888	_	WCR3_H141			53.120		345,581.939	7,672.317	95,895.324	Free Surface	2.526	0.315	0.215	0.315	0.304		1,609,638.959	No	0.315	2.526
889		WCR3_H146		10.000	257.260		159,192.435	3,196.799	39,958.545	Free Surface	3.351	0.192	0.081	0.160			1,965,314.469	No	0.160	3.351
890		WCR3_H164		10.000	335.000		159,192.435	3,196.799	39,958.545	Free Surface	2.067	0.271	0.160	0.225	0.215		994,340.556	No	0.225	2.067
891		WCR3_H165		10.000	120.000		159,192.435	3,196.799	39,958.545	Free Surface	2.065	0.271	0.160	0.226	0.215	0.907	992,859.780	No	0.226	2.065
892		WCR3_H171		10.000	285.000		159,192.435	3,196.799	39,958.545	Free Surface	1.942	0.283	0.175	0.236	0.215	0.833	911,110.620	No	0.236	1.942
893	WCR3_6	WCR3_85		15.000	467.190		1,605,392.427	47,260.782	590,748.258	Free Surface	4.845	0.435	0.393	0.544	0.631		4,089,979.476	No	0.544	4.845
894	WCR3_60		WCR3_H171	10.000	159.830		159,192.435	3,196.799	39,958.545	Free Surface	2.619	0.229	0.115	0.191	0.215		1,387,190.371	No	0.191	2.619
895	_	WCR3_H185		10.000	293.160		0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000		1,503,211.876	No	0.000	0.000
896 L	WCR3_62	WCR3_H186		10.000	293.160	0.021	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	2,254,817.814	No	0.000	0.000

	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Unpeakable Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)		Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth (ft)	Adjusted Velocity
897	WCR3_63	WCR3_H187	WCR3_H186	10.000	51.940	0.021	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	2,238,406.245	No	0.000	0.000
898	WCR3_64	WCR3_H188	WCR3_H187	8.000	231.710	0.006	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	682,553.736	No	0.000	0.000
899	WCR3_65	WCR3_H189	WCR3_H188	8.000	363.310	0.007	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	717,648.209	No	0.000	0.000
900	WCR3_66	WCR3_H190	_	8.000	195.020	0.007	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	718,766.867	No	0.000	0.000
901	WCR3_67	WCR3_H191	_	8.000	278.060	0.006	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	678,741.415	No	0.000	0.000
902	WCR3_68	WCR3_H192		8.000	256.990	0.011	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	879,144.040	No	0.000	0.000
903	WCR3_69	WCR3_H192A		8.000	280.180	0.013	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	950,859.552	No	0.000	0.000
904	WCR3_7	WCR3_86		15.000	387.790 121.000	0.007	1,605,392.427 0.000	47,260.782 0.000	590,748.258 0.000	Free Surface	4.479 0.000	0.462	0.437	0.578 0.000	0.631	1.183 0.000	3,677,459.401	No No	0.578 0.000	4.479 0.000
905	WCR3_70 WCR3_71	WCR3_H193 WCR3_H194		8.000	327.200	0.025	0.000	0.000	0.000	Free Surface Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,335,769.582 917,817.527	No	0.000	0.000
907	WCR3_71 WCR3_72	WCR3_H133	_	10.000	175.710		550,238.101	13,299.835	166,249.377	Free Surface	4.771	0.363	0.281	0.302	0.408	1.781	1,958,924.643	No	0.302	4.771
908	WCR3 73	WCR3 H132		10.000	145.240	0.006	550,238.101	13,299.835	166,249.377	Free Surface	3.209	0.489	0.482	0.408	0.408		1,141,551.246	No	0.408	3.209
909	WCR3 74	WCR3 H131	_		65.280	0.009	550,238.101	13,299.835	166,249.377	Free Surface	3.878	0.423	0.373	0.353	0.408		1,474,616.508	No	0.353	3.878
910	WCR3 75	WCR3 H130	_	8.000	235.650	0.014	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,003,891.681	Yes	0.076	0.000
911	WCR3 76	WCR3_H129	WCR3_H130	8.000	300.000	0.005	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	599,858.213	No	0.000	0.000
912	WCR3_77	WCR3_H128	WCR3_H129	8.000	348.630	0.005	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	592,387.233	No	0.000	0.000
913	WCR3_78	WCR3_H127	WCR3_H128	8.000	232.240	0.009	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	787,245.331	No	0.000	0.000
914	WCR3_79	WCR3_H126	_	8.000	111.860	0.004	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	555,708.217	No	0.000	0.000
915	WCR3_8	WCR3_86C		15.000	192.490	0.010	1,605,392.427	47,260.782	590,748.258	Free Surface	5.222	0.411	0.354	0.514	0.631		4,529,211.774	No	0.514	5.222
916	WCR3_80	WCR3_H125	_	8.000	163.480	0.005	0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	600,811.475	No	0.000	0.000
917	WCR3_9	_	WCR3_86C	15.000	303.380	0.009	1,605,392.427	47,260.782	590,748.258	Free Surface	5.029	0.423	0.373	0.529	0.631		4,301,936.044	No	0.529	5.029
918	WCR5_10-WCR5_11 WCR5_11-WCR5_12	WCR5_10 WCR5_11	WCR5_11 WCR5_12	12.000 12.000	165.680 374.150	0.018	1,340,181.950 1,340,181.950	38,164.306 38,164.306	477,057.420 477,057.420	Free Surface Free Surface	6.262 6.259	0.438	0.398	0.438 0.438	0.615		3,371,276.495 3,369,443.514	No No	0.438 0.438	6.262 6.259
920	WCR5_11-WCR5_12 WCR5_12-WCR5_13	WCR5_11	WCR5_12	12.000	277.850	0.014	1,340,181.950	38,164.306	477,057.420	Free Surface	5.691	0.430	0.452	0.430	0.615	1.660	2,963,283.964	No	0.472	5.691
921	WCR5_12-WCR5_13 WCR5_13-WCR5_14	WCR5 13	WCR5_14	12.000	196.370	0.010	1.340.181.950	38,164.306	477,057.420	Free Surface	4.950	0.526	0.545	0.526	0.615		2,460,284.883	No	0.526	4.950
922	WCR5 14-WCR5 15	WCR5_14	WCR5_15	12.000	168.090		1,340,181.950	38,164.306	477,057.420	Free Surface	5.249	0.502	0.504	0.502	0.615		2,659,206.292	No	0.502	5.249
923	WCR5 15-WCR5 16	WCR5_15	WCR5_16	12.000	371.750	0.016	1,340,181.950	38,164.306	477,057.420	Free Surface	5.956	0.455	0.425	0.455	0.615		3,150,987.534	No	0.455	5.956
924	WCR5_16-WCR5_17	WCR5_16	WCR5_17	12.000	306.640	0.013	1,513,981.620	44,089.903	551,125.232	Free Surface	5.655	0.522	0.537	0.522	0.655	1.548	2,820,746.567	No	0.522	5.655
925	WCR5_17-WCR5_18	WCR5_17	WCR5_18	12.000	346.280	0.011	1,513,981.620	44,089.903	551,125.232	Free Surface	5.401	0.541	0.570	0.541	0.655	1.443	2,654,390.210	No	0.541	5.401
926	WCR5_18-WCR5_19	WCR5_18	WCR5_19	12.000	195.440	0.020	1,513,981.620	44,089.903	551,125.232	Free Surface	6.692	0.457	0.428	0.457	0.655	1.990	3,533,228.658	No	0.457	6.692
927	WCR5_19-WCR5_20	WCR5_19	WCR5_20	12.000			1,513,981.620	44,089.903	551,125.232	Free Surface	5.794	0.512	0.520	0.512	0.655		2,912,664.328	Yes	0.517	5.721
928	WCR5_1-WCR5_2	WCR5_1	WCR5_2	10.000	1,986.790		702,041.205	17,747.993	221,854.956	Free Surface	3.013	0.628	0.719	0.523	0.464	0.794	976,028.614	No	0.523	3.013
929	WCR5_20-WCR5_21	WCR5_20	WCR5_21	12.000			1,513,981.620	44,089.903	551,125.232	Free Surface	4.563	0.622	0.709	0.622	0.655		2,134,740.756	No	0.622	4.563
930	WCR5_21-WCR5_22	WCR5_21	WCR5_22	12.000	1,025.410 441.760			44,089.903	551,125.232	Free Surface	6.091 2.831	0.492 0.645	0.486	0.492 0.806	0.655 0.616		3,113,575.077	Yes No	0.599 0.806	4.770
931	WCR5_22-WCR5_23 WCR5_23-WCR5_24	WCR5_22 WCR5_23	WCR5_23 WCR5_24	15.000 15.000	660.870		1,530,928.707 1,530,928.707	44,675.983 44,675.983	558,450.510 558,450.510	Free Surface Free Surface	4.951	0.645	0.748	0.516	0.616		2,046,935.507 4,284,933.502	No	0.516	2.831 4.951
933	WCR5_23-WCR5_24 WCR5_24-WCR5_25	WCR5_23	WCR5_24	15.000	866.430	0.006	1,587,478.419	46,635.822	582,946.341	Free Surface	4.255	0.477	0.461	0.516	0.627		3,445,040.731	No	0.596	4.255
934	WCR5 25-WCR5 26	WCR5 25	WCR5 26	15.000	411.850	0.005	1,587,478.419	46,635.822	582,946.341	Free Surface	4.012	0.499	0.499	0.624	0.627		3,183,864.549	No	0.624	4.012
935	WCR5 26-WCR5 27	WCR5 26	WCR5_27	15.000			1,587,478.419	46,635.822	582,946.341	Free Surface	4.010	0.499	0.499	0.624	0.627		3,181,856.484	No	0.624	4.010
936	WCR5 27-WCR5 28	WCR5_27	WCR5_28	15.000	231.180	0.005	1,587,478.419	46,635.822	582,946.341	Free Surface	3.999	0.500	0.501	0.626	0.627		3,170,590.774	No	0.626	3.999
937	WCR5_28-WCR5_29	WCR5_28	HWY52_5	15.000	1,193.690	0.015	1,587,478.419	46,635.822	582,946.341	Free Surface	5.980	0.369	0.290	0.461	0.627	1.806	5,476,835.631	Yes	0.545	4.777
938	WCR5_2-WCR5_3	WCR5_2	WCR5_3	10.000	539.910	0.011	702,041.205	17,747.993	221,854.956	Free Surface	4.407	0.462	0.437	0.385	0.464	1.426	1,607,899.348	No	0.385	4.407
939	WCR5_3-WCR5_4	WCR5_3	WCR5_4	10.000	1,192.000	0.015	702,041.205	17,747.993	221,854.956	Free Surface	4.952	0.423	0.373	0.352	0.464	1.691	1,883,292.112	Yes	0.510	3.105
940	WCR5_4-WCR5_5	WCR5_4	WCR5_5	12.000	580.040		1,340,181.950	38,164.306	477,057.420	Free Surface	3.205	0.768	0.936	0.768	0.615	0.646	1,431,508.715	Yes	0.865	2.871
941	WCR5_5-WCR5_6	WCR5_5	WCR5_6	12.000	871.120	0.003	1,340,181.950	38,164.306	477,057.420	Pressurized	2.640	1.000	1.010	1.000	0.612		1,326,447.964	No	1.000	2.640
942	WCR5_6-WCR5_7	WCR5_6	WCR5_7	12.000	443.620	0.003	1,340,181.950	38,164.306	477,057.420	Pressurized	2.640	1.000	1.009	1.000	0.612		1,327,686.733	No	1.000	2.640
943	WCR5_7-WCR5_8 WCR5_8-WCR5_9	WCR5_7 WCR5_8	WCR5_8 WCR5_9	12.000 12.000	490.120 559.300	0.016	1,340,181.950 1,340,181.950	38,164.306 38,164.306	477,057.420 477,057.420	Free Surface Free Surface	5.991 6.636	0.453 0.419	0.422	0.453 0.419	0.615 0.615		3,175,473.560 3,648,356.247	No No	0.453 0.419	5.991 6.636
944	WCR5_8-WCR5_9 WCR5_9-WCR5_10	WCR5_6 WCR5_9	WCR5_9 WCR5_10	12.000			1,340,181.950	38,164.306	477,057.420	Free Surface	6.690	0.419	0.363	0.419	0.615		3,688,762.390	No	0.419	6.690
946	WCR5_9-WCR5_10 WCR7_10-WCR7_11	WCR7 10	WCR7_11	8.000	541.220	0.022	369,380.519	8,301.597	103,770.681	Free Surface	3.212	0.508	0.513	0.338	0.355	1.096	720,126.831	No	0.338	3.212
947	WCR7_10-WCR7_11 WCR7_11-WCR7_12	WCR7_11	WCR7_12	8.000	386.680	0.005	369,380.519	8,301.597	103,770.681	Free Surface	2.777	0.571	0.621	0.380	0.355	0.876	594,654.285	No	0.380	2.777
948	WCR7_12-WCR7_13	WCR7_12	WCR7_13	10.000	582.070		744,107.699	19,013.753	237,674.791	Free Surface	4.349	0.488	0.481	0.407	0.478	1.360	1,548,573.905	No	0.407	4.349
949	WCR7_13-WCR7_14	WCR7_13	WCR7_14	10.000	686.300	0.009	744,107.699	19,013.753	237,674.791	Free Surface	4.089	0.513	0.522	0.427	0.478	1.239	1,426,141.262	No	0.427	4.089
950	WCR7_14-WCR7_15	WCR7_14	WCR7_15	10.000	269.660	0.007	744,107.699	19,013.753	237,674.791	Free Surface	3.792	0.545	0.576	0.454	0.478		1,291,106.520	No	0.454	3.792
951	WCR7_15-WCR7_16	WCR7_15	WCR7_16	10.000	495.150	0.008	744,107.699	19,013.753	237,674.791	Free Surface	3.994	0.522	0.538	0.435	0.478		1,382,468.177	No	0.435	3.994
952	WCR7_16-WCR7_17	WCR7_16	WCR7_17	10.000	307.790		744,107.699	19,013.753	237,674.791	Free Surface	3.575	0.571	0.622	0.476	0.478		1,195,701.456	Yes	0.483	3.517
953	WCR7_17-WCR7_18	WCR7_17	WCR7_18	10.000	565.400		744,107.699	19,013.753	237,674.791	Free Surface	2.793	0.707	0.848	0.589	0.478		877,454.384	No	0.589	2.793
954	WCR7_18-I25_36	WCR7_18	125_36	10.000	1,385.670		1,279,121.318	36,113.746	451,429.750	Free Surface	4.989	0.683	0.810	0.569	0.631		1,579,387.657	Yes	0.833	3.629
955	WCR7_1-WCR7_2	WCR7_1	WCR7_2	8.000 8.000	799.050 815.360		0.000	0.000	0.000	Free Surface Free Surface	0.000	0.000	0.000	0.000	0.000		1,269,705.921 1,184,642.934	No No	0.000	0.000
956 957	WCR7_2-WCR7_3 WCR7_3-WCR7_4	WCR7_2 WCR7_3	WCR7_3 WCR7_4	8.000	766.230		0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000		1,057,200.871	No	0.000	0.000
957	WCR7_3-WCR7_4 WCR7_4-WCR7_5	WCR7_3 WCR7_4	WCR7_4 WCR7_5	8.000	477.510		0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	942,971.089	No	0.000	0.000
959	WCR7 5-WCR7 6	WCR7_5	WCR7_6	8.000	442.930		0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000		1,132,947.029	No	0.000	0.000
960	WCR7 6-WCR7 7	WCR7_6	WCR7_7	8.000	234.100		0.000	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000		1,094,952.309	Yes	0.082	0.000
Data: Thu																				

	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Unpeakable Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth (ft)	Adjusted Velocity	
961	WCR7_7-WCR7_8	WCR7_7	WCR7_8	8.000	1,045.230	0.017	369,380.519	8,301.597	103,770.681	Free Surface	4.424	0.397	0.333	0.265	0.355	1.752	1,110,156.458	No	0.265	4.424	
962	WCR7_8-WCR7_9	WCR7_8	WCR7_9	8.000	308.600	0.013	369,380.519	8,301.597	103,770.681	Free Surface	3.962	0.432	0.387	0.288	0.355	1.494	954,891.495	No	0.288	3.962	1
963	WCR7_9-WCR7_10	WCR7_9	WCR7_10	8.000	479.290	0.012	369,380.519	8,301.597	103,770.681	Free Surface	3.920	0.435	0.392	0.290	0.355	1.471	941,218.444	No	0.290	3.920	

ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
AIF1_119	5,068.710	0.000	0.000	0.000	5,058.105	Not Full	Yes	-0.525	10.605
ARF1_12	5,190.400	0.000	0.000	0.000	5,179.325	Not Full	Yes	-0.361	11.075
ARF1_16	5,191.000	0.000	0.000	0.000	5,181.046	Not Full	No	-0.440	9.954
ARF1_17	5,195.200	0.000	0.000	0.000	5,184.039	Not Full	No	-0.428	11.161
ARF1_2	5,190.990	0.000	0.000	0.000	5,173.835	Not Full	Yes	-0.568	17.155
ARF1_28	5,201.050	0.000	0.000	0.000	5,189.726	Not Full	No	-0.470	11.324
ARF1_29	5,202.190	0.000	0.000	0.000	5,190.762	Not Full	No	-0.445	11.428
ARF1_3	5,188.520	0.000	0.000	0.000	5,176.105	Not Full	No	-0.402	12.415
ARF1_31	5,204.680	0.000	0.000	0.000	5,193.923	Not Full	No	-0.424	10.757
ARF1_32	5,205.700	0.000	0.000	0.000	5,194.954	Not Full	No	-0.412	10.746
ARF1_33	5,208.560	0.000	0.000	0.000	5,197.197	Not Full	No	-0.430	11.363
ARF1_34	5,209.050	0.000	0.000	0.000	5,198.223	Not Full	No	-0.394	10.827
ARF1_35	5,209.820	0.000	0.000	0.000	5,198.953	Not Full	Yes	-0.384	10.867
ARF1_36	5,213.560	0.000	0.000	0.000	5,201.344	Not Full	No	-0.422	12.216
ARF1_37	5,213.040	0.000	0.000	0.000	5,202.254	Not Full	No	-0.402	10.786
ARF1_4	5,189.400	0.000	0.000	0.000	5,178.020	Not Full	No	-0.456	11.380
ARF2_1	5,214.270	0.000	0.000	0.000	5,205.588	Not Full	No	-0.418	8.682
ARF2_2	5,217.170	59,250.218	225,620.011	0.000	5,206.685	Not Full	No	-0.401	10.485
BFF1_61	5,112.000	0.000	0.000	0.000	5,100.440	Not Full	No	-0.667	11.560
BFF1_62	5,110.000	0.000	0.000	0.000	5,098.440	Not Full	No	-0.667	11.560
BFF1_63	5,110.000	16,750.074	67,000.295	0.000	5,096.848	Not Full	No	-0.529	13.152
CCF3_39E	5,127.025	28,500.469	114,001.877	0.000	5,116.712	Not Full	No	-0.536	10.313
CCF3_60	5,134.515	0.000	0.000	0.000	5,123.515	Not Full	No	-0.833	11.000
CCF3_60A	5,126.015	42,999.824	167,114.552	0.000	5,118.147	Not Full	No	-0.602	7.868
CCF4_41	5,130.900	36,750.226	144,266.023	0.000	5,119.318	Not Full	No	-0.428	11.582
CCF4_42	5,139.500	0.000	0.000	0.000	5,127.781	Not Full	No	-0.536	11.719
CCF4_43	5,148.430	0.000	0.000	0.000	5,136.711	Not Full	No	-0.536	11.719
CCF4_44	5,154.330	0.000	0.000	0.000	5,142.559	Not Full	No	-0.518	11.771
CCF4_45	5,160.270	0.000	0.000	0.000	5,148.499	Not Full	No	-0.518	11.771
CCF6_105	5,098.110	163,118.819	528,373.057	0.000	5,087.055	Not Full	No	-0.675	11.055
CCF6_106	5,098.070	0.000	0.000	0.000	5,082.130	Not Full	No	-0.670	15.940
CCF6_610	5,118.330	0.000	0.000	0.000	5,107.882	Not Full	No	-0.454	10.448
CCF6_611	5,120.270	0.000	0.000	0.000	5,109.711	Not Full	No	-0.446	10.559
CCF6_612	5,123.450	0.000	0.000	0.000	5,112.276	Not Full	No	-0.451	11.174
CCF6_613	5,124.860	0.000	0.000	0.000	5,113.857	Not Full	No	-0.429	11.003
CCF6_614	5,125.820	0.000	0.000	0.000	5,114.978	Not Full	No	-0.418	10.842
CCF6_615	5,110.580	0.000	0.000	0.000	5,095.868	Not Full	No	-0.842	14.712
CCF6_68	5,111.480	0.000	0.000	0.000	5,098.505	Not Full	No	-0.452	12.975
CCF6_69	5,113.690	0.000	0.000	0.000	5,102.377	Not Full	No	-0.450	11.313
CCF9_46	5,168.820	31,499.988	125,071.153	0.000	5,150.273	Not Full	No	-0.463	18.547
CFF1_17	5,094.225	0.000	0.000	0.000	5,082.902	Not Full	No	-0.893	11.323

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	ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
	CFF1_18	5,096.025	0.000	0.000	0.000	5,085.239	Not Full	No	-0.896	10.786
	CFF1_19	5,097.625	0.000	0.000	0.000	5,086.777	Not Full	No	-0.888	10.848
	CFF1_19B1	5,098.735	0.000	0.000	0.000	5,087.732	Not Full	No	-0.703	11.003
	CFF1_19B2	5,100.735	0.000	0.000	0.000	5,088.838	Not Full	No	-0.688	11.898
	CFF1_20	5,101.125	0.000	0.000	0.000	5,089.669	Not Full	No	-0.696	11.456
	CFF1_21	5,103.925	33,750.707	133,299.782	0.000	5,092.002	Not Full	No	-0.693	11.923
	CFF1_22	5,106.175	0.000	0.000	0.000	5,093.663	Not Full	No	-0.702	12.512
	CFF1_22A	5,112.405	0.000	0.000	0.000	5,100.620	Not Full	No	-0.619	11.785
	CFF1_22B	5,106.965	0.000	0.000	0.000	5,095.280	Not Full	No	-0.618	11.685
	CFF1_22C	5,104.765	56,250.699	215,559.751	0.000	5,093.045	Not Full	No	-0.554	11.720
	CFF1_22D	5,107.255	0.000	0.000	0.000	5,095.055	Not Full	No	-0.833	12.200
	CFF1_22E	5,106.875	0.000	0.000	0.000	5,096.885	Not Full	No	-0.833	9.990
	CFF1_22F1	5,108.455	0.000	0.000	0.000	5,098.345	Not Full	No	-0.833	10.110
	CFF1_23	5,105.785	0.000	0.000	0.000	5,095.091	Not Full	No	-0.714	10.694
	CFF1_24	5,106.475	0.000	0.000	0.000	5,096.259	Not Full	No	-0.716	10.216
	CFF1_25	5,107.655	0.000	0.000	0.000	5,097.654	Not Full	No	-0.711	10.001
	CFF1_26	5,110.015	0.000	0.000	0.000	5,100.250	Not Full	No	-0.715	9.765
	CFF1_27	5,113.825	0.000	0.000	0.000	5,103.575	Not Full	No	-0.720	10.250
	CFF1_28	5,116.225	0.000	0.000	0.000	5,105.505	Not Full	No	-0.720	10.720
	CFF1_29	5,122.135	0.000	0.000	0.000	5,109.242	Not Full	No	-0.773	12.893
	CFF1_30	5,125.325	0.000	0.000	0.000	5,115.002	Not Full	No	-0.773	10.323
	CFF1_31	5,128.455	0.000	0.000	0.000	5,116.604	Not Full	No	-0.721	11.851
	CHF1A_22	5,068.620	73,249.892	269,117.000	0.000	5,055.905	Not Full	No	-1.095	12.715
	CHF1A_23	5,070.640	0.000	0.000	0.000	5,052.596	Not Full	No	-1.114	18.044
	CHF1A_24	5,052.800	0.000	0.000	0.000	5,042.476	Not Full	No	-1.024	10.324
	CHF1A_25	5,050.970	0.000	0.000	0.000	5,039.323	Not Full	No	-0.977	11.647
	CHF1A_A1A	5,049.900	0.000	0.000	0.000	5,038.436	Not Full	No	-0.974	11.464
	CHF1A_C1	5,075.600	0.000	0.000	0.000	5,061.712	Not Full	No	-1.208	13.888
	CHF1B_12	5,105.600	0.000	0.000	0.000	5,083.662	Not Full	No	-1.148	21.938
	CHF1B_14A	5,122.490	0.000	0.000	0.000	5,102.128	Not Full	No	-1.112	20.362
	CHF1B_15A	5,119.230	0.000	0.000	0.000	5,102.975	Not Full	No	-0.725	16.255
	CHF1B_17	5,116.660	0.000	0.000	0.000	5,099.440	Not Full	No	-1.000	17.220
	CHF1B_18	5,112.550	22,999.671	91,998.685	0.000	5,097.026	Not Full	No	-1.164	15.524
	CHF1B_20	5,085.470	0.000	0.000	0.000	5,074.081	Not Full	No	-1.139	11.389
	CHF3A_15	5,125.860	0.000	0.000	0.000	5,104.201	Not Full	No	-0.869	21.659
	CHF3A_15B	5,119.230	0.000	0.000	0.000	5,103.515		No	-0.865	15.715
	CHF3C_8	5,125.190	0.000	0.000	0.000	5,116.323	Not Full	No	-0.967	8.867
	CHF3C_9	5,124.720	0.000	0.000	0.000	5,114.843	Not Full	Yes	-0.947	9.877
	CMF2_22G	5,109.075	0.000	0.000	0.000	5,099.925		No	-0.833	9.150
	CMF2_32	5,114.005	0.000	0.000	0.000	5,102.255	Not Full	No	-0.593	11.750
	CMF2_33	5,113.055	0.000	0.000	0.000	5,103.073	Not Full	No	-0.546	9.982

ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
CMF2_34	5,113.115	0.000	0.000	0.000	5,103.408	Not Full	No	-0.540	9.707
CMF2_35	5,114.465	0.000	0.000	0.000	5,104.144	Not Full	Yes	-0.554	10.321
CMF2_36	5,117.345	0.000	0.000	0.000	5,107.054	Not Full	No	-0.614	10.291
CMF2_37	5,118.695	0.000	0.000	0.000	5,108.408	Not Full	No	-0.611	10.287
CMF2_38	5,119.295	0.000	0.000	0.000	5,108.979	Not Full	No	-0.599	10.316
CMF2_39	5,120.035	0.000	0.000	0.000	5,109.775	Not Full	No	-0.594	10.260
CMF2_39A	5,121.225	0.000	0.000	0.000	5,110.411	Not Full	Yes	-0.537	10.814
CMF2_39B	5,120.725	0.000	0.000	0.000	5,114.225	Not Full	No	-0.634	6.500
CMF2_39C	5,124.225	0.000	0.000	0.000	5,115.023	Not Full	No	-0.535	9.202
CMF2_39D	5,128.225	0.000	0.000	0.000	5,115.772	Not Full	No	-0.536	12.453
OMPF1_101	5,102.060	130,749.071	438,630.099	0.000	5,084.700	Not Full	No	-0.660	17.360
CSF1_C2A	5,068.715	0.000	0.000	0.000	5,050.091	Not Full	Yes	-0.974	18.624
CSF1_C2C	5,068.425	0.000	0.000	0.000	5,050.296	Not Full	No	-1.109	18.129
CSF1_C3A	5,080.635	0.000	0.000	0.000	5,068.116	Not Full	No	-1.029	12.519
CSF1_C3B	5,076.545	0.000	0.000	0.000	5,066.954	Not Full	No	-1.001	9.591
CSF1_C4B	5,073.805	0.000	0.000	0.000	5,065.299	Not Full	No	-1.036	8.506
CSF1_C5B	5,073.395	0.000	0.000	0.000	5,063.429	Not Full	No	-1.056	9.966
CSF1_C6C	5,069.785	44,075.503	171,047.237	0.000	5,062.469	Not Full	Yes	-0.966	7.316
ECF1A2_131	5,060.000	22,374.712	89,498.846	0.000	5,048.881	Not Full	No	-0.449	11.119
ECF1A2_132	5,059.800	0.000	0.000	0.000	5,046.765	Not Full	Yes	-0.365	13.035
ECF1_100	5,047.600	0.000	0.000	0.000	5,025.393	Not Full	No	-1.577	22.207
ECF1_102	5,047.000	0.000	0.000	0.000	5,024.966	Not Full	No	-1.554	22.034
ECF1_108	5,032.950	107,999.959	373,521.459	0.000	5,017.991	Not Full	No	-1.839	14.959
ECF1_118	5,028.750	0.000	0.000	0.000	5,020.774	Not Full	No	-0.516	7.976
ECF1_119	5,026.890	0.000	0.000	0.000	5,018.230	Not Full	Yes	-0.500	8.660
ECF1 2271	5,029.400	43,097.744	167,472.548	0.000	5,010.465	Not Full	Yes	-1.305	18.935
ECF1_24	5,038.000	0.000	0.000	0.000	5,028.072	Not Full	No	-1.328	9.928
ECF1_25	5,035.470	0.000	0.000	0.000	5,026.562	Not Full	No	-1.508	8.908
ECF1_26	5,036.230	0.000	0.000	0.000	5,023.927	Not Full	No	-1.683	12.303
ECF1_27	5,033.480	0.000	0.000	0.000	5,022.202	Not Full	No	-1.868	11.278
ECF1_28	5,032.150	0.000	0.000	0.000	5,014.826	Not Full	No	-1.844	17.324
ECF1_29	5,030.800	0.000	0.000	0.000	5,011.594	Not Full	No	-1.776	19.206
ECF1_44	5,039.800	0.000	0.000	0.000	5,027.434	Not Full	No	-1.316	12.366
ECF1_97	5,040.000	0.000	0.000	0.000	5,027.047	Not Full	No	-1.353	12.953
ECF21_120	5,065.390	210,160.721	653,853.116	0.000	5,056.164	Not Full	No	-0.396	9.226
ECF21_121	5,065.000	0.000	0.000	0.000	5,054.923		No	-0.357	10.077
ECF21_123	5,065.000	0.000	0.000	0.000	5,053.478		No	-0.402	11.522
ECF21_124	5,065.000	0.000	0.000	0.000	5,051.955		No	-0.395	13.045
ECF21_130	5,062.000	0.000	0.000	0.000	5,050.483	Not Full	No	-0.347	11.517
ECF21_131	5,050.560	0.000	0.000	0.000	5,033.259		No	-0.508	17.301
ECF21_132	5,050.500	0.000	0.000	0.000	5,032.163		No	-0.503	18.337

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ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
ECF21_133	5,050.800	0.000	0.000	0.000	5,030.157	Not Full	Yes	-1.343	20.643
ECF21_22A	5,054.700	0.000	0.000	0.000	5,033.201	Not Full	No	-1.309	21.499
ECF21_23	5,050.000	0.000	0.000	0.000	5,029.638	Not Full	No	-1.362	20.362
ECF21_24	5,050.000	0.000	0.000	0.000	5,029.917	Not Full	No	-1.343	20.083
ECF21_9	5,047.000	17,749.433	70,997.733	0.000	5,028.823	Not Full	No	-1.477	18.177
ECF3_217	5,026.385	0.000	0.000	0.000	5,017.259	Not Full	Yes	-0.846	9.126
ECF3_218	5,027.535	0.000	0.000	0.000	5,016.028	Not Full	No	-0.907	11.507
ECF4_133	5,060.500	0.000	0.000	0.000	5,044.788	Not Full	No	-0.392	15.712
ECF4_134	5,053.280	0.000	0.000	0.000	5,043.252	Not Full	No	0.272	10.028
ECF4_135	5,056.270	23,925.591	95,702.364	0.000	5,042.096	Not Full	Yes	-0.424	14.174
ECF5_204	5,046.995	0.000	0.000	0.000	5,036.100	Not Full	No	-1.075	10.895
ECF5_205	5,049.085	0.000	0.000	0.000	5,035.172	Not Full	No	-1.075	13.913
ECF5_208	5,047.375	0.000	0.000	0.000	5,032.740	Not Full	No	-1.075	14.635
ECF5_209	5,042.395	0.000	0.000	0.000	5,032.273	Not Full	Yes	-0.902	10.122
ECF5_213	5,046.395	0.000	0.000	0.000	5,031.712	Not Full	No	-0.903	14.683
ECF5_214	5,041.285	55,827.339	214,011.948	0.000	5,031.132	Not Full	No	-0.913	10.153
ECF5_215	5,041.125	0.000	0.000	0.000	5,029.593	Not Full	No	-1.082	11.532
ECF5_216	5,036.155	0.000	0.000	0.000	5,023.092	Not Full	No	-1.083	13.063
EHF10_11	5,145.910	0.000	0.000	0.000	5,131.880	Not Full	No	-0.496	14.030
EHF10_12	5,147.180	0.000	0.000	0.000	5,132.956	Not Full	No	-0.461	14.224
EHF10_13	5,149.870	0.000	0.000	0.000	5,135.142	Not Full	No	-0.494	14.728
EHF10_14	5,149.450	0.000	0.000	0.000	5,136.358	Not Full	No	-0.449	13.092
EHF10_15	5,150.380	0.000	0.000	0.000	5,137.589	Not Full	No	-0.448	12.791
EHF10_16	5,151.800	0.000	0.000	0.000	5,138.788	Not Full	No	-0.448	13.012
EHF10_17	5,152.630	0.000	0.000	0.000	5,139.551	Not Full	No	-0.436	13.079
EHF10_18	5,153.120	0.000	0.000	0.000	5,140.043	Not Full	Yes	-0.443	13.077
EHF11_146	5,162.560	35,999.986	141,523.147	0.000	5,146.420	Not Full	No	-0.446	16.140
EHF11_147	5,158.690	0.000	0.000	0.000	5,145.382	Not Full	No	-0.465	13.308
EHF11_148	5,153.110	0.000	0.000	0.000	5,143.254	Not Full	No	-0.472	9.856
EHF1_2	5,109.900	0.000	0.000	0.000	5,101.810	Not Full	No	2.044	8.090
EHF1_3	5,108.400	0.000	0.000	0.000	5,101.893	Not Full	No	0.926	6.507
EHF1_4	5,112.700	0.000	0.000	0.000	5,101.942	Not Full	Yes	-0.424	10.758
EHF1_5	5,115.000	0.000	0.000	0.000	5,103.567	Not Full	No	-0.500	11.433
EHF1 6	5,118.300	0.000	0.000	0.000	5,107.041	Not Full	No	-0.526	11.259
_ EHF1_7	5,127.100	0.000	0.000	0.000	5,114.647	Not Full	No	-0.520	12.453
_ EHF1_8	5,131.700	0.000	0.000	0.000	5,120.467		No	-0.500	11.233
EHF3_10	5,147.800	0.000	0.000	0.000	5,136.341		No	-0.525	11.459
EHF3_11	5,159.100	0.000	0.000	0.000	5,146.546		No	-0.521	12.554
EHF3_12	5,169.300	0.000	0.000	0.000	5,149.599	Not Full	No	-0.467	19.701
EHF3_42	5,168.000	0.000	0.000	0.000	5,150.643		Yes	-0.424	17.357
EHF3_9	5,136.500	0.000	0.000	0.000	5,125.178		No	-0.488	11.322

	ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
	EHF4_1	5,109.600	0.000	0.000	0.000	5,101.782	Not Full	No	-0.555	7.818
	EHF7_1	5,166.480	0.000	0.000	0.000	5,151.665	Not Full	No	-0.432	14.815
	EHF7_6	5,164.680	43,250.384	168,030.599	0.000	5,153.267	Not Full	No	-0.430	11.413
	EHF9_1	5,078.280	0.000	0.000	0.000	5,068.409	Not Full	No	-0.538	9.871
	EHF9_10	5,140.060	0.000	0.000	0.000	5,128.204	Not Full	No	-0.483	11.856
	EHF9_19	5,155.080	0.000	0.000	0.000	5,141.762	Not Full	No	-0.455	13.318
	EHF9_2	5,102.420	0.000	0.000	0.000	5,085.915	Not Full	No	-0.542	16.505
	EHF9_3	5,107.570	0.000	0.000	0.000	5,095.693	Not Full	No	-0.544	11.877
	EHF9_4	5,118.840	0.000	0.000	0.000	5,103.564	Not Full	No	-0.543	15.276
	EHF9_5	5,127.680	0.000	0.000	0.000	5,115.784	Not Full	No	-0.543	11.896
	EHF9_6	5,127.520	0.000	0.000	0.000	5,117.178	Not Full	No	-0.479	10.342
	EHF9_7	5,137.990	0.000	0.000	0.000	5,123.716	Not Full	No	-0.531	14.274
	EHF9_8	5,137.740	0.000	0.000	0.000	5,125.594	Not Full	No	-0.493	12.146
	EHF9_9	5,139.150	0.000	0.000	0.000	5,127.324	Not Full	No	-0.493	11.826
	EP_1	5,194.550	50,014.061	192,758.604	0.000	5,181.979	Not Full	No	-0.488	12.571
	EP_2	5,134.160	137,936.108	458,933.479	0.000	5,121.177	Not Full	No	-0.300	12.983
	EP_3	5,114.460	0.000	0.000	0.000	5,101.961	Not Full	No	-0.316	12.499
	EVF1A1_51	5,012.830	0.000	0.000	0.000	4,997.168	Not Full	No	-1.012	15.662
	EVF1A1_52	5,010.640	0.000	0.000	0.000	4,996.559	Not Full	No	-0.701	14.081
	EVF1A2_1	5,014.410	0.000	0.000	0.000	4,997.990	Not Full	No	-0.810	16.420
	EVF1A2_50	5,014.510	0.000	0.000	0.000	4,997.860	Not Full	No	-0.740	16.650
Ħ	EVF1_7	4,998.450	47,000.142	181,739.717	0.000	4,988.419	Not Full	No	-0.564	10.031
	EVF2_1A	4,997.540	0.000	0.000	0.000	4,985.020	Not Full	No	-1.000	12.520
	EVF2_2	4,996.690	0.000	0.000	0.000	4,985.219	Not Full	Yes	-0.761	11.471
	EVF2_3	4,996.740	0.000	0.000	0.000	4,986.275	Not Full	No	-0.805	10.465
	EVF2_4	4,998.320	0.000	0.000	0.000	4,986.420	Not Full	No	-0.554	11.900
	EVF2_4A	4,994.440	15,249.594	60,998.377	0.000	4,983.351	Not Full	No	-0.659	11.089
	EVF2_5	4,994.950	0.000	0.000	0.000	4,983.903	Not Full	No	-0.737	11.047
	EVF2_5A	4,998.320	0.000	0.000	0.000	4,987.033	Not Full	No	-0.570	11.287
	EVF2_6	4,997.130	0.000	0.000	0.000	4,987.731	Not Full	No	-0.563	9.399
	EVF2_6A	4,995.080	0.000	0.000	0.000	4,984.114	Not Full	No	-0.766	10.966
	EVF2_7	4,995.890	0.000	0.000	0.000	4,984.378	Not Full	No	-0.732	11.512
	EVF2_8	4,996.820	0.000	0.000	0.000	4,984.681	Not Full	No	-0.749	12.139
	EVF3_47	5,015.880	0.000	0.000	0.000	4,998.838	Not Full	No	-0.792	17.042
	EVF3_48	5,014.910	0.000	0.000	0.000	4,998.328	Not Full	No	-0.802	16.582
	EVF4_46	5,017.080	50,718.221	195,333.012	0.000	4,999.351	Not Full	No	-0.799	17.729
	FMF4_4_4	5,116.700	0.000	0.000	0.000	5,105.362	Not Full	No	-0.638	11.338
	FMF6_1	5,127.260	0.000	0.000	0.000	5,114.703	Not Full	No	-0.503	12.557
	FMF6_2	5,129.260	0.000	0.000	0.000	5,116.777	Not Full	No	-0.410	12.483
	FMF6_4_6	5,124.560	47,999.502	185,393.375	0.000	5,106.552	Not Full	Yes	-0.648	18.008
	FMF7_3	5,131.760	0.000	0.000	0.000	5,119.533	Not Full	No	-0.393	12.227

ID	Rim Elevation	Base Flow	Total Flow	Storm Flow	Grade	Status	Hydraulic	Surcharge Depth	Unfilled Depth
טו	(ft)	(gpd)	(gpd)	(gpd)	(ft)	Status	Jump	(ft)	(ft)
FMF7_4	5,136.220	0.000	0.000	0.000	5,123.596	Not Full	No	-0.391	12.624
FMF7_5	5,140.390	0.000	0.000	0.000	5,127.240	Not Full	No	-0.396	13.150
FMF8_1	5,148.970	0.000	0.000	0.000	5,136.234	Not Full	No	-0.503	12.736
FMF8_10	5,160.550	0.000	0.000	0.000	5,145.627	Not Full	No	-0.329	14.923
FMF8_11	5,159.940	45,499.663	176,253.964	0.000	5,146.078	Not Full	No	-0.329	13.862
FMF8_2	5,149.930	0.000	0.000	0.000	5,137.284	Not Full	No	-0.402	12.646
FMF8_3	5,151.500	0.000	0.000	0.000	5,138.939	Not Full	No	-0.408	12.561
FMF8_4	5,153.490	0.000	0.000	0.000	5,140.064	Not Full	No	-0.393	13.426
FMF8_6	5,146.040	0.000	0.000	0.000	5,130.132	Not Full	No	-0.435	15.908
FMF8_8	5,155.950	0.000	0.000	0.000	5,143.594	Not Full	No	-0.433	12.356
FMF8_9	5,159.460	0.000	0.000	0.000	5,145.026	Not Full	No	-0.340	14.434
FMF9_1	5,189.630	0.000	0.000	0.000	5,172.355	Not Full	No	-0.419	17.275
FMF9_10	5,162.750	0.000	0.000	0.000	5,153.953	Not Full	No	-0.494	8.797
FMF9_11	5,164.610	0.000	0.000	0.000	5,150.556	Not Full	No	-0.471	14.054
FMF9_12	5,162.750	0.000	0.000	0.000	5,148.455	Not Full	No	-0.471	14.295
FMF9_13	5,162.520	0.000	0.000	0.000	5,147.930	Not Full	No	-0.477	14.590
FMF9_15	5,172.560	34,616.147	136,463.830	0.000	5,159.790	Not Full	No	-0.467	12.770
FMF9_22	5,178.510	0.000	0.000	0.000	5,158.052	Not Full	Yes	-0.434	20.458
FMF9_23	5,173.130	0.000	0.000	0.000	5,159.326	Not Full	No	-0.470	13.804
FMF9_3	5,162.290	0.000	0.000	0.000	5,147.347	Not Full	Yes	-0.450	14.943
FMF9_35	5,174.800	0.000	0.000	0.000	5,158.869	Not Full	No	-0.457	15.931
FMF9_9	5,174.730	0.000	0.000	0.000	5,156.452	Not Full	No	-0.475	18.278
GVF1_0	5,069.880	18,999.353	75,997.411	0.000	5,061.176	Not Full	No	-0.520	8.704
GVF1_100	5,086.630	0.000	0.000	0.000	5,074.887	Not Full	No	-0.380	11.743
GVF1_101	5,083.880	0.000	0.000	0.000	5,072.217	Not Full	No	-0.329	11.663
GVF1_102	5,079.520	0.000	0.000	0.000	5,067.935	Not Full	No	-0.321	11.585
GVF1_103	5,078.780	0.000	0.000	0.000	5,067.151	Not Full	No	-0.286	11.629
GVF1_104	5,078.130	0.000	0.000	0.000	5,066.445	Not Full	No	-0.392	11.685
GVF1_105	5,074.200	0.000	0.000	0.000	5,062.398	Not Full	No	-0.418	11.802
GVF1_106	5,071.440	0.000	0.000	0.000	5,059.624	Not Full	No	-0.402	11.816
GVF1_107	5,070.010	0.000	0.000	0.000	5,058.055	Not Full	No	-0.422	11.955
GVF1_108	5,064.570	0.000	0.000	0.000	5,052.803	Not Full	No	-0.374	11.767
GVF1_109	5,062.860	0.000	0.000	0.000	5,050.533	Not Full	No	-0.474	12.327
GVF1_111	5,041.130	0.000	0.000	0.000	5,029.741	Not Full	No	-0.356	11.389
GVF1_113	5,037.460	0.000	0.000	0.000	5,025.780	Not Full	No	-0.297	11.680
GVF1_114	5,036.980	0.000	0.000	0.000	5,025.180	Not Full	No	-0.306	11.800
GVF1_115	5,036.250	0.000	0.000	0.000	5,024.218	Not Full	No	-0.329	12.032
GVF1_116	5,036.640	0.000	0.000	0.000	5,023.373	Not Full	Yes	-0.487	13.267
GVF1_117	5,036.520	60,750.697	230,282.000	0.000	5,022.970	Not Full	No	-0.530	13.550
GVF1_36	5,063.750	0.000	0.000	0.000	5,049.793	Not Full	No	-0.433	13.957
GVF1_37	5,061.780	0.000	0.000	0.000	5,047.668	Not Full	No	-0.419	14.112

ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
GVF1_40	5,062.570	0.000	0.000	0.000	5,046.656	Not Full	No	-0.431	15.914
GVF1_41	5,060.770	0.000	0.000	0.000	5,045.716	Not Full	No	-0.460	15.054
GVF1_48	5,053.840	0.000	0.000	0.000	5,041.977	Not Full	No	-0.460	11.863
GVF1_50	5,052.490	0.000	0.000	0.000	5,039.648	Not Full	No	-0.469	12.842
GVF1_51	5,052.020	39,599.985	154,684.742	0.000	5,035.165	Not Full	Yes	-0.499	16.855
GVF1_52	5,051.260	0.000	0.000	0.000	5,034.346	Not Full	No	-0.507	16.914
GVF1_53	5,049.200	0.000	0.000	0.000	5,033.829	Not Full	No	-0.535	15.371
GVF1_56	5,047.700	0.000	0.000	0.000	5,033.221	Not Full	Yes	-0.493	14.479
GVF1_57	5,046.840	0.000	0.000	0.000	5,032.840	Not Full	No	-0.493	14.000
GVF1_58	5,044.590	0.000	0.000	0.000	5,032.119	Not Full	No	-0.525	12.471
GVF1_59	5,042.030	0.000	0.000	0.000	5,031.170	Not Full	Yes	-0.514	10.860
GVF1_60	5,038.910	0.000	0.000	0.000	5,030.131	Not Full	No	-0.649	8.779
GVF1_61	5,040.570	0.000	0.000	0.000	5,029.499	Not Full	No	-0.701	11.071
GVF1_78	5,041.100	0.000	0.000	0.000	5,029.022	Not Full	No	-0.628	12.078
GVF1_80	5,041.000	0.000	0.000	0.000	5,028.338	Not Full	No	-0.632	12.662
GVF1_90	5,038.390	0.000	0.000	0.000	5,027.604	Not Full	No	-0.646	10.786
GVF1_91	5,037.800	0.000	0.000	0.000	5,027.234	Not Full	No	-0.786	10.566
GVF1_95	5,106.750	103,750.521	361,019.612	0.000	5,094.322	Not Full	No	-0.364	12.428
GVF1_96	5,104.310	0.000	0.000	0.000	5,092.593	Not Full	No	-0.404	11.717
GVF1_97	5,099.330	0.000	0.000	0.000	5,087.688	Not Full	No	-0.409	11.642
GVF1_98	5,095.600	0.000	0.000	0.000	5,083.563	Not Full	No	-0.434	12.037
GVF1_99	5,090.720	0.000	0.000	0.000	5,078.873	Not Full	No	-0.434	11.847
HWY52_1	5,018.000	93,516.445	330,910.960	0.000	5,004.844	Not Full	No	-0.916	13.156
HWY52_10	4,949.000	16,415.994	65,663.975	0.000	4,936.850	Not Full	No	-0.650	12.150
HWY52_11	4,945.000	118,285.875	403,421.572	0.000	4,933.522	Not Full	No	-0.628	11.478
HWY52_12	4,942.120	0.000	0.000	0.000	4,930.024	Not Full	No	-1.126	12.096
HWY52_2	5,035.250	0.000	0.000	0.000	5,000.119	Not Full	No	-0.991	35.131
HWY52_3	5,025.320	0.000	0.000	0.000	4,998.047	Not Full	No	-1.003	27.273
HWY52_4	5,010.170	0.000	0.000	0.000	4,992.233	Not Full	Yes	-0.917	17.937
HWY52_5	5,002.380	495,303.654	1,343,754.722	0.000	4,981.907	Not Full	No	-1.283	20.473
HWY52_6	4,990.000	0.000	0.000	0.000	4,972.454	Not Full	No	-0.786	17.546
HWY52_7	4,977.000	26,249.750	104,999.000	0.000	4,965.189	Not Full	No	-0.781	11.811
HWY52_8	4,979.360	154,533.542	504,883.739	0.000	4,960.093	Not Full	No	-1.057	19.267
HWY52_9	4,948.500	0.000	0.000	0.000	4,939.683	Not Full	Yes	-0.637	8.817
I25_1	5,220.000	59,018.378	224,899.684	0.000	5,206.734	Not Full	No	-0.433	13.266
I25_10	5,156.010	0.000	0.000	0.000	5,147.737		Yes	-0.543	8.273
_ I25_11	5,154.000	0.000	0.000	0.000	5,146.784		No	-0.566	7.216
_ I25_12	5,155.000	0.000	0.000	0.000	5,145.478		No	-0.542	9.522
_ I25_13	5,155.070	0.000	0.000	0.000	5,145.148	Not Full	No	-0.532	9.922
I25_14	5,157.090	226,265.675	695,774.311	0.000	5,144.907		No	-0.363	12.183
I25_15	5,158.050	0.000	0.000	0.000	5,144.506	Not Full	No	-0.364	13.544

	ID	Rim Elevation (ft)	Base Flow	Total Flow	Storm Flow	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
	125_16	5,176.000	(gpd) 0.000	(gpd) 0.000	(gpd) 0.000	5,143.180	Not Full	No	-0.360	32.820
	125_10	5,153.000	164,607.778	532,446.850	0.000	5,140.796		No	-1.024	12.204
H	125_17	5,120.000	0.000	0.000	0.000	5,106.900		No	-1.000	13.100
	125_16	5,101.320	128,851.151	433,268.477	0.000	5,092.897		Yes	-0.603	8.423
	125_19	5,192.000	231,396.393	709,077.753	0.000	5,178.886		No	-0.281	13.114
	125_2	5,100.300	0.000	0.000	0.000	5,091.218		No	-0.602	9.082
	_	5,104.180	0.000	0.000	0.000	5,091.218		No	-0.739	17.769
	125_21	·	0.000	0.000				No	-0.899	12.249
	125_22	5,091.630			0.000	5,079.381		No	-0.638	11.888
	125_23	5,065.480	137,892.908 0.000	458,811.439 0.000	0.000	5,053.592		Yes	-0.742	11.842
H	125_24	5,058.000			0.000	5,046.158				
H	125_25	5,060.930	0.000	0.000	0.000	5,044.986		No	-0.744	15.944
	125_26	5,061.820	142,845.066	472,801.286	0.000	5,043.555		No	-1.025	18.265
Ш	125_27	5,053.670	0.000	0.000	0.000	5,040.505		No	-0.865	13.165
	125_28	5,057.640	0.000	0.000	0.000	5,038.980		No	-0.770	18.660
	125_29	5,053.000	144,267.786	476,796.631	0.000	5,037.447		No	-1.203	15.553
Ш	125_3	5,183.000	0.000	0.000	0.000	5,169.975		Yes	-0.425	13.025
	125_30	5,029.050	117,885.556	402,290.669	0.000	5,019.189		Yes	-0.701	9.861
	I25_31	5,046.550	0.000	0.000	0.000	5,016.315		No	-0.705	30.235
	125_32	5,046.000	0.000	0.000	0.000	5,015.608		No	-0.702	30.392
	125_33	5,050.000	0.000	0.000	0.000	5,014.978		No	-0.702	35.022
	125_34	5,033.000	0.000	0.000	0.000	5,013.319		No	-0.701	19.681
	125_35	5,033.180	0.000	0.000	0.000	5,011.496		No	-0.874	21.684
Ш	125_36	5,024.780	0.000	0.000	0.000	5,007.654		Yes	-0.736	17.126
Ш	I25_4	5,181.940	158,692.260	516,261.993	0.000	5,168.904		No	-0.496	13.036
	I25_5	5,180.000	0.000	0.000	0.000	5,166.906	Not Full	No	-0.494	13.094
	I25_6	5,176.000	0.000	0.000	0.000	5,163.918	Not Full	No	-0.482	12.082
	125_7	5,172.980	0.000	0.000	0.000	5,160.609	Not Full	No	-0.481	12.371
	125_8	5,171.000	0.000	0.000	0.000	5,158.099	Not Full	Yes	-0.551	12.901
	125_9	5,168.930	292,603.570	863,544.350	0.000	5,155.915	Not Full	No	-0.665	13.015
	KEF1_1	4,993.140	0.000	0.000	0.000	4,982.466	Not Full	No	-0.584	10.674
	KEF1_10	4,994.650	6,000.478	24,001.911	0.000	4,982.856	Not Full	No	-0.894	11.794
	KEF1_1A	4,992.460	0.000	0.000	0.000	4,987.630	Not Full	No	-1.000	4.830
	KEF1_2	4,992.940	0.000	0.000	0.000	4,982.714	Not Full	No	-0.566	10.226
	KEF1_2A	4,993.170	0.000	0.000	0.000	4,986.910	Not Full	No	-1.000	6.260
	KEF1_3	4,992.980	0.000	0.000	0.000	4,982.777	Not Full	No	-0.633	10.203
	KEF1_3A	4,992.130	0.000	0.000	0.000	4,986.450	Not Full	No	-1.000	5.680
	KEF1_4	4,992.310	0.000	0.000	0.000	4,985.750	Not Full	No	-1.000	6.560
	KEF1_5	4,991.820	0.000	0.000	0.000	4,985.470	Not Full	No	-1.000	6.350
	KEF1_6	4,991.120	0.000	0.000	0.000	4,985.080	Not Full	No	-1.000	6.040
	KEF1_7	4,992.280	0.000	0.000	0.000	4,984.100	Not Full	No	-1.000	8.180
	KEF1_8	4,992.920	0.000	0.000	0.000	4,983.870	Not Full	No	-1.000	9.050

ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
KEF1_80	4,993.540	0.000	0.000	0.000	4,982.034	Not Full	No	-0.596	11.506
KEF1_81	4,992.760	0.000	0.000	0.000	4,981.719	Not Full	No	-0.591	11.041
KEF1_82	4,990.810	0.000	0.000	0.000	4,981.017	Not Full	No	-0.563	9.793
KEF1_83	4,989.710	0.000	0.000	0.000	4,980.344	Not Full	No	-0.686	9.366
KEF1_9	4,994.310	0.000	0.000	0.000	4,983.190	Not Full	No	-1.000	11.120
KFF1_10	4,997.270	59,250.218	225,620.011	0.000	4,983.957	Not Full	No	-0.673	13.313
KFF1_11	4,998.630	0.000	0.000	0.000	4,984.070	Not Full	No	-1.000	14.560
KFF1_14	5,000.070	0.000	0.000	0.000	4,984.910	Not Full	No	-1.000	15.160
KFF1_15	5,000.120	0.000	0.000	0.000	4,986.020	Not Full	No	-1.000	14.100
KFF1_16	5,001.010	0.000	0.000	0.000	4,986.750	Not Full	No	-1.000	14.260
KFF1_9	4,995.240	0.000	0.000	0.000	4,983.349	Not Full	No	-0.691	11.891
LCFA_1	5,012.427	0.000	0.000	0.000	4,996.977	Not Full	Yes	-0.973	15.450
LCFA_10	5,023.387	0.000	0.000	0.000	5,010.596	Not Full	No	-0.437	12.791
LCFA_11	5,026.087	0.000	0.000	0.000	5,013.416	Not Full	No	-0.438	12.671
LCFA_12	5,027.167	0.000	0.000	0.000	5,014.423	Not Full	No	-0.421	12.744
LCFA_13	5,028.197	0.000	0.000	0.000	5,015.660	Not Full	No	-0.444	12.537
LCFA_14	5,030.217	0.000	0.000	0.000	5,017.404	Not Full	No	-0.430	12.813
LCFA_15	5,031.377	0.000	0.000	0.000	5,018.732	Not Full	No	-0.432	12.645
LCFA_16	5,033.227	0.000	0.000	0.000	5,020.411	Not Full	No	-0.453	12.816
LCFA_17	5,041.107	48,278.862	186,414.715	0.000	5,029.163	Not Full	No	-0.511	11.944
LCFA_3	5,013.587	0.000	0.000	0.000	5,002.040	Not Full	No	-0.454	11.547
LCFA_4	5,016.087	0.000	0.000	0.000	5,003.272	Not Full	No	-0.291	12.815
LCFA_5	5,016.697	10,500.476	42,001.904	0.000	5,004.665	Not Full	No	-0.298	12.032
LCFA_6	5,018.577	0.000	0.000	0.000	5,005.639	Not Full	Yes	-0.345	12.938
LCFA_7	5,018.577	0.000	0.000	0.000	5,006.612	Not Full	No	-0.372	11.965
LCFA_8	5,019.587	0.000	0.000	0.000	5,007.423	Not Full	No	-0.430	12.164
LCFA_9	5,020.547	0.000	0.000	0.000	5,008.074	Not Full	No	-0.420	12.473
LCFB_1	5,019.517	0.000	0.000	0.000	5,007.246	Not Full	Yes	-0.457	12.271
LCFB_2	5,020.547	0.000	0.000	0.000	5,008.246	Not Full	No	-0.477	12.301
LCFB_3	5,022.307	0.000	0.000	0.000	5,009.981	Not Full	No	-0.482	12.326
LCFB_4	5,023.587	29,750.389	118,674.618	0.000	5,010.916	Not Full	No	-0.488	12.671
NMS_1	5,190.130	0.000	0.000	0.000	5,180.148	Not Full	No	-0.626	9.982
NMS_10	5,211.030	0.000	0.000	0.000	5,203.000	Not Full	No	-0.603	8.030
NMS_11	5,214.550	0.000	0.000	0.000	5,207.301	Not Full	No	-0.502	7.249
NMS_12	5,217.140	0.000	0.000	0.000	5,210.722	Not Full	No	-0.481	6.418
NMS_13	5,223.610	0.000	0.000	0.000	5,214.122	Not Full	No	-0.481	9.488
NMS_14	5,225.100	0.000	0.000	0.000	5,215.212	Not Full	No	-0.492	9.888
NMS_15	5,226.430	0.000	0.000	0.000	5,216.701	Not Full	No	-0.502	9.729
NMS_16	5,233.130	0.000	0.000	0.000	5,219.656	Not Full	No	-0.467	13.474
NMS_17	5,241.740	0.000	0.000	0.000	5,226.415	Not Full	No	-0.558	15.325
NMS_18	5,250.320	0.000	0.000	0.000	5,237.542	Not Full	No	-0.591	12.778

ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
NMS_19	5,252.800	0.000	0.000	0.000	5,240.968	Not Full	No	-0.585	11.832
NMS_2	5,190.240	0.000	0.000	0.000	5,183.860	Not Full	No	-0.603	6.380
NMS_20	5,251.790	157,499.941	512,999.807	0.000	5,242.232	Not Full	No	-0.502	9.558
NMS_3	5,191.230	0.000	0.000	0.000	5,185.301	Not Full	No	-0.502	5.929
NMS_4	5,195.030	0.000	0.000	0.000	5,188.202	Not Full	No	-0.502	6.828
NMS_5	5,196.680	0.000	0.000	0.000	5,189.998	Not Full	No	-0.586	6.682
NMS_6	5,198.380	0.000	0.000	0.000	5,191.898	Not Full	No	-0.586	6.482
NMS_7	5,200.000	0.000	0.000	0.000	5,193.758	Not Full	No	-0.585	6.242
NMS_8	5,203.910	0.000	0.000	0.000	5,198.041	Not Full	No	-0.502	5.869
NMS_9	5,210.370	0.000	0.000	0.000	5,201.637	Not Full	No	-0.486	8.733
OGF1_1	5,165.050	0.000	0.000	0.000	5,151.065	Not Full	No	-0.833	13.985
OGF1_17	5,150.610	0.000	0.000	0.000	5,138.985	Not Full	No	-0.833	11.625
OGF1_18	5,148.840	0.000	0.000	0.000	5,137.445	Not Full	No	-0.833	11.395
OGF1_2	5,160.050	0.000	0.000	0.000	5,146.865	Not Full	No	-0.833	13.185
OGF1_25	5,148.140	0.000	0.000	0.000	5,136.135	Not Full	No	-0.833	12.005
OGF1_3	5,159.350	0.000	0.000	0.000	5,146.225	Not Full	No	-0.833	13.125
OGF1_4	5,152.800	0.000	0.000	0.000	5,140.735	Not Full	No	-0.833	12.065
OGF1_5	5,150.890	0.000	0.000	0.000	5,139.645	Not Full	No	-0.833	11.245
OGF1_69	5,151.490	0.000	0.000	0.000	5,139.622	Not Full	Yes	-0.566	11.868
OGF1_70	5,150.690	0.000	0.000	0.000	5,138.975	Not Full	No	-0.563	11.715
OGF1_71	5,149.600	0.000	0.000	0.000	5,138.351	Not Full	No	-0.467	11.249
OGF1_72	5,148.590	0.000	0.000	0.000	5,137.874	Not Full	No	-0.605	10.716
OGF1_73	5,149.230	0.000	0.000	0.000	5,137.158	Not Full	Yes	-0.560	12.072
OGF1_74	5,148.230	0.000	0.000	0.000	5,135.953	Not Full	No	-0.605	12.277
OGF1_75	5,148.230	0.000	0.000	0.000	5,135.079	Not Full	No	-0.579	13.151
OGF2_29	5,177.635	0.000	0.000	0.000	5,163.790	Not Full	No	-0.552	13.845
OGF2_31	5,172.695	0.000	0.000	0.000	5,161.282	Not Full	No	-0.570	11.413
OGF2_32	5,167.395	0.000	0.000	0.000	5,155.854	Not Full	No	-0.568	11.541
OGF2_33	5,162.905	0.000	0.000	0.000	5,151.045	Not Full	No	-0.546	11.860
OGF2_34	5,162.905	0.000	0.000	0.000	5,149.335	Not Full	No	-0.547	13.570
OGF2_46	5,158.455	0.000	0.000	0.000	5,146.602	Not Full	No	-0.560	11.853
OGF2_49	5,156.745	0.000	0.000	0.000	5,144.611	Not Full	No	-0.551	12.134
OGF2_50	5,155.135	0.000	0.000	0.000	5,143.304	Not Full	Yes	-0.498	11.831
OGF2_65	5,153.045	49,150.061	189,599.821	0.000	5,142.976	Not Full	No	-0.522	10.069
OGF2_68	5,154.360	0.000	0.000	0.000	5,142.428	Not Full	No	-0.611	11.932
OTF1_101	5,021.153	0.000	0.000	0.000	5,004.293	Not Full	No	-1.000	16.860
OTF1_102	5,011.353	0.000	0.000	0.000	5,003.318	Not Full	No	-0.925	8.035
OTF1_103	5,010.453	0.000	0.000	0.000	5,003.318	Not Full	No	-0.665	7.135
OTF1_108	5,011.000	0.000	0.000	0.000	4,999.146	Not Full	No	-1.187	11.854
OTF1_30	5,023.393	0.000	0.000	0.000	5,016.723	Not Full	No	-0.667	6.670
OTF1_37	5,021.223	0.000	0.000	0.000	5,016.053	Not Full	No	-0.667	5.170

	ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
	OTF1_43	5,019.833	64,337.736	241,426.929	0.000	5,014.649	Not Full	No	-0.351	5.184
	OTF1_44	5,018.643	0.000	0.000	0.000	5,012.850	Not Full	No	-0.340	5.793
	OTF1_46	5,021.543	0.000	0.000	0.000	5,015.263	Not Full	No	-0.833	6.280
	OTF1_47	5,021.643	0.000	0.000	0.000	5,015.223	Not Full	No	-0.833	6.420
	OTF1_48	5,019.783	0.000	0.000	0.000	5,013.303	Not Full	No	-0.833	6.480
	OTF1_60A	5,011.220	0.000	0.000	0.000	4,993.355	Not Full	No	-1.335	17.865
	OTF1_61A	5,011.010	0.000	0.000	0.000	4,993.003	Not Full	No	-1.367	18.007
	OTF1_62	5,017.723	27,999.349	111,997.398	0.000	5,012.207	Not Full	No	-0.619	5.516
	OTF1_64	5,015.763	0.000	0.000	0.000	5,010.972	Not Full	No	-0.625	4.791
	OTF1_65	5,016.743	0.000	0.000	0.000	5,011.202	Not Full	No	-0.357	5.541
	OTF1_80	5,013.043	0.000	0.000	0.000	5,009.175	Not Full	No	-0.355	3.868
	OTF1_82	5,013.773	0.000	0.000	0.000	5,009.655	Not Full	No	-0.622	4.118
	OTF1_87	5,013.123	21,850.552	87,402.207	0.000	5,008.534	Not Full	No	-0.562	4.589
	OTF1_88	5,027.903	16,699.674	66,798.695	0.000	5,019.137	Not Full	No	-0.553	8.766
	OTF1_89	5,022.873	0.000	0.000	0.000	5,017.140	Not Full	Yes	2.360	5.733
	OTF1_90	5,023.493	0.000	0.000	0.000	5,016.609	Not Full	No	-0.510	6.884
	OTF1_92	5,022.393	0.000	0.000	0.000	5,015.904	Not Full	No	-0.516	6.489
	OTF1_93	5,021.323	0.000	0.000	0.000	5,015.787	Not Full	No	-0.532	5.536
П	OTF1_94	5,017.163	0.000	0.000	0.000	5,012.827	Not Full	No	-0.563	4.336
	OTF1_95	5,012.943	29,275.189	116,937.287	0.000	5,008.918	Not Full	Yes	-0.402	4.025
	OTF1_96	5,013.243	0.000	0.000	0.000	5,007.341	Not Full	No	-0.772	5.902
	OTF1_97	5,012.803	0.000	0.000	0.000	5,006.972	Not Full	No	-0.641	5.831
	OTF1_98	5,011.373	0.000	0.000	0.000	5,005.728	Not Full	No	-0.665	5.645
	RMF1_114	5,083.790	0.000	0.000	0.000	5,069.171	Not Full	No	-0.719	14.619
П	RMF1_118	5,074.620	0.000	0.000	0.000	5,060.105	Not Full	No	-0.565	14.515
	SCC_01	5,118.460	48,695.022	187,936.195	0.000	5,101.767	Not Full	No	-0.460	16.693
	SCC_02	5,113.610	45,550.063	176,438.226	0.000	5,096.644	Not Full	No	-0.549	16.966
	SCC_03	5,106.940	0.000	0.000	0.000	5,092.137	Not Full	No	-0.547	14.803
	SCC_04	5,111.500	0.000	0.000	0.000	5,090.349	Not Full	No	-0.544	21.151
	SCC_05	5,108.930	0.000	0.000	0.000	5,088.751	Not Full	No	-0.543	20.179
	SCC_06	5,106.410	0.000	0.000	0.000	5,087.517	Not Full	No	-0.547	18.893
	SCC_07	5,102.770	9,999.356	39,997.425	0.000	5,084.597	Not Full	No	-0.723	18.173
	SCC_08	5,097.960	0.000	0.000	0.000	5,081.285	Not Full	No	-0.745	16.675
	SCC_09	5,094.160	5,699.518	22,798.071	0.000	5,076.850	Not Full	No	-0.730	17.310
	SCC_10	5,093.370	0.000	0.000	0.000	5,075.818	Not Full	Yes	-0.662	17.552
	SCC_11	5,089.070	0.000	0.000	0.000	5,073.634	Not Full	No	-0.786	15.436
	SCC_11A	5,087.810	517,999.485	1,395,342.347	0.000	5,066.004		Yes	-0.396	21.806
Πl	SCC_12	5,087.290	0.000	0.000	0.000	5,065.513	Not Full	No	-0.397	21.777
	SCC_13	5,085.400	0.000	0.000	0.000	5,064.566	Not Full	No	-0.394	20.834
同	SCC_14	5,081.740	0.000	0.000	0.000	5,063.373		No	-0.397	18.367
同	SCC_15	5,079.780	0.000	0.000	0.000	5,062.174	Not Full	No	-0.396	17.606

	ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
П	SCC_16	5,077.060	0.000	0.000	0.000	5,060.951	Not Full	No	-0.399	16.109
П	SCC_17	5,074.870	0.000	0.000	0.000	5,059.723	Not Full	No	-0.397	15.147
Π	SCC_18	5,073.800	0.000	0.000	0.000	5,058.976	Not Full	No	-0.394	14.824
Ħ	SCC_19	5,072.830	0.000	0.000	0.000	5,057.813	Not Full	No	-0.397	15.017
П	SCC_20	5,071.610	0.000	0.000	0.000	5,056.783	Not Full	No	-0.397	14.827
	SCC_21	5,069.850	0.000	0.000	0.000	5,056.280	Not Full	No	-0.250	13.570
П	SUN_1	5,117.830	58,999.658	224,841.521	0.000	5,104.343	Not Full	No	-0.463	13.487
	SUN_10	5,081.060	0.000	0.000	0.000	5,069.146	Not Full	No	-0.481	11.914
	SUN_11	5,071.850	0.000	0.000	0.000	5,059.233	Not Full	No	-0.514	12.617
	SUN_12	5,054.840	0.000	0.000	0.000	5,042.364	Not Full	Yes	-0.373	12.476
	SUN_13	5,053.120	0.000	0.000	0.000	5,040.454	Not Full	No	-0.432	12.666
	SUN_14	5,050.790	0.000	0.000	0.000	5,036.918	Not Full	No	-0.479	13.872
	SUN_15	5,035.740	0.000	0.000	0.000	5,029.309	Not Full	Yes	-0.358	6.431
	SUN_2	5,109.460	0.000	0.000	0.000	5,097.571	Not Full	No	-0.456	11.889
	SUN_3	5,103.540	0.000	0.000	0.000	5,091.689	Not Full	No	-0.417	11.851
	SUN_4	5,096.140	0.000	0.000	0.000	5,088.457	Not Full	No	-0.400	7.683
	SUN_5	5,099.970	0.000	0.000	0.000	5,087.239	Not Full	Yes	-0.378	12.731
	SUN_6	5,104.710	0.000	0.000	0.000	5,085.588	Not Full	No	-0.378	19.122
	SUN_7	5,112.510	0.000	0.000	0.000	5,084.339	Not Full	No	-0.378	28.171
	SUN_8	5,094.800	0.000	0.000	0.000	5,082.891	Not Full	No	-0.476	11.909
	SUN_9	5,087.680	0.000	0.000	0.000	5,076.775	Not Full	No	-0.471	10.905
	TOE_2576	5,140.690	0.000	0.000	0.000	5,129.354	Not Full	No	-0.986	11.336
	TOE_2577	5,137.370	0.000	0.000	0.000	5,127.454	Not Full	No	-1.106	9.916
	TOE_2578	5,132.730	0.000	0.000	0.000	5,123.325	Not Full	No	-1.105	9.405
	TOE_2579	5,129.120	0.000	0.000	0.000	5,118.917	Not Full	No	-1.053	10.203
	TOE_2580	5,123.350	0.000	0.000	0.000	5,113.226	Not Full	No	-0.964	10.124
	TOE_2581	5,125.960	0.000	0.000	0.000	5,111.191	Not Full	No	-0.949	14.769
	TOE_2582	5,126.690	0.000	0.000	0.000	5,109.406	Not Full	No	-0.954	17.284
	TOE_2583	5,127.830	0.000	0.000	0.000	5,107.537	Not Full	No	-0.923	20.293
	TOE_2584	5,127.830	0.000	0.000	0.000	5,105.848	Not Full	No	-0.932	21.982
	TOE_2585	5,078.040	0.000	0.000	0.000	5,064.270	Not Full	No	-1.050	13.770
	TOE_2586	5,048.720	0.000	0.000	0.000	5,037.128	Not Full	No	-0.992	11.592
	TOE_2587	5,051.780	0.000	0.000	0.000	5,035.000	Not Full	No	-1.100	16.780
	TOE_2588	5,042.550	0.000	0.000	0.000	5,024.612	Not Full	No	-1.118	17.938
	TOE_2589	5,027.940	53,249.740	204,588.246	0.000	5,012.431	Not Full	No	-1.099	15.509
	TOE_2590	5,029.380	0.000	0.000	0.000	5,009.454	Not Full	No	-1.186	19.926
	TOE_2591	5,026.905	0.000	0.000	0.000	5,008.758	Not Full	Yes	-1.167	18.147
	TOE_2592	5,109.510	0.000	0.000	0.000	5,097.701	Not Full	No	-0.436	11.809
	TOE_2593	5,110.100	0.000	0.000	0.000	5,097.271	Not Full	No	-0.486	12.829
أ	TOE_2594	5,034.380	0.000	0.000	0.000	5,016.390	Not Full	No	-0.740	17.990
٦l	TOE_2595	5,027.210	0.000	0.000	0.000	5,015.609	Not Full	No	-0.671	11.601

ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
TOE_2596	5,030.630	0.000	0.000	0.000	5,014.831	Not Full	No	-2.079	15.799
TOE_2597	5,029.850	0.000	0.000	0.000	5,014.491	Not Full	No	-2.019	15.359
TOE_2598	5,030.780	0.000	0.000	0.000	5,013.897	Not Full	No	-0.943	16.883
TOE_2609	5,049.595	0.000	0.000	0.000	5,039.753	Not Full	Yes	-0.912	9.842
TOE_2610	5,049.965	0.000	0.000	0.000	5,040.682	Not Full	No	-1.133	9.283
TOE_2612	5,052.325	0.000	0.000	0.000	5,042.836	Not Full	No	-1.139	9.489
TOE_2615	5,011.000	51,746.381	199,091.963	0.000	4,995.144	Not Full	Yes	-0.981	15.856
TOE_2619	5,011.075	0.000	0.000	0.000	4,994.404	Not Full	No	-1.121	16.671
TOE_2620	5,141.225	0.000	0.000	0.000	5,129.382	Not Full	Yes	-0.743	11.843
TOE_2621	5,148.225	0.000	0.000	0.000	5,131.905	Not Full	No	-0.810	16.320
TOE_2622	5,148.225	0.000	0.000	0.000	5,133.818	Not Full	No	-0.757	14.407
TOE_2623	5,158.225	0.000	0.000	0.000	5,144.065	Not Full	No	-0.833	14.160
TOE_2624	5,168.225	0.000	0.000	0.000	5,154.505	Not Full	No	-0.833	13.720
TOE_2625	5,173.225	0.000	0.000	0.000	5,160.575	Not Full	No	-0.833	12.650
TOE_2626	5,185.225	14,250.235	57,000.939	0.000	5,168.595	Not Full	No	-0.577	16.630
TOE_2628	5,083.085	0.000	0.000	0.000	5,068.810	Not Full	Yes	-1.025	14.275
TOE_2629	5,085.095	0.000	0.000	0.000	5,070.472	Not Full	No	-0.803	14.623
TOE_2630	5,088.805	0.000	0.000	0.000	5,074.493	Not Full	Yes	-0.672	14.312
TOE_2631	5,095.275	44,999.983	174,427.134	0.000	5,076.086	Not Full	No	-0.799	19.189
TOE_2635	5,080.000	0.000	0.000	0.000	5,072.240	Not Full	No	-0.833	7.760
TOE_2636	5,085.000	0.000	0.000	0.000	5,071.110	Not Full	No	-0.833	13.890
TOE_2637	5,085.000	0.000	0.000	0.000	5,072.796	Not Full	No	-0.714	12.204
TOE_2638	5,085.000	0.000	0.000	0.000	5,071.672	Not Full	No	-0.668	13.328
TOE_2639	5,085.000	0.000	0.000	0.000	5,070.913	Not Full	No	-0.657	14.087
TOE_2640	5,091.070	0.000	0.000	0.000	5,077.273	Not Full	No	-0.687	13.797
TOE_2646	5,212.890	0.000	0.000	0.000	5,202.610	Not Full	No	-0.266	10.280
TOE_2647	5,214.610	0.000	0.000	0.000	5,204.195	Not Full	Yes	-0.382	10.415
TOE_2648	5,057.225	0.000	0.000	0.000	5,037.374	Not Full	No	-0.561	19.851
TOE_2649	5,058.225	0.000	0.000	0.000	5,038.049	Not Full	No	-0.566	20.176
TOE_2650	5,051.225	32,937.108	130,325.262	0.000	5,035.489	Not Full	No	-0.806	15.736
TOE_2651	5,033.085	0.000	0.000	0.000	5,017.849	Not Full	Yes	-0.576	15.236
TOE_2652	5,031.225	0.000	0.000	0.000	5,017.809	Not Full	No	-0.546	13.416
TOE_2653	5,048.625	0.000	0.000	0.000	5,016.241	Not Full	No	-0.544	32.384
TOE_2654	5,029.225	34,394.387	135,653.075	0.000	5,014.423	Not Full	No	-0.722	14.802
TOE_2655	5,028.225	0.000	0.000	0.000	5,010.396	Not Full	Yes	-0.834	17.829
TOE_2656	5,040.685	0.000	0.000	0.000	5,028.129	Not Full	No	-0.846	12.556
TOE_2657	5,072.520	113,160.917	388,704.998	0.000	5,059.009	Not Full	No	-0.377	13.511
TOE_2659	5,069.950	0.000	0.000	0.000	5,056.143	Not Full	No	-0.373	13.807
TOE_2660	5,063.730	0.000	0.000	0.000	5,051.343	Not Full	No	-0.354	12.387
TOE_2661	5,060.080	0.000	0.000	0.000	5,047.994	Not Full	No	-0.353	12.086
TOE_2662	5,055.000	0.000	0.000	0.000	5,041.470	Not Full	No	-0.765	13.530

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ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
TOE_2663	5,059.350	0.000	0.000	0.000	5,046.871	Not Full	No	-0.375	12.479
TOE_2664	5,051.225	0.000	0.000	0.000	5,039.002	Not Full	Yes	-0.573	12.223
TOE_2673	5,142.740	0.000	0.000	0.000	5,127.339	Not Full	No	-0.534	15.401
TOE_2710	5,188.970	121,000.274	411,089.749	0.000	5,171.869	Not Full	Yes	-0.154	17.101
TOE_2711	5,175.840	0.000	0.000	0.000	5,168.648	Not Full	No	-0.235	7.192
TOE_2712	5,183.520	0.000	0.000	0.000	5,171.253	Not Full	No	0.030	12.267
TOE_2713	5,179.770	0.000	0.000	0.000	5,170.699	Not Full	No	0.006	9.071
TOE_2714	5,179.540	0.000	0.000	0.000	5,170.276	Not Full	No	0.022	9.264
TOE_2715	5,171.960	0.000	0.000	0.000	5,168.053	Not Full	No	0.230	3.907
TOE_2716	5,173.770	0.000	0.000	0.000	5,167.319	Not Full	No	0.036	6.451
TOE_2717	5,171.760	0.000	0.000	0.000	5,166.370	Not Full	No	-0.423	5.390
TOE_2718	5,169.220	0.000	0.000	0.000	5,159.920	Not Full	Yes	-0.163	9.300
TOE_2719	5,171.870	0.000	0.000	0.000	5,157.470	Not Full	No	-0.334	14.400
TOE_2720	5,162.710	0.000	0.000	0.000	5,153.683	Not Full	Yes	-0.160	9.027
TOE_2721	5,160.580	0.000	0.000	0.000	5,151.444	Not Full	No	-0.469	9.136
TOE_2722	5,153.520	0.000	0.000	0.000	5,144.526	Not Full	No	-0.467	8.994
TOE_2723	5,149.910	0.000	0.000	0.000	5,140.833	Not Full	No	-0.480	9.077
TOE_2724	5,137.860	15,124.314	60,497.257	0.000	5,129.349	Not Full	Yes	-0.264	8.511
TOE_2725	5,133.820	0.000	0.000	0.000	5,126.491	Not Full	No	-0.282	7.329
TOE_2726	5,130.690	0.000	0.000	0.000	5,123.114	Not Full	No	-0.460	7.576
TOE_2727	5,121.990	0.000	0.000	0.000	5,112.803	Not Full	No	-0.521	9.187
TOE_2728	5,115.430	0.000	0.000	0.000	5,104.631	Not Full	No	-0.512	10.799
TOE_2729	5,114.600	0.000	0.000	0.000	5,101.930	Not Full	No	-0.453	12.670
TOE_2730	5,107.960	0.000	0.000	0.000	5,095.401	Not Full	No	-0.332	12.559
TOE_2731	5,101.300	0.000	0.000	0.000	5,092.496	Not Full	No	-0.421	8.804
TOE_2732	5,104.000	0.000	0.000	0.000	5,094.355	Not Full	No	-0.332	9.645
TOE_2733	5,112.400	0.000	0.000	0.000	5,095.636	Not Full	Yes	-0.341	16.764
TOE_2734	5,010.600	0.000	0.000	0.000	4,998.538	Not Full	No	-1.487	12.062
TOE_2735	5,014.525	0.000	0.000	0.000	4,999.482	Not Full	No	-1.143	15.043
TOE_2736	5,017.825	0.000	0.000	0.000	5,000.422	Not Full	No	-1.103	17.403
TOE_2737	5,023.625	0.000	0.000	0.000	5,003.196	Not Full	No	-1.129	20.429
TOE_2738	5,023.325	0.000	0.000	0.000	5,004.138	Not Full	No	-0.987	19.187
TOE_2739	5,020.425	0.000	0.000	0.000	5,005.127	Not Full	No	-1.098	15.298
TOE_2740	5,022.425	0.000	0.000	0.000	5,006.169	Not Full	No	-1.056	16.256
TOE_2741	5,025.425	0.000	0.000	0.000	5,007.126	Not Full	No	-0.999	18.299
TOE_2742	5,025.825	0.000	0.000	0.000	5,007.406	Not Full	No	-1.119	18.419
TOE_2743	5,026.525	0.000	0.000	0.000	5,007.947	Not Full	No	-1.278	18.578
TOE_2744	5,029.425	0.000	0.000	0.000	5,010.253	Not Full	Yes	0.228	19.172
TOE_2745	5,028.225	0.000	0.000	0.000	5,010.388	Not Full	No	-0.287	17.837
TOE_2746	5,027.525	0.000	0.000	0.000	5,014.824	Not Full	No	-1.001	12.701
TOE_2747	5,053.435	92,584.765	328,169.958	0.000	5,038.704	Not Full	No	-1.021	14.731

	ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
	TOE_2748	5,094.000	0.000	0.000	0.000	5,081.331	Not Full	No	-0.419	12.669
	TOE_2749	5,090.550	0.000	0.000	0.000	5,078.111	Not Full	No	-0.389	12.439
	TOE_2750	5,087.000	0.000	0.000	0.000	5,074.231	Not Full	No	-0.519	12.769
	TOE_2751	5,081.000	0.000	0.000	0.000	5,068.801	Not Full	No	-0.779	12.199
	TOE_2752	5,075.220	0.000	0.000	0.000	5,062.994	Not Full	No	-0.726	12.226
	TOE_2753	5,069.870	0.000	0.000	0.000	5,058.897	Not Full	No	-0.743	10.973
П	TOE_2754	5,066.730	0.000	0.000	0.000	5,054.902	Not Full	No	-0.688	11.828
П	TOE_2755	5,064.690	0.000	0.000	0.000	5,053.749	Not Full	No	-0.721	10.941
П	TOE_2756	5,059.960	0.000	0.000	0.000	5,047.162	Not Full	No	-0.718	12.798
Ħ	TOE_2757	5,058.890	0.000	0.000	0.000	5,046.361	Not Full	No	-0.769	12.529
Ħ	TOE_2758	5,033.130	0.000	0.000	0.000	5,020.097	Not Full	No	-0.693	13.033
Ħ	TOE_2759	5,062.630	33,805.427	133,499.838	0.000	5,050.646	Not Full	No	-0.724	11.984
Ħ	TOE_2760	5,053.320	0.000	0.000	0.000	5,039.988	Not Full	No	-0.802	13.332
Ħ	TOE_2761	5,030.160	0.000	0.000	0.000	5,019.224	Not Full	No	-0.846	10.936
Ħ	TOE_2762	5,029.520	0.000	0.000	0.000	5,019.119	Not Full	No	-0.701	10.401
Ħ	TOE_2763	5,031.630	0.000	0.000	0.000	5,017.092	Not Full	No	-0.738	14.538
Ħ	TOE_2764	5,030.240	0.000	0.000	0.000	5,018.180		No	-0.760	12.060
Ħ	TOE_2765	5,031.520	0.000	0.000	0.000	5,016.213	Not Full	No	-0.637	15.307
H	TOE_2766	5,029.380	0.000	0.000	0.000	5,015.902		No	-0.718	13.478
H	TOE_2767	5,028.000	0.000	0.000	0.000	5,015.359		No	-0.911	12.641
H	TOE_2768	5,027.030	0.000	0.000	0.000	5,013.392		No	-1.038	13.638
H	TOE_2769	5,021.960	0.000	0.000	0.000	5,009.311		No	-0.749	12.649
H	TOE_2770	5,018.710	0.000	0.000	0.000	5,008.216		No	-0.744	10.494
H	TOE_2771	5,019.010	3,500.639	14,002.555	0.000	5,007.170		No	-0.920	11.840
H	TOE_2772	5,020.000	0.000	0.000	0.000	5,006.762		Yes	-0.768	13.238
H	TOE_2773	5,019.000	0.000	0.000	0.000	5,006.144		No	-0.506	12.856
H	TOE_2774	5,017.000	0.000	0.000	0.000	5,005.998		No	0.348	11.002
H	TOE_2775	5,015.840	0.000	0.000	0.000	5,005.143		No	-0.657	10.697
H	TOE_2776	5,014.980	0.000	0.000	0.000	5,004.504		No	-0.536	10.476
H	TOE_2777	5,012.960	0.000	0.000	0.000	5,003.968		No	-0.562	8.992
H	TOE_2778	5,012.130	0.000	0.000	0.000	5,003.501		No	-0.539	8.629
H	TOE_2779	5,009.900	0.000	0.000	0.000	5,003.339		No	-0.241	6.561
H	TOE_2780	5,011.970	0.000	0.000	0.000	5,003.074		No	-0.036	8.896
H	TOE_2781	5,011.660	0.000	0.000	0.000	5,002.908		No	0.108	8.752
H	TOE 2782	5,011.310	0.000	0.000	0.000	5,002.060		No	-0.880	9.250
H	TOE_2783	5,008.830	0.000	0.000	0.000	5,001.829		No	-0.731	7.001
H	TOE 2784	5,006.790	0.000	0.000	0.000	5,000.726		No	-0.824	6.064
H	TOE_2785	5,012.690	0.000	0.000	0.000	5,000.597		No	-0.823	12.093
H	TOE 2786	5,008.290	92,388.925	327,593.797	0.000	5,001.705		No	0.065	6.585
H	TOE_2787	5,016.850	0.000	0.000	0.000	5,000.302		No	0.072	16.548
H	TOE_2788	5,014.290	0.000	0.000	0.000	5,000.456		No	-0.684	13.834

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ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
TOE_2789	5,007.240	0.000	0.000	0.000	4,996.136	Not Full	No	-1.014	11.104
TOE_2790	5,012.380	44,943.823	174,221.813	0.000	4,996.359	Not Full	No	-0.721	16.021
TOE_2791	5,004.080	0.000	0.000	0.000	4,995.705	Not Full	No	-0.995	8.375
TOE_2792	5,003.840	0.000	0.000	0.000	4,995.432	Not Full	No	-1.118	8.408
TOE_2793	5,008.860	0.000	0.000	0.000	4,994.806	Not Full	No	-1.184	14.054
TOE_2794	5,009.670	0.000	0.000	0.000	4,994.251	Not Full	No	-1.069	15.419
TOE_2795	5,011.010	0.000	0.000	0.000	4,993.931	Not Full	No	-0.889	17.079
TOE_2798	5,011.503	65,534.375	245,144.888	0.000	5,000.988	Not Full	Yes	-0.445	10.515
TOE_2799	5,007.780	0.000	0.000	0.000	5,000.231	Not Full	No	-0.855	7.549
TOE_2800	5,010.450	0.000	0.000	0.000	4,992.624	Not Full	No	-2.276	17.826
TOE_2801	5,055.525	0.000	0.000	0.000	5,045.298	Not Full	No	-1.157	10.227
TOE_2802	5,061.985	0.000	0.000	0.000	5,047.250	Not Full	No	-1.015	14.735
TOE_2803	5,065.905	0.000	0.000	0.000	5,048.160	Not Full	No	-0.995	17.745
TOE_2804	5,067.345	0.000	0.000	0.000	5,049.156	Not Full	No	-0.989	18.189
TOE_2805	5,093.920	0.000	0.000	0.000	5,081.845	Not Full	No	-1.065	12.075
TOE_2806	5,098.000	0.000	0.000	0.000	5,085.160	Not Full	No	-1.080	12.840
TOE_2807	5,096.900	0.000	0.000	0.000	5,087.413	Not Full	No	-0.967	9.487
TOE_2808	5,105.750	0.000	0.000	0.000	5,094.804	Not Full	No	-1.076	10.946
TOE_2809	5,152.350	0.000	0.000	0.000	5,134.005	Not Full	No	-0.579	18.345
TOE_2817	5,046.820	0.000	0.000	0.000	5,031.813	Not Full	No	-0.837	15.007
TOE_2818	5,034.360	0.000	0.000	0.000	5,021.105	Not Full	Yes	-0.835	13.255
TOE_2819	5,101.240	0.000	0.000	0.000	5,090.287	Not Full	No	-1.013	10.953
TOE_2825	5,011.300	0.000	0.000	0.000	4,991.657	Not Full	No	-1.843	19.643
TOE_2826	5,010.820	0.000	0.000	0.000	4,991.019	Not Full	Yes	-1.431	19.801
TOE_2827	5,010.790	0.000	0.000	0.000	4,990.334	Not Full	No	-1.706	20.456
TOE_2828	5,009.220	0.000	0.000	0.000	4,989.472	Not Full	No	-1.398	19.748
TOE_2829	5,007.990	0.000	0.000	0.000	4,988.127	Not Full	Yes	-1.693	19.863
TOE_2830	5,007.630	0.000	0.000	0.000	4,987.976	Not Full	No	-1.454	19.654
TOE_2831	5,006.030	0.000	0.000	0.000	4,987.499	Not Full	No	-1.401	18.531
TOE_2832	5,004.210	0.000	0.000	0.000	4,987.095	Not Full	No	-1.615	17.115
TOE_2833	5,004.410	0.000	0.000	0.000	4,986.839	Not Full	No	-1.441	17.571
TOE_2834	5,004.240	0.000	0.000	0.000	4,985.860	Not Full	No	-1.580	18.380
TOE_2835	5,001.480	0.000	0.000	0.000	4,984.875	Not Full	No	-1.525	16.605
TOE_2836	5,000.540	0.000	0.000	0.000	4,983.995	Not Full	No	-1.465	16.545
TOE_2837	5,000.330	0.000	0.000	0.000	4,983.549	Not Full	No	-1.121	16.781
TOE_2838	5,005.660	0.000	0.000	0.000	4,982.379	Not Full	No	-1.401	23.281
TOE_2839	5,002.590	0.000	0.000	0.000	4,982.891	Not Full	No	-1.419	19.699
TOE_2840	5,006.110	0.000	0.000	0.000	4,981.711	Not Full	No	-1.549	24.399
TOE_2841	5,002.460	0.000	0.000	0.000	4,980.859	Not Full	No	-1.751	21.601
TOE_2842	5,002.920	0.000	0.000	0.000	4,979.931	Not Full	Yes	-1.679	22.989
TOE_2843	5,000.380	0.000	0.000	0.000	4,980.454	Not Full	No	-1.916	19.926

ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
TOE_2844	4,994.190	0.000	0.000	0.000	4,978.507	Not Full	No	-1.813	15.683
TOE 2845	4,993.980	0.000	0.000	0.000	4,978.498	Not Full	Yes	-1.482	15.482
TOE 2846	4,991.150	0.000	0.000	0.000	4,977.950	Not Full	No	-1.550	13.200
TOE_2847	4,990.880	0.000	0.000	0.000	4,977.044	Not Full	No	-1.826	13.836
TOE_2848	4,990.370	0.000	0.000	0.000	4,976.508	Not Full	No	-1.852	13.862
TOE_2849	4,990.000	0.000	0.000	0.000	4,973.931	Not Full	No	-2.049	16.069
TOE_2850	4,988.020	0.000	0.000	0.000	4,969.784	Not Full	No	-2.026	18.236
TOE_2851	4,987.060	0.000	0.000	0.000	4,967.587	Not Full	No	-1.823	19.473
TOE_2852	4,985.500	0.000	0.000	0.000	4,967.301	Not Full	Yes	-1.439	18.199
TOE_2853	4,986.910	0.000	0.000	0.000	4,967.302	Not Full	No	-1.778	19.608
TOE_2854	4,987.460	0.000	0.000	0.000	4,970.109	Not Full	No	-0.641	17.351
TOE_2855	4,986.200	0.000	0.000	0.000	4,971.112	Not Full	No	-0.568	15.088
TOE_2856	4,988.050	0.000	0.000	0.000	4,971.871	Not Full	No	-0.609	16.179
TOE_2857	4,987.820	0.000	0.000	0.000	4,972.235	Not Full	Yes	-0.615	15.585
TOE_2858	4,988.840	0.000	0.000	0.000	4,975.907	Not Full	No	-0.723	12.933
TOE_2859	4,989.490	0.000	0.000	0.000	4,977.896	Not Full	Yes	-0.654	11.594
TOE_2860	4,985.430	0.000	0.000	0.000	4,966.536	Not Full	No	-1.384	18.894
TOE_2861	4,983.250	0.000	0.000	0.000	4,965.513	Not Full	No	-1.667	17.737
TOE_2862	4,982.380	0.000	0.000	0.000	4,965.482	Not Full	Yes	-1.228	16.898
TOE_2863	4,982.420	0.000	0.000	0.000	4,964.839	Not Full	No	-1.571	17.581
TOE_2864	4,980.720	0.000	0.000	0.000	4,964.016	Not Full	No	-1.694	16.704
TOE_2865	4,981.960	0.000	0.000	0.000	4,963.815	Not Full	No	-1.395	18.145
TOE_2866	4,982.300	0.000	0.000	0.000	4,963.273	Not Full	No	-1.397	19.027
TOE_2867	4,984.250	29,000.149	115,931.741	0.000	4,962.408	Not Full	No	-1.692	21.842
TOE_2868	4,980.960	0.000	0.000	0.000	4,961.319	Not Full	No	-1.471	19.641
TOE_2869	4,978.450	0.000	0.000	0.000	4,960.471	Not Full	No	-1.419	17.979
TOE_2870	4,976.690	0.000	0.000	0.000	4,959.660	Not Full	No	-1.440	17.030
TOE_2871	4,974.820	0.000	0.000	0.000	4,958.827	Not Full	No	-1.383	15.993
TOE_2872	4,973.300	0.000	0.000	0.000	4,957.977	Not Full	No	-1.503	15.323
TOE_2873	4,970.750	0.000	0.000	0.000	4,957.363	Not Full	No	-1.277	13.387
TOE_2874	4,969.570	0.000	0.000	0.000	4,956.960	Not Full	No	-1.490	12.610
TOE_2875	4,967.820	0.000	0.000	0.000	4,956.527	Not Full	No	-1.563	11.293
TOE_2876	4,970.850	0.000	0.000	0.000	4,956.186	Not Full	No	-1.504	14.664
TOE_2877	4,969.020	0.000	0.000	0.000	4,955.555	Not Full	No	-1.385	13.465
TOE_2878	4,975.470	0.000	0.000	0.000	4,954.877		No	-1.433	20.593
TOE_2879	4,993.130	0.000	0.000	0.000	4,954.163	Not Full	No	-1.377	38.967
TOE_2880	4,992.470	0.000	0.000	0.000	4,953.730	Not Full	No	-1.670	38.740
TOE_2881	4,986.390	0.000	0.000	0.000	4,953.351		No	-1.369	33.039
TOE_2882	4,983.690	80,500.290	291,643.984	0.000	4,952.908	Not Full	No	-1.412	30.782
TOE_2883	4,977.290	0.000	0.000	0.000	4,952.518	Not Full	No	-1.452	24.772
TOE_2884	4,973.860	0.000	0.000	0.000	4,951.626	Not Full	No	-1.434	22.234

7 7 7 7 1	ID	Rim Elevation	Base Flow	Total Flow	Storm Flow	Grade	Status	Hydraulic	Surcharge Depth	Unfilled Depth
		(ft)	(gpd)	(gpd)	(gpd)	(ft)		Jump	(ft)	(ft)
	TOE_2885	4,966.950	0.000	0.000	0.000	4,950.693	Not Full	No	-1.557	16.257
	TOE_2886	4,962.980	0.000	0.000	0.000	4,949.931	Not Full	Yes	-1.449	13.049
	TOE_2887	4,963.360	0.000	0.000	0.000	4,949.222	Not Full	No	-1.558	14.138
	TOE_2888	4,965.190	0.000	0.000	0.000	4,948.444	Not Full	No	-1.116	16.746
	TOE_2889	4,956.350	45,236.143	175,290.535	0.000	4,941.155	Not Full	No	-1.615	15.195
	TOE_2890	4,957.260	0.000	0.000	0.000	4,940.784	Not Full	No	-1.576	16.476
	TOE_2891	4,956.430	0.000	0.000	0.000	4,939.549	Not Full	No	-1.791	16.881
	TOE_2892	4,952.720	0.000	0.000	0.000	4,939.543	Not Full	Yes	-1.267	13.177
	TOE_2893	4,951.610	0.000	0.000	0.000	4,938.577	Not Full	No	-1.483	13.033
	TOE_2894	4,950.110	0.000	0.000	0.000	4,937.659	Not Full	No	-1.401	12.451
	TOE_2895	4,948.680	0.000	0.000	0.000	4,936.648	Not Full	No	-1.422	12.032
	TOE_2896	4,945.630	0.000	0.000	0.000	4,935.908	Not Full	No	-1.272	9.722
	TOE_2897	4,944.050	0.000	0.000	0.000	4,934.686	Not Full	No	-1.784	9.364
	TOE_2898	4,942.250	0.000	0.000	0.000	4,932.978	Not Full	Yes	-1.332	9.272
	TOE_2899	4,941.010	0.000	0.000	0.000	4,932.121	Not Full	No	-1.479	8.889
	TOE_2900	4,939.280	0.000	0.000	0.000	4,931.129	Not Full	No	-1.611	8.151
	TOE_2901	4,939.080	0.000	0.000	0.000	4,931.043	Not Full	No	-1.487	8.037
	TOE_2902	4,941.290	0.000	0.000	0.000	4,930.287	Not Full	No	-1.423	11.003
	TOE_2903	4,936.850	0.000	0.000	0.000	4,929.344	Not Full	No	-1.346	7.506
	TOE_2904	4,934.060	147,057.065	484,428.098	0.000	4,929.264	Not Full	No	-0.606	4.796
	TOE_2905	5,019.625	0.000	0.000	0.000	5,002.211	Not Full	No	-0.814	17.414
	TOE_2906	5,019.725	0.000	0.000	0.000	5,001.340	Not Full	No	-1.085	18.385
	TOE_2914	5,023.740	0.000	0.000	0.000	5,009.935	Not Full	Yes	-0.745	13.805
	TOE_2915	5,115.200	0.000	0.000	0.000	5,100.410	Not Full	No	-0.457	14.790
	TOE_2916	5,116.100	0.000	0.000	0.000	5,103.372	Not Full	No	-0.495	12.728
	TOE_2917	5,127.100	55,624.299	213,269.634	0.000	5,116.967	Not Full	No	-0.500	10.133
	TOE_2920	4,988.020	0.000	0.000	0.000	4,970.457	Not Full	No	-2.033	17.563
	TOE_2921	5,009.220	0.000	0.000	0.000	4,988.785	Not Full	No	-1.745	20.435
	TOE_2941	5,101.560	0.000	0.000	0.000	5,083.584	Not Full	No	-0.716	17.976
	TOE_2942	5,095.220	0.000	0.000	0.000	5,079.759	Not Full	No	-0.771	15.461
	TOE_2943	5,086.380	0.000	0.000	0.000	5,070.413	Not Full	No	-0.767	15.967
	TOE_2944	5,080.970	199,884.885	627,001.355	0.000	5,057.830	Not Full	Yes	-0.690	23.140
	TOE_2945	5,071.410	0.000	0.000	0.000	5,057.338	Not Full	No	-0.582	14.072
	TOE_2946	5,070.940	0.000	0.000	0.000	5,056.648	Not Full	No	-0.632	14.292
	TOE_2947	5,070.110	0.000	0.000	0.000	5,056.250	Not Full	No	-0.460	13.860
	TOE_2948	5,070.560	22,499.992	89,999.966	0.000	5,056.148		No	-0.312	14.412
	TOE_2949	5,067.830	0.000	0.000	0.000	5,055.534		No	-0.436	12.296
	TOE_2950	4,930.000	0.000	0.000	0.000	4,928.468		No	-0.662	1.532
	TOE_2951	4,934.060	0.000	0.000	0.000	4,929.161		No	-0.589	4.899
	TOE_2960	5,099.000	0.000	0.000	0.000	5,087.472	Not Full	No	-0.488	11.528
	TOE_2962	5,098.360	0.000	0.000	0.000	5,088.352		Yes	0.012	10.008

	ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
	TOE_2964	5,098.200	19,787.033	79,148.130	0.000	5,087.481	Not Full	No	-0.719	10.719
	TOE_2965	5,099.700	0.000	0.000	0.000	5,088.910	Not Full	Yes	-0.590	10.790
	TOE_2966	5,104.500	0.000	0.000	0.000	5,096.054	Not Full	No	-0.746	8.446
	TOE_2967	5,109.100	0.000	0.000	0.000	5,098.203	Not Full	Yes	-0.597	10.897
	TOE_2968	5,110.300	0.000	0.000	0.000	5,100.083	Not Full	No	-0.717	10.217
	TOE_2969	5,111.800	0.000	0.000	0.000	5,099.164	Not Full	No	-0.636	12.636
	TOE_2970	5,116.500	51,750.701	199,107.757	0.000	5,103.830	Not Full	No	-0.570	12.670
	TOE_2971	5,115.900	0.000	0.000	0.000	5,102.603	Not Full	No	-0.597	13.297
	TOE_2972	5,117.400	0.000	0.000	0.000	5,101.278	Not Full	No	-0.622	16.122
	TOE_2973	5,120.000	0.000	0.000	0.000	5,105.873	Not Full	No	-0.627	14.127
	TOE_2977	5,105.640	13,249.435	52,997.740	0.000	5,099.334	Not Full	No	-0.483	6.306
	TOE_2978	5,133.570	29,250.709	116,847.788	0.000	5,112.733	Not Full	No	-0.987	20.837
	TOE_2979	5,125.960	0.000	0.000	0.000	5,110.809	Not Full	No	-0.951	15.151
П	TOE_2980	5,135.280	0.000	0.000	0.000	5,109.300	Not Full	Yes	-0.940	25.980
	TOE_2981	5,129.120	0.000	0.000	0.000	5,118.091	Not Full	No	-1.053	11.029
	TOE_2982	5,156.250	0.000	0.000	0.000	5,134.500	Not Full	No	-1.500	21.750
П	TOE_2983	5,156.910	500,421.412	1,355,387.386	0.000	5,133.789	Not Full	No	-1.171	23.121
	TOE_2984	5,083.315	0.000	0.000	0.000	5,073.524	Not Full	No	-0.861	9.791
	TOE_2985	5,135.145	0.000	0.000	0.000	5,119.075	Not Full	No	-0.690	16.070
П	TOE_2986	5,135.995	37,500.466	147,008.900	0.000	5,119.343	Not Full	No	-0.712	16.652
	TOE_2987	5,143.225	0.000	0.000	0.000	5,124.316	Not Full	Yes	-0.699	18.909
	TOE_2988	5,151.225	0.000	0.000	0.000	5,126.278	Not Full	No	-0.707	24.947
	TOE_2989	5,151.225	27,999.349	111,997.398	0.000	5,128.336	Not Full	No	-0.709	22.889
	TOE_2990	5,127.040	0.000	0.000	0.000	5,116.776	Not Full	No	-0.431	10.264
	TOE_2991	5,143.225	0.000	0.000	0.000	5,122.364	Not Full	No	-0.721	20.861
	TOE_2992	5,107.670	0.000	0.000	0.000	5,092.256	Not Full	No	-0.348	15.414
	TOE_2994	5,011.000	0.000	0.000	0.000	4,993.204	Not Full	No	-1.866	17.796
	TOE_2997	5,102.000	0.000	0.000	0.000	5,087.081	Not Full	No	-0.452	14.919
	TOE_3003	5,171.230	0.000	0.000	0.000	5,155.175	Not Full	No	-0.833	16.055
	TOE_3005	5,011.000	0.000	0.000	0.000	4,993.016	Not Full	No	-2.254	17.984
	VPF1_1	5,067.160	0.000	0.000	0.000	5,054.818	Not Full	No	-0.542	12.342
П	VPF1_103	5,067.570	0.000	0.000	0.000	5,052.766	Not Full	No	-0.884	14.804
	VPF1_11	5,075.480	0.000	0.000	0.000	5,064.513	Not Full	No	-1.237	10.967
同	VPF1_12	5,071.900	0.000	0.000	0.000	5,060.983	Not Full	No	-1.167	10.917
	VPF1_126	5,074.140	0.000	0.000	0.000	5,055.890	Not Full	No	-0.667	18.250
	VPF1_127	5,066.000	0.000	0.000	0.000	5,051.180	Not Full	No	-0.667	14.820
	VPF1_128	5,059.140	0.000	0.000	0.000	5,046.440	Not Full	No	-0.667	12.700
П	VPF1_129	5,058.660	20,999.512	83,998.048	0.000	5,045.548	Not Full	No	-0.528	13.112
同	VPF1_13	5,078.400	0.000	0.000	0.000	5,059.087		No	-1.263	19.313
	VPF1_130	5,056.230	0.000	0.000	0.000	5,043.799	Not Full	No	-0.567	12.431
同	VPF1_14	5,069.300	0.000	0.000	0.000	5,055.210	Not Full	Yes	-0.840	14.090

ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
VPF1_15	5,069.300	0.000	0.000	0.000	5,054.759	Not Full	No	-0.891	14.541
VPF1_15A	5,064.530	40,750.545	158,891.188	0.000	5,051.224	Not Full	Yes	-0.826	13.306
VPF1_16	5,062.560	0.000	0.000	0.000	5,049.457	Not Full	No	-1.443	13.103
VPF1_17	5,058.600	0.000	0.000	0.000	5,038.280	Not Full	Yes	-0.870	20.320
VPF1_18A	5,058.100	0.000	0.000	0.000	5,037.188	Not Full	No	-0.962	20.912
VPF1_19A	5,056.800	0.000	0.000	0.000	5,036.224	Not Full	No	-0.956	20.576
VPF1_20A	5,054.500	0.000	0.000	0.000	5,035.106	Not Full	No	-0.934	19.394
VPF1_21A	5,054.700	0.000	0.000	0.000	5,033.968	Not Full	No	-1.162	20.732
VPF1_32A	5,080.000	19,324.793	77,299.171	0.000	5,066.643	Not Full	No	-1.307	13.357
VPF1_58	5,067.590	20,750.392	83,001.569	0.000	5,054.354	Not Full	No	-0.596	13.236
VPF1 7	5,085.770	0.000	0.000	0.000	5,075.252	Not Full	No	-0.998	10.518
VPF1 718	5,092.100	64,215.336	241,046.633	0.000	5,079.113	Not Full	No	-0.987	12.987
VPF1_8	5,082.650	0.000	0.000	0.000	5,071.907	Not Full	No	-0.853	10.743
VPFE 10A	5,083.640	0.000	0.000	0.000	5,069.767	Not Full	No	-0.933	13.873
VPFE 717	5,098.830	0.000	0.000	0.000	5,085.420	Not Full	No	-0.543	13.410
VRF1D_702	5,136.180	0.000	0.000	0.000	5,123.221		No	-0.593	12.959
VRF1D_703	5,125.680	0.000	0.000	0.000	5,113.602		No	-0.562	12.078
VRF1D_704	5,119.340	0.000	0.000	0.000	5,107.263		No	-0.560	12.077
VRF1D_705	5,116.570	0.000	0.000	0.000	5,104.440		No	-0.563	12.130
VRF1D 707	5,113.290	0.000	0.000	0.000	5,101.325		No	-0.549	11.965
VRF1D_708	5,111.140	0.000	0.000	0.000	5,099.285		No	-0.488	11.855
VRF1D_709	5,108.490	0.000	0.000	0.000	5,098.103		Yes	-0.421	10.387
VRF1D_710	5,110.890	0.000	0.000	0.000	5,097.502	Not Full	No	-0.422	13.388
VRF1D_711	5,115.620	0.000	0.000	0.000	5,096.622		No	-0.431	18.998
VRF1D_712	5,119.540	0.000	0.000	0.000	5,095.810		No	-0.413	23.730
VRF1D_713	5,116.910	0.000	0.000	0.000	5,095.059		No	-0.414	21.851
VRF1D_714	5,112.260	0.000	0.000	0.000	5,094.126	Not Full	No	-0.468	18.134
VRF1D_715	5,110.280	0.000	0.000	0.000	5,092.861		No	-0.552	17.419
VRF1D 716	5,102.500	42,500.144	165,287.723	0.000	5,088.967		No	-0.467	13.533
VRF1G_186	5,145.220	0.000	0.000	0.000	5,136.100		No	-0.553	9.120
VRF1G_188	5,141.220	0.000	0.000	0.000	5,128.683		No	-0.471	12.537
VRF1G_204	5,146.770	0.000	0.000	0.000	5,127.037		Yes	-0.623	19.733
VRF1G_205	5,137.330	0.000	0.000	0.000	5,125.812		No	-0.618	11.518
VRGC1 698	5,157.760	163,450.018	529,279.220	0.000	5,137.680		No	-0.514	20.080
VRGC1_699	5,153.370	0.000	0.000	0.000	5,134.955		No	-0.548	18.415
VRGC2_206	5,137.400	0.000	0.000	0.000	5,124.561		No	-0.739	12.839
VRGC2_526	5,142.130	0.000	0.000	0.000	5,131.838		No	-0.692	10.292
VRGC2_527	5,138.210	72,750.213	267,564.495	0.000	5,127.221		No	-0.689	10.989
VRGC2 543	5,134.310	0.000	0.000	0.000	5,119.101		Yes	-0.499	15.209
VRGC2_544	5,125.790	0.000	0.000	0.000	5,117.244		No	-0.546	8.546
VRGC2_545	5,121.520	0.000	0.000	0.000	5,111.960		Yes	-0.710	9.560

	ID ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
	VRGC2_580	5,120.220	0.000	0.000	0.000	5,110.429	Not Full	No	-0.741	9.791
IH	VRGC2_581	5,123.750	0.000	0.000	0.000	5,108.921		No	-0.779	14.829
	VRGC2_582	5,116.400	69,000.454	255,913.995	0.000	5,107.193		No	-0.787	9.207
	VRGC2_583	5,116.440	0.000	0.000	0.000	5,104.437		No	-1.163	12.003
	VRGC4_365	5,191.820	163,750.978	530,102.646	0.000	5,179.383		No	-0.410	12.437
	VRGC4_366	5,189.850	0.000	0.000	0.000	5,178.019	Not Full	No	-0.464	11.831
	VRGC4_389	5,191.830	0.000	0.000	0.000	5,176.807	Not Full	No	-0.456	15.023
	VRGC4_415	5,189.660	0.000	0.000	0.000	5,175.396	Not Full	Yes	-0.398	14.264
	VRGC4_416	5,192.130	0.000	0.000	0.000	5,173.517	Not Full	No	-0.446	18.613
	VRGC4_417	5,183.930	0.000	0.000	0.000	5,170.992	Not Full	No	-0.622	12.938
	VRGC4_418	5,153.010	23,474.871	93,899.485	0.000	5,147.090	Not Full	No	-0.453	5.920
	VRGC4_419	5,150.600	0.000	0.000	0.000	5,143.511	Not Full	No	-0.522	7.089
	VRGC4_420	5,150.350	0.000	0.000	0.000	5,140.059	Not Full	No	-0.525	10.291
	VRGC6_183	5,175.770	158,274.660	515,119.440	0.000	5,146.523	Not Full	No	-0.450	29.247
	VRGC6_184	5,155.730	0.000	0.000	0.000	5,145.132	Not Full	No	-0.531	10.598
	VRGC6_185	5,152.370	0.000	0.000	0.000	5,140.335	Not Full	No	-0.569	12.035
	WCR10	5,106.000	202,023.284	632,671.368	0.000	5,094.368	Not Full	No	-0.299	11.632
	WCR3-I_3	5,066.070	0.000	0.000	0.000	5,052.872	Not Full	No	-0.828	13.198
	WCR3_100	5,023.010	0.000	0.000	0.000	5,015.616	Not Full	No	-0.914	7.394
	WCR3_100A	5,026.060	0.000	0.000	0.000	5,017.485	Not Full	No	-0.785	8.575
	WCR3_100B	5,027.500	0.000	0.000	0.000	5,019.276	Not Full	No	-0.784	8.224
	WCR3_101	5,028.990	0.000	0.000	0.000	5,021.066	Not Full	No	-0.784	7.924
	WCR3_102	5,029.520	0.000	0.000	0.000	5,022.209	Not Full	No	-0.791	7.311
	WCR3_103	5,030.990	0.000	0.000	0.000	5,024.595	Not Full	No	-0.855	6.395
	WCR3_11A	5,068.180	0.000	0.000	0.000	5,055.846	Not Full	Yes	-0.804	12.334
	WCR3_184	5,094.790	39,958.545	155,995.637	0.000	5,082.689	Not Full	No	-0.645	12.101
	WCR3_80	4,964.020	6,999.837	27,999.349	0.000	4,951.388	Not Full	No	-0.862	12.632
	WCR3_81	4,964.350	0.000	0.000	0.000	4,953.425	Not Full	No	-0.905	10.925
	WCR3_82	4,964.780	0.000	0.000	0.000	4,954.299	Not Full	No	-0.671	10.481
	WCR3_83	4,967.250	0.000	0.000	0.000	4,957.208	Not Full	No	-0.672	10.042
	WCR3_84	4,968.740	0.000	0.000	0.000	4,958.868	Not Full	No	-0.672	9.872
	WCR3_85	4,974.200	0.000	0.000	0.000	4,962.832	Not Full	No	-0.708	11.368
	WCR3_86	4,976.960	0.000	0.000	0.000	4,965.616	Not Full	No	-0.674	11.344
	WCR3_86A	4,989.610	0.000	0.000	0.000	4,973.655	Not Full	No	-0.745	15.955
	WCR3_86B	4,983.490	48,250.062	186,309.422	0.000	4,970.617	Not Full	No	-0.723	12.873
	WCR3_86C	4,983.460	0.000	0.000	0.000	4,967.673	Not Full	No	-0.737	15.787
	WCR3_87	4,990.560	0.000	0.000	0.000	4,976.177		No	-0.743	14.383
	WCR3_88	4,994.080	0.000	0.000	0.000	4,978.318		No	-0.742	15.762
	WCR3_89	4,988.470	0.000	0.000	0.000	4,981.108	Not Full	No	-0.742	7.362
	WCR3_90	5,000.230	0.000	0.000	0.000	4,985.168		No	-0.812	15.062
	WCR3_91	4,999.540	0.000	0.000	0.000	4,987.016	Not Full	No	-0.694	12.524

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	ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
	WCR3_92	4,999.290	0.000	0.000	0.000	4,988.895	Not Full	No	-0.695	10.395
	WCR3_93	4,998.750	0.000	0.000	0.000	4,990.403	Not Full	No	-0.697	8.347
	WCR3_94	5,007.400	0.000	0.000	0.000	4,995.444	Not Full	No	-0.846	11.956
	WCR3_94A	5,010.850	57,103.178	218,676.417	0.000	4,997.654	Not Full	No	-0.686	13.196
	WCR3_95	5,012.370	0.000	0.000	0.000	4,998.752	Not Full	No	-0.738	13.618
	WCR3_96	5,013.040	0.000	0.000	0.000	5,001.558	Not Full	No	-0.722	11.482
	WCR3_97	5,013.510	0.000	0.000	0.000	5,004.168	Not Full	No	-0.722	9.342
	WCR3_98	5,018.000	120,500.595	409,678.154	0.000	5,008.360	Not Full	No	-0.790	9.640
	WCR3_99	5,021.010	0.000	0.000	0.000	5,010.136	Not Full	No	-0.784	10.874
	WCR3_H125	5,085.240	0.000	0.000	0.000	5,072.800	Not Full	No	-0.667	12.440
	WCR3_H126	5,080.230	0.000	0.000	0.000	5,071.780	Not Full	No	-0.667	8.450
	WCR3_H127	5,081.120	0.000	0.000	0.000	5,071.100	Not Full	No	-0.667	10.020
	WCR3_H128	5,077.710	0.000	0.000	0.000	5,068.900	Not Full	No	-0.667	8.810
	WCR3_H129	5,079.410	0.000	0.000	0.000	5,067.000	Not Full	No	-0.667	12.410
	WCR3_H130	5,078.600	0.000	0.000	0.000	5,065.300	Not Full	No	-0.667	13.300
	WCR3_H131	5,076.050	166,249.377	536,938.266	0.000	5,062.148	Not Full	No	-0.486	13.902
	WCR3_H132	5,077.020	0.000	0.000	0.000	5,061.402	Not Full	No	-0.431	15.618
	WCR3_H133	5,074.230	0.000	0.000	0.000	5,060.298	Not Full	No	-0.535	13.932
	WCR3_H134	5,072.210	0.000	0.000	0.000	5,057.255	Not Full	No	-0.845	14.955
	WCR3_H135	5,080.510	0.000	0.000	0.000	5,062.365	Not Full	No	-0.765	18.145
	WCR3_H136	5,079.790	0.000	0.000	0.000	5,064.380	Not Full	No	-0.720	15.410
	WCR3_H137	5,080.010	0.000	0.000	0.000	5,066.380	Not Full	No	-0.720	13.630
	WCR3_H138	5,078.740	0.000	0.000	0.000	5,068.582	Not Full	No	-0.718	10.158
	WCR3_H139	5,081.290	0.000	0.000	0.000	5,070.282	Not Full	No	-0.718	11.008
	WCR3_H140	5,085.040	0.000	0.000	0.000	5,072.923	Not Full	No	-0.757	12.117
	WCR3_H141	5,085.410	55,936.779	214,412.060	0.000	5,073.411	Not Full	Yes	-0.689	11.999
	WCR3_H146	5,089.800	0.000	0.000	0.000	5,077.659	Not Full	No	-0.675	12.141
	WCR3_H164	5,096.500	0.000	0.000	0.000	5,079.323	Not Full	No	-0.610	17.177
	WCR3_H165	5,095.420	0.000	0.000	0.000	5,080.023	Not Full	No	-0.610	15.397
	WCR3_H171	5,093.250	0.000	0.000	0.000	5,081.233	Not Full	Yes	-0.600	12.017
	WCR3_H185	5,097.730	0.000	0.000	0.000	5,085.500	Not Full	No	-0.833	12.230
	WCR3_H186	5,104.280	0.000	0.000	0.000	5,092.000	Not Full	No	-0.833	12.280
	WCR3_H187	5,105.550	0.000	0.000	0.000	5,093.300	Not Full	No	-0.833	12.250
	WCR3_H188	5,106.480	0.000	0.000	0.000	5,095.000	Not Full	No	-0.667	11.480
	WCR3_H189	5,108.120	0.000	0.000	0.000	5,097.800	Not Full	No	-0.667	10.320
	WCR3_H190	5,111.400	0.000	0.000	0.000	5,099.400	Not Full	No	-0.667	12.000
	WCR3_H191	5,113.380	0.000	0.000	0.000	5,101.380	Not Full	No	-0.667	12.000
	WCR3_H192	5,116.340	0.000	0.000	0.000	5,104.340	Not Full	No	-0.667	12.000
	WCR3_H192A	5,120.060	0.000	0.000	0.000	5,108.060	Not Full	No	-0.667	12.000
	WCR3_H193	5,123.260	0.000	0.000	0.000	5,111.260	Not Full	No	-0.667	12.000
	WCR3_H194	5,127.280	0.000	0.000	0.000	5,115.290	Not Full	No	-0.667	11.990

ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
WCR3_I1	5,069.640	0.000	0.000	0.000	5,056.522	Not Full	No	-0.838	13.118
WCR3_I10	5,049.360	0.000	0.000	0.000	5,037.313	Not Full	No	-0.757	12.047
WCR3_I11	5,046.150	57,873.578	221,342.792	0.000	5,035.399	Not Full	No	-0.871	10.751
WCR3_I12	5,050.460	0.000	0.000	0.000	5,032.972	Not Full	Yes	-0.718	17.488
WCR3_I13	5,046.090	0.000	0.000	0.000	5,031.572	Not Full	No	-0.718	14.518
WCR3_I13A	5,041.820	0.000	0.000	0.000	5,030.099	Not Full	No	-0.841	11.721
WCR3_I14	5,040.390	0.000	0.000	0.000	5,028.792	Not Full	No	-0.848	11.598
WCR3_I15	5,039.430	0.000	0.000	0.000	5,027.046	Not Full	No	-0.784	12.384
WCR3_I2	5,066.970	0.000	0.000	0.000	5,053.872	Not Full	No	-0.828	13.098
WCR3_I4	5,065.060	0.000	0.000	0.000	5,051.373	Not Full	No	-0.927	13.687
WCR3_I5	5,059.210	0.000	0.000	0.000	5,046.831	Not Full	No	-0.829	12.379
WCR3_I6	5,056.080	62,625.576	236,107.250	0.000	5,045.094	Not Full	No	-0.786	10.986
WCR3_I7	5,053.870	0.000	0.000	0.000	5,043.084	Not Full	No	-0.786	10.786
WCR3_I8	5,051.680	0.000	0.000	0.000	5,040.913	Not Full	Yes	-0.757	10.767
WCR3_I9	5,048.680	0.000	0.000	0.000	5,039.113	Not Full	No	-0.757	9.567
WCR5_1	5,170.000	221,854.956	684,293.211	0.000	5,157.514	Not Full	No	-0.319	12.486
WCR5_10	5,094.000	0.000	0.000	0.000	5,081.431	Not Full	No	-0.569	12.569
WCR5_11	5,092.990	3,250.079	13,000.315	0.000	5,078.323	Not Full	No	-0.567	14.667
WCR5_12	5,084.000	0.000	0.000	0.000	5,071.465	Not Full	No	-0.535	12.535
WCR5_13	5,080.000	0.000	0.000	0.000	5,067.519	Not Full	No	-0.481	12.481
WCR5_14	5,078.000	0.000	0.000	0.000	5,065.496	Not Full	No	-0.504	12.504
WCR5_15	5,076.000	0.000	0.000	0.000	5,063.449	Not Full	No	-0.551	12.551
WCR5_16	5,070.000	74,067.812	271,658.277	0.000	5,057.514	Not Full	No	-0.486	12.486
WCR5_17	5,066.000	0.000	0.000	0.000	5,053.533	Not Full	No	-0.467	12.467
WCR5_18	5,062.000	0.000	0.000	0.000	5,049.451	Not Full	No	-0.549	12.549
WCR5_19	5,058.000	0.000	0.000	0.000	5,045.504	Not Full	No	-0.496	12.496
WCR5_2	5,162.980	0.000	0.000	0.000	5,149.280	Not Full	No	-0.454	13.700
WCR5_20	5,048.000	0.000	0.000	0.000	5,035.612	Not Full	No	-0.388	12.388
WCR5_21	5,045.000	16,250.394	65,001.576	0.000	5,032.482	Not Full	No	-0.508	12.518
WCR5_22	5,029.000	7,325.277	29,301.109	0.000	5,016.806	Not Full	Yes	-0.444	12.194
WCR5_23	5,028.000	0.000	0.000	0.000	5,015.516	Not Full	No	-0.734	12.484
WCR5_24	5,022.000	24,495.831	97,983.323	0.000	5,009.595	Not Full	No	-0.655	12.405
WCR5_25	5,017.080	0.000	0.000	0.000	5,004.523	Not Full	No	-0.627	12.557
WCR5_26	5,018.000	0.000	0.000	0.000	5,002.393	Not Full	No	-0.627	15.607
WCR5_27	5,018.000	0.000	0.000	0.000	5,000.555	Not Full	No	-0.625	17.445
WCR5_28	5,016.000	0.000	0.000	0.000	4,999.160	Not Full	No	-0.790	16.840
WCR5_3	5,156.000	0.000	0.000	0.000	5,143.217	Not Full	No	-0.486	12.783
WCR5_4	5,138.000	255,202.464	769,807.041	0.000	5,125.648	Not Full	Yes	-0.252	12.352
WCR5_5	5,136.000	0.000	0.000	0.000	5,123.703	Not Full	No	-0.197	12.297
WCR5_6	5,138.000	0.000	0.000	0.000	5,121.153	Not Full	No	-0.197	16.847
WCR5_7	5,132.000	0.000	0.000	0.000	5,119.446	Not Full	No	-0.554	12.554

ID	Rim Elevation (ft)	Base Flow (gpd)	Total Flow (gpd)	Storm Flow (gpd)	Grade (ft)	Status	Hydraulic Jump	Surcharge Depth (ft)	Unfilled Depth (ft)
WCR5_8	5,124.000	0.000	0.000	0.000	5,111.413	Not Full	No	-0.587	12.587
WCR5_9	5,112.000	0.000	0.000	0.000	5,099.410	Not Full	No	-0.590	12.590
WCR7_1	5,154.000	0.000	0.000	0.000	5,141.000	Not Full	No	-0.667	13.000
WCR7_10	5,062.000	0.000	0.000	0.000	5,049.334	Not Full	No	-0.333	12.666
WCR7_11	5,058.000	0.000	0.000	0.000	5,045.375	Not Full	Yes	-0.292	12.625
WCR7_12	5,055.990	148,904.584	489,482.911	0.000	5,043.413	Not Full	No	-0.420	12.577
WCR7_13	5,050.000	0.000	0.000	0.000	5,037.434	Not Full	No	-0.399	12.566
WCR7_14	5,044.000	0.000	0.000	0.000	5,031.461	Not Full	No	-0.372	12.539
WCR7_15	5,042.000	0.000	0.000	0.000	5,029.442	Not Full	No	-0.391	12.558
WCR7_16	5,038.000	0.000	0.000	0.000	5,025.384	Not Full	No	-0.350	12.616
WCR7_17	5,036.000	0.000	0.000	0.000	5,023.541	Not Full	Yes	-0.232	12.459
WCR7_18	5,034.990	213,754.960	663,208.919	0.000	5,021.568	Not Full	No	-0.265	13.422
WCR7_2	5,136.000	0.000	0.000	0.000	5,123.000	Not Full	No	-0.667	13.000
WCR7_3	5,120.000	0.000	0.000	0.000	5,107.000	Not Full	No	-0.667	13.000
WCR7_4	5,108.000	0.000	0.000	0.000	5,095.000	Not Full	No	-0.667	13.000
WCR7_5	5,102.000	0.000	0.000	0.000	5,089.000	Not Full	No	-0.667	13.000
WCR7_6	5,094.000	0.000	0.000	0.000	5,081.000	Not Full	No	-0.667	13.000
WCR7_7	5,090.000	103,770.681	361,078.922	0.000	5,077.262	Not Full	No	-0.405	12.738
WCR7_8	5,072.000	0.000	0.000	0.000	5,059.294	Not Full	No	-0.383	12.706
WCR7_9	5,068.000	0.000	0.000	0.000	5,055.286	Not Full	No	-0.380	12.714

	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth	Adjusted Velocity
	AIF1_119-ECF21_120	AIF1_119	ECF21_120	12.000	488.407	0.004	709,007.958	231,369.033	Free Surface	2.982	0.475	0.458	0.475	0.441	0.866	1,547,662.229	No	0.475	2.982
	ARF1_12-ARF1_4	ARF1_12	ARF1_4	8.000	154.018	0.004	225,620.011	59,250.218	Free Surface	2.239	0.458	0.430	0.305	0.274	0.815	525,053.946	No	0.305	2.239
	ARF1_16-ARF1_12	ARF1_16	ARF1_12	8.000	132.199	0.011	225,620.011	59,250.218	Free Surface	3.344	0.339	0.248	0.226	0.274	1.449	909,644.038	No	0.226	3.344
	ARF1_17-ARF1_16	ARF1_17	ARF1_16	8.000	314.508	0.009	225,620.011	59,250.218	Free Surface	3.111	0.358	0.274	0.239	0.274	1.308	822,988.236	No	0.239	3.111
	ARF1_28-ARF1_17	ARF1_28	ARF1_17	8.000	284.662	0.020	225,620.011	59,250.218	Free Surface	4.064	0.295	0.189	0.196	0.274	1.905	1,193,034.187	No	0.196	4.064
	ARF1_29-ARF1_28	ARF1_29	ARF1_28	8.000	66.881	0.012	225,620.011	59,250.218	Free Surface	3.437	0.333	0.239	0.222	0.274	1.507	945,043.898	No	0.222	3.437
7	ARF1 2-FMF9 1	ARF1_2	FMF9_1	10.000	336.918	0.004	225,620.011	59,250.218	Free Surface	2.340	0.318	0.219	0.265	0.257	0.941	1,029,721.578	Yes	0.280	2.172
7	ARF1 31-ARF1 29	ARF1_31	ARF1_29	8.000	345.854	0.009	225,620.011	59,250.218	Free Surface	3.035	0.364	0.284	0.243	0.274	1.263	795,342.077	No	0.243	3.035
7	ARF1 32-ARF1 31	ARF1_32	ARF1_31	8.000	124.179	0.007	225,620.011	59,250.218	Free Surface	2.852	0.382	0.309	0.254	0.274	1.156	730,184.738	No	0.254	2.852
7	ARF1_33-ARF1_32	ARF1_33	ARF1_32	8.000	224.073	0.010	225,620.011	59,250.218	Free Surface	3.138	0.356	0.271	0.237	0.274	1.324	832,905.398	No	0.237	3.138
7	ARF1 34-ARF1 33	ARF1_34	ARF1_33	8.000	155.283	0.006	225,620.011	59,250.218	Free Surface	2.597	0.409	0.351	0.273	0.274	1.011	642,238.703	No	0.273	2.597
	ARF1 35-ARF1 34	ARF1_35	ARF1_34	8.000	103.489	0.005	225,620.011	59,250.218	Free Surface	2.475	0.424	0.375	0.283	0.274	0.943	601,337.528	No	0.283	2.475
=	ARF1 36-ARF1 35	ARF1_36	ARF1_35	8.000	271.125	0.009	225,620.011	59,250.218	Free Surface	3.010	0.367	0.287	0.244	0.274	1.249	786,423.378	No	0.244	3.010
=	ARF1 37-ARF1 36	ARF1_37	ARF1 36	8.000	113.306	0.006	225,620.011	59,250.218	Free Surface	2.710	0.396	0.331	0.264	0.274	1.075	680,924.666	No	0.264	2.710
=	ARF1 3-ARF1 2	ARF1_3	ARF1 2	8.000	201.740	0.006	225,620.011	59,250.218	Free Surface	2.703	0.397	0.333	0.265	0.274	1.071	678,362.734	No	0.265	2.703
=	ARF1 4-ARF1 3	ARF1_4	ARF1 3	8.000	122.407	0.015	225,620.011	59,250.218	Free Surface	3.697	0.315	0.216	0.210	0.274	1.669	1,045,721.845	No	0.210	3.697
=	ARF2 1-TOE 2647	ARF2_1	TOE_2647	8.000	158.000	0.008	225,620.011	59,250.218	Free Surface	2.946	0.372	0.295	0.248	0.274	1.211	763,554.513	No	0.248	2.946
=	ARF2 2-ARF2 1	ARF2_2	ARF2 1	8.000	151.286		225,620.011		Free Surface		0.398	0.334	0.265	0.274	1.066	675,771.581	No	0.265	2.695
=	BFF1 61-BFF1 62	BFF1_61	BFF1_62	8.000	397.643		0.000		Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	601,633.726	No	0.000	0.000
=	BFF1 62-BFF1 63	BFF1 62	BFF1 63	8.000	345.405		0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	600,374.865	Yes	0.069	0.000
=	BFF1 63-TOE 2733	BFF1_63	TOE_2733	8.000	197.672		67,000.295		Free Surface		0.207	0.094	0.138	0.147	1.126	713,929.656	Yes	0.232	0.960
	CCF3 39E-CMF2 39D	CCF3_39E	CMF2 39D	10.000	161.407		263,680.995		Free Surface		0.357	0.272	0.297	0.278	0.882	968,552.158	No	0.297	2.339
	CCF3_60A-CCF3_39E	CCF3_60A	CCF3 39E	10.000	310.798		167,114.552		Free Surface		0.278	0.169	0.232	0.220	0.905	990,944.494	No	0.232	2.091
	CCF3_60-CCF3_59E	CCF3_60A	CCF3_59L	10.000	135.757		0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	3,061,985.380	Yes	0.232	0.000
=		CCF4_41	TOE_2990	8.000	204.703		253,583.000		Free Surface		0.358	0.274	0.000	0.000	1.472	926,183.223	No	0.000	3.500
=	CCF4_4-1-TOE_2990		CCF4 41	8.000	274.850		125,071.153		Free Surface		0.338	0.274	0.236	0.292	2.324		No	0.236	3.990
=	CCF4_4-2-CCF4_41	CCF4_42							Free Surface							1,478,629.209			
=	CCF4_4-3-CCF4_42	CCF4_43	CCF4_42	8.000	287.880		125,071.153				0.196	0.084	0.131	0.202	2.335	1,485,724.658	No	0.131	4.004
=	CCF4_4-4-CCF4_43	CCF4_44	CCF4_43	8.000	307.760		125,071.153		Free Surface		0.223	0.109	0.149	0.202	1.819	1,148,410.503	No	0.149	3.337
	CCF4_4-5-CCF4_44	CCF4_45	CCF4_44	8.000	312.018		125,071.153		Free Surface		0.223	0.109	0.149	0.202	1.812	1,143,577.617	No	0.149	3.327
	CCF6_105-CCF6_106	CCF6_105	CCF6_106	12.000	300.958		709,007.958	231,369.033		4.966	0.325	0.228	0.325	0.441	1.802	3,112,332.973	No	0.325	4.966
	CCF6_106-TOE_2640	CCF6_106	TOE_2640	12.000	304.102		709,007.958	231,369.033			0.330	0.235	0.330	0.441	1.747	3,018,825.908	No	0.330	4.858
	CCF6_6-10-CCF6_69	CCF6_610	CCF6_69	8.000	294.243		253,583.000		Free Surface		0.319	0.220	0.212	0.292	1.839	1,152,419.655	No	0.212	4.097
	CCF6_6-11-CCF6_610	CCF6_611	CCF6_610	8.000	108.377		253,583.000		Free Surface		0.332	0.237	0.221	0.292	1.704	1,068,707.131	No	0.221	3.881
	CCF6_6-12-CCF6_611	CCF6_612	CCF6_611	8.000	139.412		253,583.000		Free Surface	4.008	0.324	0.227	0.216	0.292	1.783	1,117,689.788	No	0.216	4.008
	CCF6_6-13-CCF6_612	CCF6_613	CCF6_612	8.000	116.143	0.012	253,583.000	68,250.214	Free Surface	3.523	0.356	0.271	0.237	0.292	1.486	934,707.955	No	0.237	3.523
	CCF6_6-14-CCF6_613	CCF6_614	CCF6_613	8.000	93.593	0.010	253,583.000	68,250.214	Free Surface	3.314	0.372	0.295	0.248	0.292	1.363	859,168.773	No	0.248	3.314
	CCF6_6-15-CCF6_105	CCF6_615	CCF6_105	12.000	250.404	0.035	253,583.000	68,250.214	Free Surface	4.935	0.158	0.054	0.158	0.259	2.634	4,699,501.517	Yes	0.171	4.388
	CCF6_6-8-CCF6_615	CCF6_68	CCF6_615	8.000	122.248	0.018	253,583.000	68,250.214	Free Surface	4.040	0.322	0.224	0.215	0.292	1.803	1,130,246.077	No	0.215	4.040
	CCF6_6-9-CCF6_68	CCF6_69	CCF6_68	8.000	210.219	0.017	253,583.000	68,250.214	Free Surface	3.985	0.325	0.229	0.217	0.292	1.768	1,108,600.417	No	0.217	3.985
	CCF9_4-6-CCF4_45	CCF9_46	CCF4_45	8.000	295.271	0.005	125,071.153	31,499.988	Free Surface	2.147	0.305	0.202	0.203	0.202	0.988	618,590.475	No	0.203	2.147
	CFF1_17-TOE_2631	CFF1_17	TOE_2631	15.000	200.085	0.011	858,114.812	290,401.811	Free Surface	4.590	0.286	0.178	0.357	0.455	1.599	4,819,738.677	No	0.357	4.590
	CFF1_18-CFF1_17	CFF1_18	CFF1_17	15.000	192.033	0.012	858,114.812	290,401.811	Free Surface	4.651	0.283	0.175	0.354	0.455	1.628	4,908,843.591	No	0.354	4.651
	CFF1_19B1-CFF1_19	CFF1_19B1	CFF1_19	12.000	114.139	0.008	430,160.526	127,750.992	Free Surface	3.412	0.297	0.192	0.297	0.340	1.301	2,245,553.259	No	0.297	3.412
	CFF1_19B2-CFF1_19B1	CFF1_19B2	CFF1_19B1	12.000	135.089	0.007	430,160.526	127,750.992	Free Surface	3.174	0.313	0.212	0.313	0.340	1.176	2,030,162.628	No	0.313	3.174
	CFF1_19-CFF1_18	CFF1_19	CFF1_18	15.000	128.744	0.011	858,114.812	290,401.811	Free Surface	4.505	0.290	0.183	0.362	0.455	1.557	4,695,185.852	No	0.362	4.505
	CFF1 20-CFF1 19	CFF1_20	CFF1_19	12.000	259.752	0.011	527,092.609	162,650.819	Free Surface	4.037	0.304	0.201	0.304	0.378	1.518	2,619,928.491	No	0.304	4.037
=	CFF1 21-CFF1 20	CFF1 21	CFF1 20	12.000	204.761	0.011	527,092.609	162,650.819	Free Surface	3.987	0.307	0.205	0.307	0.378	1.492	2,574,854.316	No	0.307	3.987
T I	CFF1_22A-CFF1_22B	CFF1_22A	CFF1_22B	10.000	369.202		263,680.995	71,500.293	Free Surface	3.669	0.258	0.145	0.215	0.278	1.655	1,814,859.742	No	0.215	3.669
7	CFF1 22B-CFF1 22C	CFF1_22B	CFF1_22C	10.000	151.596		263,680.995	71,500.293			0.258	0.146	0.215	0.278	1.651	1,810,337.033	No	0.215	3.663
=	CFF1 22C-CFF1 19B2	CFF1_22C	CFF1_19B2	10.000	289.466		430,160.526	127,750.992			0.336	0.243	0.280	0.359	1.616	1,771,578.311	No	0.280	4.144
7	CFF1 22-CFF1 21	CFF1_22	CFF1_21	12.000	185.308		433,406.789	128,900.111			0.298	0.194	0.298	0.341	1.295	2,235,268.786	No	0.298	3.408
=	CFF1 22D-CFF1 22C	CFF1_22D	CFF1_22C	10.000	133.147		0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	1,832,565.336	No	0.000	0.000
=	CFF1 22E-CFF1 22D	CFF1_22E	CFF1_22D	10.000	130.967		0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	1,715,954.795	No	0.000	0.000
=	CFF1 22F1-CFF1 22E	CFF1_22F1	CFF1_22E	10.000	217.475		0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	1,128,189.005	No	0.000	0.000
=	CFF1_22F1-CFF1_22E	CFF1_23	CFF1_22	12.000			433,406.789	128,900.111			0.286	0.178	0.000	0.341	1.407	2,428,997.525	No	0.000	3.617
=	CFF1_23-CFF1_22 CFF1_24-CFF1_23	CFF1_24	CFF1_23	12.000	100.548		433,406.789	128,900.111			0.284	0.176	0.284	0.341	1.430	2,469,290.350	No	0.284	3.660
	CFF1_24-CFF1_23 CFF1_25-CFF1_24	CFF1_24 CFF1_25	CFF1_23	12.000	122.953		433,406.789	128,900.111			0.289	0.170	0.289	0.341	1.430	2,376,498.473	No	0.289	3.561
4		CFF1_25	CFF1_24	12.000	251.246		433,406.789	128,900.111			0.285	0.162	0.285	0.341	1.416	2,444,570.671	No	0.285	3.633
4	CFF1_26-CFF1_25																		3.725
Ш	CFF1_27-CFF1_26	CFF1_27	CFF1_26	12.000	308.568	0.010	433,406.789	128,900.111	riee Surface	3.725	0.280	0.171	0.280	0.341	1.466	2,531,128.225	No	0.280	3.72

	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth	Adjusted Velocity
	CFF1_28-CFF1_27	CFF1_28	CFF1_27	12.000	145.140	0.010	433,406.789	128,900.111	Free Surface	3.728	0.280	0.171	0.280	0.341	1.468	2,534,226.581	No	0.280	3.728
	CFF1_29-CFF1_28	CFF1_29	CFF1_28	12.000	150.879	0.024	433,406.789	128,900.111	Free Surface	5.013	0.227	0.113	0.227	0.341	2.210	3,841,988.751	No	0.227	5.013
	CFF1_30-CFF1_29	CFF1_30	CFF1_29	12.000	241.294	0.023	433,406.789	128,900.111	Free Surface	4.999	0.227	0.113	0.227	0.341	2.202	3,827,344.160	No	0.227	4.999
	CFF1_31-CFF1_30	CFF1_31	CFF1_30	12.000	118.736	0.010	433,406.789	128,900.111	Free Surface	3.740	0.279	0.170	0.279	0.341	1.475	2,545,706.000	No	0.279	3.740
	CHF1A_22-CHF1A_23	CHF1A_22	CHF1A_23	18.000	160.160	0.019	1,635,716.886	625,921.684	Free Surface	6.567	0.270	0.160	0.405	0.603	2.152	10,243,088.805	No	0.405	6.567
	CHF1A_23-CHF1A_24	CHF1A_23	CHF1A_24	18.000	434.970	0.023	1,635,716.886	625,921.684	Free Surface	7.021	0.258	0.145	0.386	0.603	2.360	11,248,363.236	No	0.386	7.021
F	CHF1A 24-CHF1A 25	CHF1A_24	CHF1A_25	18.000	292.440	0.010	1,635,716.886	625,921.684	Free Surface	5.245	0.318	0.219	0.476	0.603	1.573	7,481,584.554	No	0.476	5.245
	CHF1A 25-CHF1A A1A	CHF1A_25	CHF1A_A1A	18.000	123.397	0.007	1,635,716.886	625,921.684	Free Surface	4.614	0.349	0.261	0.523	0.603	1.313	6,262,836.979	Yes	0.524	4.599
	CHF1A A1A-TOE 2586	CHF1A_A1A	TOE_2586	18.000	158.077	0.007	1,635,716.886	625,921.684	Free Surface	4.584	0.350	0.264	0.526	0.603	1.301	6,207,300.817	No	0.526	4.584
	CHF1A C1-CHF1A 22	CHF1A_C1	CHF1A_22	18.000	101.324	0.058	1,473,345.957	552,671.792	Free Surface	9.409	0.195	0.083	0.292	0.571	3.672	17,749,713.432	Yes	0.324	8.126
	CHF1B 12-CHF1B 20	CHF1B_12	CHF1B_20	18.000	340.960	0.027	1,473,345.957	552,671.792	Free Surface	7.218	0.235	0.121	0.352	0.571	2.552	12,205,355.972	No	0.352	7.218
	CHF1B 14A-CHF1B 17	CHF1B_14A	CHF1B_17	18.000	122.228	0.017	1,421,643.166	529,672.121	Free Surface	6.063	0.259	0.147	0.388	0.560	2.033	9,689,124.841	No	0.388	6.063
F	CHF1B 15A-CHF1B 14A	CHF1B_15A	CHF1B_14A	18.000	195.015	0.001	1,421,643.166	529,672.121	Free Surface	2.390	0.516	0.528	0.775	0.560	0.537	2,692,660.183	No	0.775	2.390
F	CHF1B 15A-CHF3A 15B	CHF3A 15B	CHF1B 15A	18.000	180.259	0.003	1,421,643.166	529,672.121	Free Surface	3.090	0.423	0.374	0.635	0.560	0.786	3,805,405.449	No	0.635	3.090
	CHF1B 17-CHF1B 18	CHF1B 17	CHF1B 18	18.000	330.000	0.006	1,421,643.166	529,672.121	Free Surface	4.263	0.333	0.240	0.500	0.560	1.244	5,924,634.458	No	0.500	4.263
	CHF1B 18-CHF1B 12	CHF1B_18	CHF1B 12	18.000	400.000	0.033	1,473,345.957	552,671.792	Free Surface	7.707	0.224	0.110	0.336	0.571	2.793	13,386,173.134	No	0.336	7.707
	CHF1B 20-TOE 2585	CHF1B_20	TOE_2585	18.000			1,473,345.957	552,671.792			0.241	0.127	0.361	0.571	2.430	11,610,027.069	No	0.361	6.966
	CHF3A_15-CHF3A_15B	CHF3A_15	CHF3A_15B	18.000			1,421,643.166				0.421	0.370	0.631	0.560	0.795	3,847,134.378	No	0.631	3.115
	CHF3C 8-CHF3C 9	CHF3C 8	CHF3C 9	18.000			1,355,387.386		Free Surface		0.355	0.271	0.533	0.547	1.049	5,009,536.836	No	0.533	3.727
	CHF3C 9-TOE 2580	CHF3C 9	TOE_2580	18.000			1,355,387.386				0.369	0.290	0.553	0.547	0.976	4,669,246.805	No	0.553	3.542
	CMF2 22G-CFF1 22F1	CMF2 22G	CFF1 22F1	10.000		0.028	0.000	0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	2,587,708.428	No	0.000	0.000
	CMF2 32-CFF1 22A	CMF2_32	CFF1 22A	10.000	151.294		263,680.995		Free Surface		0.288	0.181	0.240	0.278	1.328	1,452,948.058	No	0.240	3.131
	CMF2 33-CMF2 32	CMF2 33	CMF2 32	10.000		0.004	263,680.995	71,500.293	Free Surface		0.345	0.256	0.288	0.278	0.938	1,029,443.086	No	0.288	2.444
	CMF2 34-CMF2 33	CMF2_34	CMF2_33	10.000	31.066		263,680.995		Free Surface		0.351	0.265	0.293	0.278	0.906	995,000.873	No	0.293	2.385
H	CMF2_35-CMF2_34	CMF2_35	CMF2 34	10.000		0.005	263,680.995	71,500.293	Free Surface		0.335	0.242	0.279	0.278	0.995	1,090,089.794	No	0.279	2.547
	CMF2 36-CMF2 35	CMF2_36	CMF2_35	10.000	215.403				Free Surface		0.263	0.151	0.219	0.278	1.592	1,744,243.654	No	0.219	3.567
	CMF2 37-CMF2 36	CMF2 37	CMF2 36	10.000		0.012		71,500.293	Free Surface		0.267	0.156	0.223	0.278	1.539	1,685,918.996	No	0.223	3.481
	CMF2 38-CMF2 37	CMF2_38	CMF2_37	10.000					Free Surface		0.281	0.173	0.234	0.278	1.394	1,525,893.681	No	0.234	3.242
	CMF2 39A-CMF2 39	CMF2 39A	CMF2 39	10.000		0.004	263,680.995	71,500.293	Free Surface		0.355	0.270	0.296	0.278	0.888	975,390.304	No	0.296	2.350
	CMF2_39B-CMF2_39A	CMF2_39B	CMF2_39A	10.000	156.532		263,680.995		Free Surface		0.240	0.126	0.200	0.278	1.905	2,093,583.694	No	0.200	4.061
	CMF2 39C-CMF2 39B	CMF2 39C	CMF2 39B	10.000		0.004	263,680.995	71,500.293	Free Surface		0.358	0.274	0.298	0.278	0.876	962,841.442	No	0.298	2.328
	CMF2 39-CMF2 38	CMF2 39	CMF2 38	10.000	65.228		263,680.995		Free Surface		0.287	0.180	0.240	0.278	1.337	1,462,862.125	No	0.240	3.146
	CMF2 39D-CMF2 39C	CMF2_39D	CMF2 39C	10.000		0.004	263,680.995		Free Surface		0.357	0.272	0.297	0.278	0.881	967,923.923	No	0.297	2.337
	COMPF1 10.1-TOE 2941		TOE_2941	12.000		0.005	438,630.099		Free Surface		0.340	0.249	0.340	0.343	1.018	1,760,761.108	No	0.340	2.880
	CSF1 C2A-TOE 2804	CSF1 C2A	TOE 2804	18.000			1,074,330.451		Free Surface	3.004	0.351	0.264	0.526	0.485	0.852	4,064,442.599	No	0.526	3.004
	CSF1 C2C-CSF1 C2A	CSF1_C2C	CSF1_C2A	18.000			1,074,330.451	379,477.297			0.261	0.149	0.391	0.485	1.517	7,225,549.849	No	0.391	4.538
	CSF1 C3A-CSF1 C3B	CSF1 C3A	CSF1 C3B	18.000		0.004	968,433.703		Free Surface		0.314	0.214	0.471	0.459	0.953	4,532,537.708	No	0.471	3.157
	CSF1 C3B-CSF1 C4B	CSF1_C3B	CSF1 C4B	18.000		0.003	968,433.703	335,401.794			0.333	0.239	0.499	0.459	0.850	4,048,353.344	No	0.499	2.910
	CSF1 C4B-CSF1 C5B	CSF1 C4B	CSF1 C5B	18.000		0.004	968,433.703		Free Surface		0.309	0.208	0.464	0.459	0.981	4,664,630.000	No	0.464	3.223
	CSF1 C5B-CSF1 C6C	CSF1 C5B	CSF1 C6C	18.000			968,433.703	335,401.794			0.296	0.191	0.444	0.459	1.065	5,064,930.575	No	0.444	3.418
	CSF1_CSB-CSF1_C6C	CSF1_C6C	CSF1 C2C	18.000			1,074,330.451	379.477.297		2.948	0.256	0.131	0.534	0.435	0.829	3,959,290.219	No	0.534	2.948
	ECF1 100-ECF1 102	ECF1_100	ECF1_102	30.000				1,917,068.398			0.369	0.291	0.923	0.463	0.840	14,412,685.329	Yes	0.934	3.872
	ECF1_100-ECF1_102 ECF1_102-ECF1_26	ECF1_100	ECF1 26	30.000			4,188,502.127			3.809	0.378	0.304	0.925	0.843	0.801	13,774,775.041	No	0.946	3.809
	ECF1_102-ECF1_26 ECF1_108-ECF1_28	ECF1_102 ECF1_108	ECF1_28	30.000			4,385,839.343	,- ,			0.264	0.304	0.940	0.864	1.679	28,680,223.705	No	0.940	6.538
	ECF1_106-ECF1_26 ECF1_118-ECF1_119	ECF1_108	ECF1_28	12.000		0.006	887,581.330	302,350.926		3.642	0.484	0.153	0.484	0.496	1.045	1,874,045.649	No	0.484	3.642
	ECF1_118-ECF1_119 ECF1_119-TOE_2594	ECF1_118	TOE 2594	12.000			887.581.330	302,350.926			0.500	0.500	0.464	0.496	0.983	1,774,422.234	No	0.464	3.496
	ECF1_119-10E_2594 ECF1_2271-TOE_2655	ECF1_119	TOE_2594	30.000			,	2,068,166.101			0.300	0.355	1.029	0.490	0.983	12,574,544.023	Yes	1.430	2.379
			ECF1_44									0.333				9,115,619.517	No	1.430	2.794
	ECF1_24-ECF1_44 ECF1_25-ECF1_100	ECF1_24	ECF1_44 ECF1_100	30.000 30.000				1,858,068.740 1,917,068.398			0.469	0.446	1.172 0.992	0.832 0.843	0.517 0.732	12,620,046.817	No	0.992	3.574
	ECF1_25-ECF1_100 ECF1_26-ECF1_27	ECF1_25 ECF1_26	ECF1_100	30.000							0.397	0.332		0.843	1.064	18,157,932.414	No	0.992	4.652
				30.000				1,917,068.398 1,917,068.398			0.327	0.231	0.817 0.632	0.843	1.747		No	0.632	6.642
	ECF1_27-ECF1_108	ECF1_27	ECF1_108													29,871,083.103			
	ECF1_28-ECF1_29	ECF1_28	ECF1_29	30.000				2,025,068.357			0.262	0.151	0.656	0.864	1.704	29,107,942.782	No Yes	0.656	6.608
	ECF1_29-ECF1_2271	ECF1_29	ECF1_2271	30.000				2,025,068.357			0.289	0.183	0.724	0.864	1.408	24,003,856.458		0.859	4.544
	ECF1_44-ECF1_97	ECF1_44	ECF1_97	30.000				1,917,068.398			0.474	0.456	1.184	0.843	0.521	9,194,468.376	No	1.184	2.831
	ECF1_97-ECF1_25	ECF1_97	ECF1_25	30.000				1,917,068.398			0.459	0.431	1.147	0.843	0.554	9,719,681.687	No	1.147	2.950
	ECF1A2_131-ECF1A2_132							463,904.465			0.551	0.587	0.551	0.598	1.172	2,166,340.368	Yes	0.593	4.056
	ECF1A2_132-ECF4_133			12.000				463,904.465			0.635	0.732	0.635	0.598	0.891	1,738,336.479	No	0.635	3.740
	ECF21_120-ECF21_121			12.000				441,529.754			0.604	0.678	0.604	0.586	0.943	1,798,953.748	No	0.604	3.809
	ECF21_121-ECF21_123	ECF21_121	ECF21_123	12.000	279.590	U.UU4	1,220,064.330	441,529.754	Free Surface	3.538	0.643	0.745	0.643	0.586	0.835	1,638,612.605	No	0.643	3.538

FULI	BUILDOUT WITH SEPTIC	PIPE TABLE		1 5: .	1								<b>.</b>	0 ''' 1				A 11 1 1	A P ( )
	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth	Adjusted Velocity
	ECF21_123-ECF21_124	ECF21_123	ECF21_124	12.000	249.288	0.005	1,220,064.330	441,529.754	Free Surface	3.855	0.598	0.668	0.598	0.586	0.961	1,826,926.891	No	0.598	3.855
	ECF21_124-ECF21_130	ECF21_124	ECF21_130	12.000	256.838	0.005	1,220,064.330	441,529.754	Free Surface	3.799	0.605	0.680	0.605	0.586	0.939	1,793,096.783	No	0.605	3.799
	ECF21_130-ECF1A2_131	ECF21_130	ECF1A2_131	12.000	316.851	0.004	1,220,064.330	441,529.754	Free Surface	3.474	0.653	0.762	0.653	0.586	0.810	1,602,102.791	No	0.653	3.474
	ECF21_131-ECF21_132	ECF21_131	ECF21_132	8.000	138.119	0.006	83,998.048	20,999.512	Free Surface	2.044	0.238	0.124	0.159	0.165	1.076	677,140.724	No	0.159	2.044
	ECF21_132-ECF21_133	ECF21_132	ECF21_133	8.000	299.894	0.006	83,998.048	20,999.512	Free Surface	1.960	0.245	0.132	0.163	0.165	1.016	638,711.151	No	0.163	1.960
	ECF21_133-ECF21_24	ECF21_133	ECF21_24	30.000	232.963	0.001	4,047,193.356	1,840,319.307	Free Surface	2.817	0.463	0.438	1.157	0.828	0.526	9,242,619.204	No	1.157	2.817
	ECF21_22A-ECF21_133	ECF21_22A	ECF21_133	24.000	347.152	0.010	4,008,365.258	1,819,319.795	Free Surface	6.443	0.345	0.257	0.691	0.881	1.596	15,624,736.073	Yes	0.849	4.882
E	ECF21_23-ECF21_9	ECF21_23	ECF21_9	30.000	457.000	0.001	4,047,193.356	1,840,319.307	Free Surface	2.880	0.455	0.425	1.138	0.828	0.543	9,524,883.908	No	1.138	2.880
E	ECF21_24-ECF21_23	ECF21_24	ECF21_23	30.000	155.077	0.001	4,047,193.356	1,840,319.307	Free Surface	2.818	0.463	0.438	1.157	0.828	0.526	9,249,524.645	No	1.157	2.818
E	ECF21_9-ECF1_24	ECF21_9	ECF1_24	30.000	492.000	0.002	4,079,945.146	1,858,068.740	Free Surface	3.339	0.409	0.351	1.023	0.832	0.671	11,611,684.604	Yes	1.048	3.236
F	ECF3 217-ECF3 218	ECF3_217	ECF3_218	18.000	469.731	0.002	1,417,627.590	527,889.401	Free Surface	2.965	0.436	0.394	0.654	0.559	0.741	3,600,918.864	No	0.654	2.965
	ECF3 218-TOE 2746	ECF3_218	TOE_2746	18.000	297.552	0.003	1,417,627.590	527,889.401	Free Surface	3.374	0.395	0.330	0.593	0.559	0.893	4,296,433.228	No	0.593	3.374
F	ECF4 133-ECF4 134	ECF4_133	ECF4 134	12.000	398.994	0.006	1,271,844.765	463,904.465	Free Surface	3.940	0.608	0.685	0.608	0.598	0.971	1,857,266.033	Yes	0.940	2.569
F	ECF4 134-ECF4 135	ECF4_134	ECF4 135	12.000	300.951	0.002	1,271,844.765	463,904.465	Pressurized	2.506	1.000	1.235	1.000	0.536	0.442	1,029,635.546	No	1.000	2.506
F	ECF4 135-TOE 2662	ECF4_135	TOE 2662	15.000	88.785		1,580,829.504	600,990.974	Free Surface	2.843	0.661	0.774	0.826	0.626	0.588	2,041,934.441	No	0.826	2.843
F	ECF5 204-ECF5 205	ECF5_204	ECF5 205	18.000	92.979		1,290,558.293	472,062.062		4.850	0.283	0.175	0.425	0.533	1.549	7,367,341.389	No	0.425	4.850
H	ECF5 205-ECF5 208	ECF5_205	ECF5 208	18.000	243.553		1,290,558.293	472,062.062			0.283	0.175	0.425	0.533	1.549	7,369,094.379	Yes	0.425	4.847
H	ECF5_208-ECF5_209	ECF5_208	ECF5 209	18.000	59.397		1,290,558.293	472,062.062			0.284	0.176	0.425	0.533	1.545	7,349,732.797	Yes	0.487	4.020
H	ECF5 209-ECF5 213	ECF5_209	ECF5 213	18.000			1,290,558.293	472,062.062			0.398	0.335	0.598	0.533	0.801	3,855,901.750	No	0.598	3.040
H	ECF5 213-ECF5 214	ECF5_213	ECF5 214	18.000			1,290,558.293	472,062.062			0.398	0.334	0.597	0.533	0.803	3,863,009.650	No	0.597	3.044
H	ECF5 214-ECF5 215	ECF5_214	ECF5 215	18.000			1,417,627.590	527,889.401			0.391	0.323	0.587	0.559	0.912	4,382,464.774	No	0.587	3.424
H	ECF5 215-ECF5 216	ECF5_215	ECF5 216	18.000			1,417,627.590	527,889.401		5.456	0.279	0.169	0.418	0.559	1.758	8,366,467.435	No	0.418	5.456
H	ECF5 216-ECF3 217	ECF5 216	ECF3 217	18.000			1,417,627.590		Free Surface		0.278	0.169	0.417	0.559	1.762	8,382,439.078	Yes	0.511	4.133
H		EHF1 2	EHF4 1	8.000	72.518			43,250.384	Pressurized	1.836	0.426	0.103	0.417	0.235	0.698	445.508.194	Yes	0.667	0.745
H	EHF1_2-EHF4_1		EHF1 2	8.000	209.536		168,030.599	43,250.384	Pressurized	2.243	0.420	0.287	0.244	0.235	0.098	586,049.477	Yes	0.667	0.745
	EHF1_3-EHF1_2	EHF1_3			264.573		168,030.599	43,250.384	Free Surface		0.364	0.287	0.244	0.235		594,651.505		0.667	0.745
H	EHF1_4-EHF1_3	EHF1_4	EHF1_3	8.000			168,030,599								0.945		Yes		
H	EHF1_5-EHF1_4	EHF1_5	EHF1_4	8.000	72.008		,	43,250.384	Free Surface		0.250	0.137	0.167	0.235	1.949	1,224,387.430	No	0.167	3.804
	EHF1_6-EHF1_5	EHF1_6	EHF1_5	8.000	83.531		168,030.599	43,250.384	Free Surface		0.212	0.098	0.141	0.235	2.703	1,711,509.151	No	0.141	4.825
	EHF1_7-EHF1_6	EHF1_7	EHF1_6	8.000	219.245		168,030.599	43,250.384	Free Surface		0.220	0.106	0.147	0.235	2.500	1,579,448.808	No	0.147	4.558
	EHF1_8-EHF1_7	EHF1_8	EHF1_7	8.000	271.700		168,030.599	43,250.384	Free Surface		0.250	0.137	0.167	0.235	1.956	1,228,729.304	No	0.167	3.814
	EHF10_11-EHF9_10	EHF10_11	EHF9_10	8.000	256.644		141,523.147		Free Surface		0.255	0.143	0.170	0.215	1.578	990,677.374	No	0.170	3.114
	EHF10_12-EHF10_11	EHF10_12	EHF10_11	8.000	104.212		141,523.147		Free Surface		0.308	0.207	0.206	0.215	1.094	685,264.637	No	0.206	2.393
	EHF10_13-EHF10_12	EHF10_13	EHF10_12	8.000	148.178		141,523.147		Free Surface		0.259	0.147	0.172	0.215	1.539	965,656.503	No	0.172	3.058
	EHF10_14-EHF10_13	EHF10_14	EHF10_13	8.000	185.568		141,523.147		Free Surface		0.327	0.231	0.218	0.215	0.978	613,334.939	No	0.218	2.210
	EHF10_15-EHF10_14	EHF10_15	EHF10_14	8.000	179.349		141,523.147		Free Surface		0.328	0.233	0.219	0.215	0.969	607,587.024	No	0.219	2.195
Щ	EHF10_16-EHF10_15	EHF10_16	EHF10_15	8.000	191.512		141,523.147		Free Surface		0.328	0.232	0.218	0.215	0.973	609,934.416	No	0.218	2.201
	EHF10_17-EHF10_16	EHF10_17	EHF10_16	8.000	99.824		141,523.147		Free Surface		0.346	0.257	0.231	0.215	0.876	550,262.793	No	0.231	2.044
Ш	EHF10_18-EHF10_17	EHF10_18	EHF10_17	8.000	48.315		141,523.147		Free Surface		0.335	0.242	0.223	0.215	0.933	585,310.316	No	0.223	2.137
Ш	EHF11_146-EHF11_147	EHF11_146	EHF11_147	8.000	149.540		141,523.147		Free Surface		0.330	0.236	0.220	0.215	0.958	600,780.117	No	0.220	2.177
	EHF11_147-EHF11_148	EHF11_147	EHF11_148	8.000	258.010	0.007	141,523.147		Free Surface		0.303	0.199	0.202	0.215	1.135	710,533.609	No	0.202	2.456
	EHF11_148-EHF9_19	EHF11_148	EHF9_19	8.000	162.000		141,523.147		Free Surface		0.292	0.186	0.194	0.215	1.218	762,854.562	No	0.194	2.584
	EHF3_10-EHF3_9	EHF3_10	EHF3_9	8.000	275.063		168,030.599		Free Surface		0.212	0.099	0.141	0.235	2.692	1,704,154.670	No	0.141	4.810
	EHF3_11-EHF3_10	EHF3_11	EHF3_10	8.000	280.011		168,030.599	43,250.384	Free Surface		0.219	0.105	0.146	0.235	2.537	1,603,157.020	No	0.146	4.607
	EHF3_12-EHF3_11	EHF3_12	EHF3_11	8.000	280.647		168,030.599	43,250.384	Free Surface		0.299	0.195	0.199	0.235	1.377	862,347.690	No	0.199	2.962
	EHF3_42_EHF3_12	EHF3_42	EHF3_12	8.000	143.448	0.005	168,030.599	43,250.384	Free Surface	2.261	0.364	0.284	0.243	0.235	0.941	592,605.092	No	0.243	2.261
	EHF3_9-EHF1_8	EHF3_9	EHF1_8	8.000	281.524	0.016	168,030.599	43,250.384	Free Surface	3.462	0.268	0.157	0.178	0.235	1.711	1,072,536.676	No	0.178	3.462
	EHF4_1-TOE_2592	EHF4_1	TOE_2592	8.000	38.176	0.105	168,030.599	43,250.384	Free Surface	6.747	0.168	0.061	0.112	0.235	4.274	2,752,842.869	No	0.112	6.747
	EHF7_1-EHF3_42	EHF7_1	EHF3_42	8.000	167.606	0.006	168,030.599	43,250.384	Free Surface	2.369	0.352	0.266	0.235	0.235	1.005	631,917.381	No	0.235	2.369
	EHF7_6-EHF7_1	EHF7_6	EHF7_1	8.000	274.487	0.005	168,030.599	43,250.384	Free Surface	2.338	0.355	0.271	0.237	0.235	0.987	620,813.832	No	0.237	2.338
	EHF9_10-EHF9_9	EHF9_10	EHF9_9	8.000	50.865		141,523.147		Free Surface		0.276	0.167	0.184	0.215	1.356	849,449.276	No	0.184	2.791
	EHF9_19-EHF10_18	EHF9_19	EHF10_18	8.000	262.829	0.006			Free Surface		0.318	0.219	0.212	0.215	1.033	647,250.479	No	0.212	2.297
F	EHF9_1-GVF1_0	EHF9_1	GVF1_0	8.000			141,523.147		Free Surface		0.193	0.082	0.129	0.215	2.714	1,728,730.317	Yes	0.667	0.627
F	EHF9_2-EHF9_1	EHF9_2	EHF9_1	8.000			141,523.147		Free Surface		0.187	0.076	0.125	0.215	2.905	1,854,576.605	No	0.125	4.855
F	EHF9_3-EHF9_2	EHF9_3	EHF9_2	8.000	186.841		141,523.147		Free Surface		0.185	0.074	0.123	0.215	2.974	1,900,766.814	No	0.123	4.940
F	EHF9_4-EHF9_3	EHF9_4	EHF9_3	8.000	155.145				Free Surface		0.186	0.076	0.124	0.215	2.934	1,873,883.793	No	0.124	4.891
F	EHF9_5-EHF9_4	EHF9_5	EHF9_4	8.000	242.340		141,523.147		Free Surface		0.185	0.075	0.124	0.215	2.950	1,884,590.663	No	0.124	4.911
H	EHF9_6-EHF9_5	EHF9_6	EHF9_5	8.000	124.073				Free Surface		0.282	0.173	0.188	0.215	1.304	816,722.607	No	0.188	2.714
H	EHF9_7-EHF9_6	EHF9_7	EHF9_6	8.000	189.952		141,523.147		Free Surface		0.204	0.091	0.136	0.215	2.452	1,555,938.102	No	0.136	4.289
H	EHF9 8-EHF9 7	EHF9 8	EHF9 7	8.000			141,523.147		Free Surface		0.261	0.149	0.174	0.215	1.511	947,924.207	No	0.174	3.018
السال	Li ii 0_0-Li ii 0_7	0_0	0_,	5.500	.5040	J.J 12	,0=0.1=1	55,555.555		0.010	0.201	5.140	V	J.= 10		5 ,SZ-7.ZOI		J	3.310

	ID	From ID	To ID	Diameter (in)	Length (ft) Slop	e Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth	Adjusted Velocity
	EHF9_9-EHF9_8	EHF9_9	EHF9_8	8.000	126.463 0.01	3 141,523.147	35,999.986	Free Surface	3.025	0.261	0.149	0.174	0.215	1.516	951,220.660	No	0.174	3.025
	EP_1-EP_2	EP_1	EP_2	8.000	2,935.010 0.02	1 192,758.604	50,014.061	Free Surface	3.952	0.269	0.158	0.179	0.253	1.949	1,221,889.131	Yes	0.223	2.917
	EP_2-EP_3	EP_2	EP_3	8.000	1,331.650 0.01	4 595,213.240	187,950.169	Free Surface	4.681	0.550	0.586	0.367	0.455	1.515	1,015,980.200	No	0.367	4.681
	EP_3-I25_19	EP_3	I25_19	8.000	574.890 0.01	7 595,213.240	187,950.169	Free Surface	4.941	0.527	0.546	0.351	0.455	1.646	1,091,092.294	Yes	0.574	2.880
	EVF1_7-EVF2_6	EVF1_7	EVF2_6	10.000	216.280 0.00	3 181,739.717	47,000.142	Free Surface	1.842	0.323	0.226	0.269	0.230	0.734	803,361.857	No	0.269	1.842
	EVF1A1_51-LCFA_1	EVF1A1_51	LCFA_1	21.000	93.148 0.00	2 2,049,274.311	818,564.812	Free Surface	3.291	0.422	0.371	0.738	0.647	0.777	5,527,552.587	Yes	0.757	3.179
	EVF1A1_52-TOE_2790	EVF1A1_52	TOE_2790	21.000	200.800 0.00	1 2,233,905.718	907,094.538	Free Surface	2.297	0.599	0.671	1.049	0.677	0.432	3,330,501.695	No	1.049	2.297
	EVF1A2_1-EVF1A2_50	EVF1A2_1	EVF1A2_50	21.000	186.858 0.00	1 2,049,274.311	818,564.812	Free Surface	2.410	0.537	0.563	0.940	0.647	0.489	3,639,275.758	Yes	0.975	2.303
- E	EVF1A2_50-EVF1A1_51	EVF1A2_50	EVF1A1_51	21.000	494.431 0.00	1 2,049,274.311	818,564.812	Free Surface	2.206	0.577	0.632	1.010	0.647	0.426	3,242,109.775	No	1.010	2.206
	EVF2_1A-EVF2_8	EVF2_1A	EVF2_8	12.000	143.991 0.00	4 0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,587,423.739	Yes	0.121	0.000
	EVF2 2-EVF2 8	EVF2_2	EVF2_8	12.000	94.559 0.00	3 181,739.717	47,000.142	Free Surface	1.956	0.239	0.125	0.239	0.218	0.839	1,455,021.234	No	0.239	1.956
	EVF2 3-EVF2 2	EVF2_3	EVF2_2	12.000	95.123 0.00	8 181,739.717	47,000.142	Free Surface	2.600	0.195	0.084	0.195	0.218	1.241	2,176,055.790	No	0.195	2.600
	EVF2 4A-KEF1 3	EVF2_4A	KEF1 3	12.000	276.789 0.00	1 234,939.516	62,249.737	Free Surface	1.538	0.341	0.250	0.341	0.249	0.543	938,867.719	No	0.341	1.538
=	EVF2 4-EVF2 3	EVF2_4	EVF2_3	10.000	287.309 0.00			Free Surface		0.336	0.243	0.280	0.230	0.683	748,295.666	Yes	0.548	0.740
=	EVF2 5A-EVF2 4	EVF2_5A	EVF2 4	10.000	177.162 0.00			Free Surface	1.904	0.316	0.216	0.263	0.230	0.769	841,291.145	No	0.263	1.904
=	EVF2 5-EVF2 4A	EVF2_5	EVF2_4A	12.000	187.149 0.00			Free Surface		0.263	0.152	0.263	0.218	0.694	1,198,908.685	No	0.263	1.704
=	EVF2 6A-EVF2 5	EVF2_6A	EVF2 5	12.000	46.711 0.00			Free Surface		0.234	0.120	0.234	0.218	0.869	1,508,900.022	No	0.234	2.007
	EVF2_6-EVF2_5A	EVF2_6	EVF2_5A	10.000	220.000 0.00			Free Surface		0.325	0.120	0.234	0.210	0.727	796,540.917	No	0.234	1.831
-	EVF2_6-EVF2_5A EVF2_7-EVF2_6A	EVF2_0 EVF2_7	EVF2_5A EVF2_6A	12.000	46.512 0.00			Free Surface	1.664	0.323	0.228	0.271	0.230	0.727	1,159,743.687	No	0.271	1.664
#				12.000	65.379 0.00			Free Surface	1.817	0.251		0.251	0.218	0.071		No	0.251	1.817
	EVF2_8-EVF2_7	EVF2_8	EVF2_7								0.138				1,312,395.588			
	EVF3_47-EVF3_48	EVF3_47	EVF3_48	21.000		1 2,049,274.311	818,564.812			0.547	0.581	0.958	0.647	0.472	3,526,083.241	No	0.958	2.353
	EVF3_48-EVF1A2_1	EVF3_48	EVF1A2_1	21.000		1 2,049,274.311				0.542	0.571	0.948	0.647	0.481	3,588,728.736	No	0.948	2.385
	EVF4_46-EVF3_47	EVF4_46	EVF3_47	21.000		1 2,049,274.311				0.544	0.575	0.951	0.647	0.478	3,566,357.378	Yes	0.955	2.363
	FMF4_4_4-TOE_2970	FMF4_4_4	TOE_2970	12.000	395.686 0.00		128,115.312			0.362	0.280	0.362	0.340	0.888	1,539,983.914	No	0.362	2.602
	FMF6_1-FMF6_4_6	FMF6_1	FMF6_4_6	8.000	115.487 0.06			Free Surface		0.245	0.132	0.163	0.313	3.512	2,207,498.480	No	0.163	6.777
	FMF6_2-FMF6_1	FMF6_2	FMF6_1	8.000	150.000 0.01	2 290,449.406	80,115.810	Free Surface	3.626	0.385	0.314	0.257	0.313	1.462	924,118.990	No	0.257	3.626
	FMF6_4_6-TOE_2973	FMF6_4_6	TOE_2973	12.000	142.272 0.00	4 431,189.730	128,115.312	Free Surface	2.705	0.352	0.265	0.352	0.340	0.938	1,624,287.031	No	0.352	2.705
	FMF7_3-FMF6_2	FMF7_3	FMF6_2	8.000	270.000 0.00	9 290,449.406	80,115.810	Free Surface	3.337	0.410	0.352	0.273	0.313	1.297	824,426.197	No	0.273	3.337
	FMF7_4-FMF7_3	FMF7_4	FMF7_3	8.000	430.000 0.00	9 290,449.406	80,115.810	Free Surface	3.293	0.414	0.359	0.276	0.313	1.273	809,976.682	No	0.276	3.293
	FMF7_5-FMF7_4	FMF7_5	FMF7_4	8.000	352.996 0.01	290,449.406	80,115.810	Free Surface	3.385	0.405	0.345	0.270	0.313	1.325	841,091.527	No	0.270	3.385
	FMF8_10-FMF8_9	FMF8_10	FMF8_9	8.000	91.023 0.00	5 290,449.406	80,115.810	Free Surface	2.536	0.506	0.510	0.337	0.313	0.867	569,349.967	No	0.337	2.536
	FMF8 11-FMF8 10	FMF8_11	FMF8_10	8.000	71.269 0.00	4 290,449.406	80,115.810	Free Surface	2.533	0.506	0.511	0.338	0.313	0.865	568,446.303	No	0.338	2.533
	FMF8 1-FMF8 6	FMF8 1	FMF8 6	8.000	90.764 0.06	6 290,449.406	80,115.810	Free Surface	6.727	0.246	0.133	0.164	0.313	3.476	2,184,769.012	No	0.164	6.727
Ħ	FMF8 2-FMF8 1	FMF8_2	FMF8 1	8.000	74.020 0.01	1 290,449.406	80,115.810	Free Surface	3.489	0.396	0.331	0.264	0.313	1.384	876,399.929	No	0.264	3.489
	FMF8 3-FMF8 2	FMF8 3	FMF8 2	8.000	130.706 0.01			Free Surface		0.388	0.319	0.259	0.313	1.442	911,811.000	No	0.259	3.591
	FMF8 4-FMF8 3	FMF8 4	FMF8 3	8.000	103.656 0.00			Free Surface		0.411	0.354	0.274	0.313	1.291	820,637.465	No	0.274	3.325
	FMF8 6-FMF7 5	FMF8 6	FMF7 5	8.000	160.553 0.01			Free Surface		0.348	0.260	0.232	0.313	1.780	1,118,294.473	No	0.232	4.164
	FMF8 8-FMF8 4	FMF8 8	FMF8 4	8.000	206.870 0.01			Free Surface		0.351	0.264	0.234	0.313	1.748	1,098,701.288	No	0.234	4.111
	FMF8 9-FMF8 8	FMF8 9	FMF8 8	8.000	200.000 0.00			Free Surface		0.489	0.482	0.326	0.313	0.924	602,849.761	No	0.326	2.647
=		FMF9 10	FMF9_11	8.000	279.830 0.01			Free Surface		0.259	0.147	0.173	0.211	1.475	925,419.375	No	0.173	2.936
냂	FMF9_10-FMF9_11	FMF9 11	FMF9 12	8.000	252.130 0.00			Free Surface		0.294	0.147	0.173	0.211	1.160	726,669.964	No	0.173	2.470
	FMF9_11-FMF9_12		FMF9_12 FMF9_13					Free Surface					0.211		730,217.431		0.195	2.470
	FMF9_12-FMF9_13	FMF9_12		8.000	39.140 0.00 54.240 0.00			Free Surface		0.293 0.284	0.187	0.195 0.190	0.211	1.166 1.234	730,217.431	No No	0.195	2.479
	FMF9_13-FMF9_3	FMF9_13	FMF9_3	8.000			- ,											
	FMF9_15-FMF9_23	FMF9_15	FMF9_23	8.000	49.960 0.00			Free Surface		0.299	0.195	0.200	0.211	1.117	699,828.864	No	0.200	2.405
	FMF9_1-TOE_2710	FMF9_1	TOE_2710	10.000	71.040 0.00			Free Surface		0.497	0.496	0.415	0.453	1.184	1,353,395.699	Yes	0.447	3.485
	FMF9_22-FMF9_9	FMF9_22	FMF9_9	8.000	371.380 0.00			Free Surface	1.949	0.349	0.261	0.232	0.211	0.832	522,713.730	No	0.232	1.949
	FMF9_23-FMF9_35	FMF9_23	FMF9_35	8.000	44.080 0.00	,		Free Surface		0.294	0.189	0.196	0.211	1.154	722,799.434	No	0.196	2.461
	FMF9_35-FMF9_22	FMF9_35	FMF9_22	8.000		6 136,463.830	34,616.147			0.314	0.214	0.209	0.211	1.020	638,801.265	No	0.209	2.252
	FMF9_3-FMF8_11	FMF9_3	FMF8_11	8.000	240.000 0.00		34,616.147			0.325	0.228	0.217	0.211	0.953	597,353.575	No	0.217	2.146
	FMF9_9-FMF9_10	FMF9_9	FMF9_10	8.000	281.570 0.00		34,616.147			0.288	0.180	0.192	0.211	1.208	756,648.937	No	0.192	2.543
	GVF1_0-GVF1_36	GVF1_0	GVF1_36	8.000		5 210,984.781	54,999.339			0.220	0.106	0.146	0.265	3.154	1,992,874.077	No	0.146	5.743
	GVF1_100-GVF1_101	GVF1_100	GVF1_101	8.000		2 484,274.444	147,000.905			0.430	0.385	0.287	0.409	1.971	1,259,413.660	No	0.287	5.217
	GVF1_101-GVF1_102	GVF1_101	GVF1_102	8.000	335.002 0.01	3 484,274.444	147,000.905	Free Surface	4.227	0.506	0.510	0.337	0.409	1.444	948,739.808	No	0.337	4.227
	GVF1_102-GVF1_103	GVF1_102	GVF1_103	8.000	55.341 0.01	2 484,274.444	147,000.905	Free Surface	4.104	0.518	0.531	0.345	0.409	1.382	912,285.351	No	0.345	4.104
	GVF1_103-GVF1_104	GVF1_103	GVF1_104	8.000	52.260 0.00	8 484,274.444	147,000.905	Free Surface	3.637	0.571	0.622	0.381	0.409	1.147	778,406.631	No	0.381	3.637
	GVF1_104-GVF1_105	GVF1_104	GVF1_105	8.000	145.575 0.02		147,000.905			0.413	0.357	0.275	0.409	2.135	1,357,921.256	No	0.275	5.513
			GVF1_106	8.000	69.468 0.03		147,000.905			0.373	0.296	0.248	0.409	2.598	1,638,025.872	No	0.248	6.321
-	GVF1 105-GVF1 106	GVF I 105	GVI I 100	0.000														
	GVF1_105-GVF1_106 GVF1_106-GVF1_107	GVF1_105 GVF1_106	GVF1_100	8.000	40.229 0.03		147,000.905			0.397	0.332	0.264	0.409	2.303	1,459,036.051	No	0.264	5.811

	BUILDOUT WITH SEPTIC		To ID	Diameter	Length Slope	Total Flow	Peakable Flow	Flow Type	Velocity	4/D	a/O	Water Depth	Critical	Froude	Full Flow	Backwater	Adjusted	Adjusted
		From ID		(in)	(ft) Slop	(gpd)	(gpd)	- ''	(ft/s)	d/D	q/Q	(ft)	Depth	Number	(gpd)	Adjustment	Depth	Velocity
	GVF1_108-GVF1_109	GVF1_108	GVF1_109	8.000		484,274.444	147,000.905			0.439	0.399	0.293	0.409	1.894	1,213,079.383	No	0.293	5.075
닖	GVF1_109-GVF1_111	GVF1_109	GVF1_111	8.000	210.244 0.09		147,000.905			0.289	0.183	0.193	0.409	4.232	2,650,918.354	No	0.193	8.941
닖	GVF1_111-GVF1_113	GVF1_111	GVF1_113	8.000	223.339 0.01		147,000.905			0.467	0.444	0.311	0.409	1.686	1,090,421.306	No	0.311	4.690
닖	GVF1_113-GVF1_114	GVF1_113	GVF1_114	8.000	39.937 0.009	· · · · · · · · · · · · · · · · · · ·	147,000.905			0.554	0.593	0.370	0.409	1.215	816,534.936	No	0.370	3.773
H	GVF1_114-GVF1_115	GVF1_114	GVF1_115	8.000	72.568 0.01		147,000.905			0.540	0.569	0.360	0.409	1.275	850,846.058	No	0.360	3.893
H	GVF1_115-GVF1_116	GVF1_115	GVF1_116 GVF1_117	8.000 12.000	41.819 0.012 40.907 0.003		147,000.905 241,600.229			0.507 0.513	0.512 0.521	0.338 0.513	0.409 0.449	1.440 0.777	945,977.845 1,410,003.553	No No	0.338	4.218 2.807
H	GVF1_116-GVF1_117 GVF1_117-ECF1_118	GVF1_116 GVF1_117	ECF1 118	12.000	319.483 0.00		302,350.926			0.313	0.450	0.313	0.449	1.107	1,974,006.450	No	0.313	3.786
H	GVF1_117-ECF1_118	GVF1_117	GVF1 37	8.000	227.819 0.00			Free Surface		0.350	0.430	0.470	0.490	1.107	802,756.597	No	0.470	2.999
H	GVF1_30-GVF1_40	GVF1_37	GVF1_37	8.000		210,984.781		Free Surface		0.371	0.294	0.248	0.265	1.140	718.352.275	No	0.248	2.767
H	GVF1 40-GVF1 41	GVF1 40	GVF1 41	8.000		210,984.781		Free Surface		0.353	0.268	0.236	0.265	1.254	788.361.419	No	0.236	2.960
Ħ	GVF1 41-GVF1 48	GVF1 41	GVF1 48	8.000		210,984.781	,	Free Surface		0.309	0.208	0.206	0.265	1.622	1,015,806.873	No	0.206	3.553
Ħ	GVF1 48-GVF1 50	GVF1 48	GVF1 50	8.000		210,984.781		Free Surface		0.310	0.209	0.207	0.265	1.612	1,009,879.222	No	0.207	3.538
Ħ	GVF1_50-GVF1_51	GVF1 50	GVF1 51	8.000	261.911 0.01	210,984.781	54,999.339	Free Surface	3.758	0.297	0.192	0.198	0.265	1.754	1,098,295.807	No	0.198	3.758
Ħ	GVF1 51-GVF1 52	GVF1_51	GVF1_52	10.000	141.579 0.004	334,096.791	94,599.324	Free Surface	2.524	0.402	0.339	0.335	0.315	0.889	984,481.446	No	0.335	2.524
Ħ	GVF1 52-GVF1 53	GVF1_52	GVF1_53	10.000	86.625 0.00	334,096.791	94,599.324	Free Surface	2.613	0.391	0.324	0.326	0.315	0.934	1,032,056.782	No	0.326	2.613
	GVF1_53-GVF1_56	GVF1_53	GVF1_56	10.000	84.916 0.00	334,096.791	94,599.324	Free Surface	2.942	0.358	0.275	0.299	0.315	1.106	1,215,168.899	No	0.299	2.942
	GVF1_56-GVF1_57	GVF1_56	GVF1_57	10.000	59.986 0.004	334,096.791	94,599.324	Free Surface	2.464	0.409	0.351	0.341	0.315	0.858	952,430.183	No	0.341	2.464
	GVF1_57-GVF1_58	GVF1_57	GVF1_58	10.000	135.171 0.00	334,096.791	94,599.324	Free Surface	2.467	0.409	0.350	0.340	0.315	0.860	954,010.335	No	0.340	2.467
	GVF1_58-GVF1_59	GVF1_58	GVF1_59	10.000	137.845 0.00	334,096.791	94,599.324	Free Surface	2.813	0.370	0.293	0.309	0.315	1.037	1,142,103.592	No	0.309	2.813
	GVF1_59-GVF1_60	GVF1_59	GVF1_60	10.000	183.929 0.00	334,096.791	94,599.324	Free Surface	2.682	0.384	0.312	0.320	0.315	0.969	1,069,948.622	No	0.320	2.682
	GVF1_60-GVF1_61	GVF1_60	GVF1_61	12.000	184.669 0.003	334,096.791	94,599.324	Free Surface	2.100	0.351	0.265	0.351	0.298	0.729	1,261,822.207	No	0.351	2.100
	GVF1_61-GVF1_78	GVF1_61	GVF1_78	12.000	63.774 0.00	334,096.791		Free Surface		0.299	0.195	0.299	0.298	0.994	1,715,481.944	No	0.299	2.619
	GVF1_78-GVF1_80	GVF1_78	GVF1_80	12.000	209.783 0.00	334,096.791	94,599.324	Free Surface	1.941	0.372	0.295	0.372	0.298	0.652	1,132,388.242	No	0.372	1.941
	GVF1_80-GVF1_90	GVF1_80	GVF1_90	12.000	224.665 0.003		,	Free Surface		0.368	0.289	0.368	0.298	0.666	1,156,110.201	No	0.368	1.971
	GVF1_90-GVF1_91	GVF1_90	GVF1_91	12.000		334,096.791		Free Surface		0.354	0.269	0.354	0.298	0.717	1,242,996.882	No	0.354	2.077
Щ	GVF1_91-GVF1_116	GVF1_91	GVF1_116	12.000	200.994 0.01		,	Free Surface		0.214	0.100	0.214	0.298	1.909	3,328,739.672	No	0.214	4.198
닖	GVF1_95-GVF1_96	GVF1_95	GVF1_96	8.000	76.100 0.01		147,000.905			0.454	0.422	0.302	0.409	1.781	1,146,508.437	No	0.302	4.868
H	GVF1_96-GVF1_97	GVF1_96	GVF1_97	8.000	154.304 0.03		147,000.905			0.395	0.329	0.263	0.409	2.326	1,472,658.535	No	0.263	5.850
닖	GVF1_97-GVF1_98	GVF1_97	GVF1_98	8.000	114.319 0.03		147,000.905			0.387	0.316	0.258	0.409	2.421	1,530,300.191	No	0.258	6.016
닖	GVF1_98-GVF1_99	GVF1_98	GVF1_99	8.000	92.578 0.04		147,000.905			0.349	0.261	0.233	0.409	2.950	1,853,624.894	No	0.233	6.913
H	GVF1_99-GVF1_100	GVF1_99	GVF1_100	8.000 24.000	81.192 0.04		147,000.905 4,049,196.395			0.349	0.262	0.233	0.409 1.252	2.944 0.864	1,849,699.823	No No	0.233 1.350	6.903 5.382
H	HWY52_10-HWY52_11	HWY52_10 HWY52_11	HWY52_11 HWY52_12	24.000			4,167,482.271			0.686	0.798	1.350 1.372	1.268	0.858	9,841,403.736 9,862,350.656	Yes	1.573	4.694
H	HWY52_11-HWY52_12 HWY52_12-TOE_2904	HWY52_11	TOE_2904	36.000			4,167,482.271			0.625	0.714	1.874	1.120	0.838	11,264,072.713	Yes	2.084	2.374
H	HWY52_12-10E_2904 HWY52_1-HWY52_2	HWY52_12	HWY52_2	24.000			2,754,246.643			0.542	0.714	1.084	1.057	0.954	9,932,906.547	No	1.084	5.055
H	HWY52_1-HWY52_2	HWY52_2	HWY52_2	24.000			2,754,246.643			0.504	0.508	1.009	1.057	1.094	11,186,622.998	No	1.009	5.531
H	HWY52_3-HWY52_4	HWY52_3	HWY52_4	24.000			2,754,246.643			0.499	0.498	0.997	1.057	1.118	11,407,795.711	No	0.997	5.612
H	HWY52_4-HWY52_5	HWY52_4	HWY52 5	24.000			2,754,246.643			0.541	0.571	1.083	1.057	0.956	9,951,084.187	No	1.083	5.062
H	HWY52 5-HWY52 6	HWY52_5	HWY52 6	24.000			3,851,997.110			0.359	0.275	0.717	1.225	2.790	27,357,606.246	Yes	0.916	8.304
H	HWY52 6-HWY52 7	HWY52_6	HWY52_7	24.000			3,851,997.110			0.607	0.684	1.214	1.225	1.017	11,001,508.941	No	1.214	5.834
H	HWY52 7-HWY52 8	HWY52_7	HWY52_8	24.000			3,878,246.860			0.609	0.688	1.219	1.229	1.016	11,006,634.371	No	1.219	5.843
	HWY52_8-HWY52_9	HWY52_8	HWY52_9	24.000	1,745.531 0.013	7,822,616.402	4,032,780.402	Free Surface	8.309	0.471	0.452	0.943	1.250	1.714	17,307,674.328	Yes	1.103	6.814
	HWY52_9-HWY52_10	HWY52_9	HWY52_10	24.000	691.522 0.004	7,822,616.402	4,032,780.402	Free Surface	5.307	0.682	0.808	1.363	1.250	0.845	9,682,028.669	No	1.363	5.307
	I25_10-I25_11	125_10	I25_11	18.000	688.030 0.00	1,886,395.317	741,710.601	Free Surface	2.452	0.638	0.736	0.957	0.649	0.476	2,561,321.452	No	0.957	2.452
	125_11-125_12	I25_11	125_12	18.000	964.920 0.00	1,886,395.317	741,710.601	Free Surface	2.522	0.623	0.711	0.934	0.649	0.498	2,654,227.110	No	0.934	2.522
	125_12-125_13	I25_12	I25_13	18.000	199.510 0.00	1,886,395.317	741,710.601	Free Surface	2.449	0.639	0.738	0.958	0.649	0.475	2,557,714.201	No	0.958	2.449
	125_13-125_14	I25_13	I25_14	18.000	265.210 0.00	1,886,395.317	741,710.601	Free Surface	2.421	0.645	0.748	0.968	0.649	0.466	2,521,242.547	Yes	1.003	2.325
	125_14-125_15	I25_14	I25_15	18.000	250.010 0.00	2,359,200.059	967,976.276	Free Surface	2.539	0.758	0.924	1.137	0.730	0.423	2,554,527.990	No	1.137	2.539
	125_15-125_16	I25_15	I25_16	18.000		2,359,200.059				0.757	0.922	1.136	0.730	0.424	2,559,390.262	No	1.136	2.543
	125_16-125_17	I25_16	I25_17	18.000			967,976.276			0.760	0.925	1.140	0.730	0.421	2,549,137.288	No	1.140	2.534
	125_17-125_18	I25_17	I25_18	18.000			1,132,584.054			0.317	0.218	0.476	0.782	2.591	12,328,705.003	No	0.476	8.640
	I25_18-I25_19	125_18	125_19	18.000			1,132,584.054			0.333	0.239	0.500	0.782	2.361	11,243,987.478	Yes	0.649	5.691
	125_19-125_20	125_19	125_20	18.000			1,449,385.374			0.598	0.669	0.897	0.871	0.945	4,950,031.529	No	0.897	4.644
닖	125_1-125_2	I25_1	125_2	8.000	2,762.520 0.01		59,018.378			0.351	0.264	0.234	0.274	1.356	852,383.725	Yes	0.255	2.837
	125_20-125_21	125_20	125_21	18.000			1,449,385.374			0.599	0.670	0.898	0.871	0.943	4,943,382.511	No	0.898	4.639
	125_21-125_22	125_21	125_22	18.000			1,449,385.374			0.507	0.512	0.761	0.871	1.296	6,467,408.972	No	0.761	5.696
	125_22-125_23	125_22	125_23	18.000			1,449,385.374			0.401	0.338	0.601	0.871	2.033	9,789,705.498	Yes	0.682	6.557
Ш	125_23-125_24	125_23	I25_24	18.000	1,028.875 0.00	3,952,736.065	1,789,301.566	ree Surface	5.817	0.575	0.629	0.862	0.956	1.217	6,287,793.609	Yes	0.885	5.635

ID	From ID	To ID	Diameter (in)	Length (ft) Slop	e Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth	Adjust Veloci
125_24-125_25	125_24	125_25	24.000	898.605 0.00	1 3,952,736.065	1,789,301.566	Free Surface	2.939	0.629	0.721	1.258	0.875	0.499	5,480,374.998	No	1.258	2.939
125_25-125_26	125_25	125_26	24.000	876.779 0.00	1 3,952,736.065	1,789,301.566	Free Surface	2.945	0.628	0.719	1.256	0.875	0.501	5,496,072.039	No	1.256	2.94
125_26-125_27	125_26	125_27	24.000	1,011.620 0.00	3 4,216,173.029	1,932,146.632	Free Surface	4.290	0.487	0.479	0.975	0.905	0.867	8,805,912.290	Yes	1.005	4.128
125_27-125_28	125_27	125_28	24.000	817.040 0.00	2 4,216,173.029	1,932,146.632	Free Surface	3.547	0.567	0.615	1.135	0.905	0.649	6,850,195.904	No	1.135	3.547
125_28-125_29	125_28	125_29	24.000	690.810 0.00	1 4,216,173.029	1,932,146.632	Free Surface	3.218	0.615	0.698	1.230	0.905	0.556	6,042,595.868	No	1.230	3.218
125_29-125_30	125_29	125_30	24.000	2,626.620 0.00	7 4,479,073.025	2,076,414.418	Free Surface	5.937	0.398	0.335	0.797	0.934	1.355	13,386,284.582	Yes	0.998	4.42
125_2-125_3	125_2	125_3	8.000	354.910 0.02	5 858,146.771	290,414.771	Free Surface	6.341	0.579	0.635	0.386	0.544	1.982	1,350,907.908	Yes	0.430	5.57
125_30-125_31	125_30	I25_31	24.000	1,812.250 0.00	2 4,691,727.019	2,194,299.974	Free Surface	3.361	0.650	0.756	1.299	0.957	0.557	6,209,171.960	No	1.299	3.36
125 31-125 32	125_31	125_32	24.000	395.150 0.00	2 4,691,727.019	2,194,299.974	Free Surface	3.374	0.647	0.752	1.295	0.957	0.560	6,240,031.494	No	1.295	3.37
125 32-125 33	125_32	125_33	24.000	346.170 0.00	2 4,691,727.019	2,194,299.974	Free Surface	3.363	0.649	0.755	1.298	0.957	0.557	6,214,355.271	No	1.298	3.36
125 33-125 34	125_33	125_34	24.000	1,017.760 0.00	2 4,691,727.019	2,194,299.974	Free Surface	3.365	0.649	0.755	1.298	0.957	0.558	6,217,881.876	No	1.298	3.36
125_34-125_35	125_34	125_35	24.000	1.013.810 0.00	2 4,691,727.019	2.194.299.974	Free Surface	3.362	0.649	0.756	1.299	0.957	0.557	6.209.983.139	No	1.299	3.36
125_35-125_36	125_35	125_36	24.000		2 4.691.727.019				0.563	0.608	1.126	0.957	0.733	7,714,323.017	Yes	1.145	3.90
I25 36-HWY52 1	125_36	HWY52 1	24.000	,	2 5,516,260.542	, - ,			0.632	0.726	1.264	1.041	0.690	7,597,281.363	No	1.264	4.07
125_3-125_4	125_3	125_4	12.000		3 858,146.771	290,414.771			0.575	0.629	0.575	0.487	0.728	1,364,818.812	No	0.575	2.84
125_5-125_4	125_4	125_5	12.000		0 1,237,624.670				0.504	0.506	0.504	0.590	1.353	2,445,202.202	No	0.504	4.83
					9 1,237,624.670				0.504	0.510	0.504	0.590	1.342		No	0.504	4.8
125_5-125_6	125_5	125_6	12.000											2,428,226.428			
125_6-125_7	125_6	125_7	12.000		9 1,237,624.670				0.518	0.531	0.518	0.590	1.280	2,329,279.156	No	0.518	4.6
125_7-125_8	125_7	125_8	12.000		9 1,237,624.670				0.519	0.533	0.519	0.590	1.275	2,321,366.854	Yes	0.559	4.2
125_8-125_9	125_8	125_9	15.000		2 1,237,624.670				0.559	0.602	0.699	0.551	0.634	2,056,167.396	No	0.699	2.7
125_9-125_10	I25_9	125_10	15.000	964.580 0.00	. ,,	,	Free Surface		0.468	0.447	0.585	0.687	1.356	4,221,921.089	Yes	0.676	4.3
KEF1_10-KEF1_1	KEF1_10	KEF1_1	12.000	425.192 0.00	,		Free Surface		0.106	0.024	0.106	0.078	0.545	1,014,852.200	Yes	0.261	0.2
KEF1_1A-KEF1_2A	KEF1_1A	KEF1_2A	12.000	304.802 0.00	2 0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,118,928.838	No	0.000	0.0
KEF1_1-KEF1_80	KEF1_1	KEF1_80	12.000	111.462 0.00	2 429,452.694	127,500.432	Free Surface	2.147	0.416	0.363	0.416	0.340	0.675	1,184,548.524	No	0.416	2.1
KEF1_2A-KEF1_3A	KEF1_2A	KEF1_3A	12.000	190.988 0.00	2 0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,158,870.443	No	0.000	0.
KEF1_2-KEF1_1	KEF1_2	KEF1_1	12.000	128.808 0.00	2 412,501.345	121,499.954	Free Surface	1.953	0.434	0.390	0.434	0.333	0.600	1,056,910.315	No	0.434	1.9
KEF1 3A-KEF1 4	KEF1_3A	KEF1_4	12.000	265.620 0.00	2 0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,138,143.873	No	0.000	0.0
KEF1 3-KEF1 2	KEF1 3	KEF1 2	12.000	39.537 0.00	3 412,501.345	121,499.954	Free Surface	2.442	0.367	0.288	0.367	0.333	0.826	1,434,221.176	Yes	0.400	2.1
KEF1 4-KEF1 5	KEF1 4	KEF1 5	12.000	97.079 0.00	2 0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,046,665.307	No	0.000	0.0
KEF1 5-KEF1 6	KEF1 5	KEF1_6	12.000	126.404 0.00		0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,134,362.985	No	0.000	0.0
KEF1 6-KEF1 7	KEF1 6	KEF1 7	12.000	300.782 0.00			Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,281,839.995	No	0.000	0.0
KEF1 7-KEF1 8	KEF1 7	KEF1 8	12.000	129.689 0.00			Free Surface		0.000	0.000	0.000	0.000	0.000	850,629.580	No	0.000	0.0
KEF1 80-KEF1 81	KEF1 80	KEF1 81	12.000	67.889 0.00		127,500.432			0.404	0.343	0.404	0.340	0.716	1,251,614.374	No	0.404	2.2
KEF1 81-KEF1 82	KEF1 81	KEF1 82	12.000	250.893 0.00	· · · · · · · · · · · · · · · · · · ·	127,500.432			0.409	0.351	0.409	0.340	0.699	1,223,144.117	No	0.409	2.
	KEF1 82	KEF1 83	12.000	254.412 0.00		127,500.432			0.437	0.395	0.437	0.340	0.616	1,086,419.681	No	0.437	2.
KEF1_82-KEF1_83	KEF1_83		12.000	374.323 0.00	· · · · · · · · · · · · · · · · · · ·	127,500.432			0.437	0.333	0.437	0.340	1.165		No	0.437	
KEF1_83-TOE_2859		TOE_2859												2,011,085.908			3.
KEF1_8-KEF1_9	KEF1_8	KEF1_9	12.000	250.713 0.00			Free Surface		0.000	0.000	0.000	0.000	0.000	1,203,016.022	No	0.000	0.
KEF1_9-KEF1_10	KEF1_9	KEF1_10	12.000	123.304 0.00			Free Surface		0.000	0.000	0.000	0.000	0.000	1,388,512.128	Yes	0.023	0.
KFF1_10-KFF1_9	KFF1_10	KFF1_9	12.000	223.577 0.00	· · · · · · · · · · · · · · · · · · ·		Free Surface	1.563	0.327	0.231	0.327	0.244	0.565	975,375.446	No	0.327	1.
KFF1_11-KFF1_10	KFF1_11	KFF1_10	12.000	287.986 0.00			Free Surface		0.000	0.000	0.000	0.000	0.000	896,523.512	Yes	0.129	0.0
KFF1_14-KFF1_11	KFF1_14	KFF1_11	12.000	334.039 0.00			Free Surface		0.000	0.000	0.000	0.000	0.000	957,955.485	No	0.000	0.
KFF1_15-KFF1_14	KFF1_15	KFF1_14	12.000	345.637 0.00			Free Surface		0.000	0.000	0.000	0.000	0.000	1,084,657.167	No	0.000	0.
KFF1_16-KFF1_15	KFF1_16	KFF1_15	12.000	234.800 0.00			Free Surface		0.000	0.000	0.000	0.000	0.000	1,243,115.538	No	0.000	0.
KFF1_9-KEF1_3	KFF1_9	KEF1_3	12.000	283.847 0.00			Free Surface		0.309	0.207	0.309	0.244	0.632	1,090,939.541	No	0.309	1.0
LCFA_10-LCFA_9	LCFA_10	LCFA_9	8.000	313.750 0.00	· · · · · · · · · · · · · · · · · · ·		Free Surface		0.344	0.254	0.229	0.248	1.167	732,621.515	No	0.229	2.
LCFA_11-LCFA_10	LCFA_11	LCFA_10	8.000	349.730 0.00		.,	Free Surface		0.344	0.254	0.229	0.248	1.169	734,256.516	No	0.229	2.
LCFA_12-LCFA_11	LCFA_12	LCFA_11	8.000	136.970 0.00	6 186,414.715	48,278.862	Free Surface	2.472	0.368	0.289	0.246	0.248	1.023	644,264.831	No	0.246	2.
LCFA_13-LCFA_12	LCFA_13	LCFA_12	8.000	127.450 0.00	8 186,414.715	48,278.862	Free Surface	2.821	0.334	0.241	0.223	0.248	1.233	773,653.723	No	0.223	2.8
LCFA_14-LCFA_13	LCFA_14	LCFA_13	8.000	231.150 0.00	7 186,414.715	48,278.862	Free Surface	2.598	0.355	0.270	0.237	0.248	1.098	690,180.006	No	0.237	2.
LCFA_15-LCFA_14	LCFA_15	LCFA_14	8.000	166.040 0.00	7 186,414.715	48,278.862	Free Surface	2.624	0.352	0.266	0.235	0.248	1.113	699,836.302	No	0.235	2.0
LCFA_16-LCFA_15	LCFA_16	LCFA_15	8.000	153.370 0.01		48,278.862	Free Surface	2.991	0.320	0.222	0.214	0.248	1.339	838,955.698	No	0.214	2.
LCFA_17-LCFA_16	LCFA_17	LCFA_16	8.000		4 186,414.715	48,278.862			0.233	0.119	0.156	0.248	2.480	1,562,036.128	No	0.156	4.0
LCFA_1-EVF1A1_52	LCFA_1	EVF1A1_52	21.000		2 2,233,905.718	907,094.538			0.444	0.407	0.777	0.677	0.767	5,492,249.176	Yes	0.913	2.
LCFA_3-LCFA_1	LCFA_3	LCFA_1	8.000		9 316,240.035	88,529.727			0.319	0.221	0.213	0.327	2.287	1,433,080.656	Yes	0.495	1.
LCFA_4-LCFA_3	LCFA_4	LCFA_3	8.000		4 316,240.035	88,529.727			0.563	0.608	0.375	0.327	0.769	519,716.515	No	0.375	2.
LCFA_4-LCFA_5 LCFA_5-LCFA_4	LCFA_5	LCFA_4	8.000		4 316,240.035	88,529.727			0.553	0.590	0.368	0.327	0.703	535,566.343	No	0.368	2.
LCFA_6-LCFA_5	LCFA_6	LCFA_5 LCFA_6	8.000 8.000	162.080 0.00 116.630 0.00		78,029.251 78,029.251			0.483 0.442	0.471	0.322 0.295	0.309	0.928 1.096	603,400.714 702,592.425	No No	0.322 0.295	2.0
LCFA_7-LCFA_6	LCFA_7																

	ID	From ID	To ID	Diameter (in)	(11)	ope Total F (gpd	(gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth	Adjusted Velocity
	LCFA_9-LCFA_8	LCFA_9	LCFA_8	8.000	78.140 0	186,414	15 48,278.862	Free Surface	2.450	0.371	0.293	0.247	0.248	1.010	636,580.370	No	0.247	2.450
	LCFB_1-LCFA_7	LCFB_1	LCFA_7	8.000	119.310 0	118,674	29,750.389	Free Surface	1.956	0.314	0.214	0.209	0.197	0.885	554,638.832	No	0.209	1.956
	LCFB_2-LCFB_1	LCFB_2	LCFB_1	8.000	129.900 0	118,674	29,750.389	Free Surface	2.250	0.284	0.176	0.189	0.197	1.076	674,009.407	No	0.189	2.250
	LCFB_3-LCFB_2	LCFB_3	LCFB_2	8.000	219.450 0	007 118,674	18 29,750.389	Free Surface	2.336	0.276	0.167	0.184	0.197	1.134	710,650.679	No	0.184	2.336
	LCFB_4-LCFB_3	LCFB_4	LCFB_3	8.000	93.380 0	008 118,674	29,750.389	Free Surface	2.440	0.268	0.157	0.179	0.197	1.205	755,183.569	No	0.179	2.440
	NMS_10-NMS_9	NMS_10	NMS_9	10.000	29.440 0	040 512,999	157,499.941	Free Surface	6.475	0.276	0.167	0.230	0.394	2.813	3,079,396.698	No	0.230	6.475
	NMS_11-NMS_10	NMS_11	NMS_10	10.000	400.000 0	10 512,999	157,499.941	Free Surface	3.926	0.398	0.334	0.331	0.394	1.390	1,538,131.757	No	0.331	3.926
	NMS_12-NMS_11	NMS_12	NMS_11	10.000	400.000 0	008 512,999	157,499.941	Free Surface	3.618	0.423	0.373	0.352	0.394	1.235	1,375,746.867	No	0.352	3.618
	NMS_13-NMS_12	NMS_13	NMS_12	10.000	400.000 0	008 512,999	157,499.941	Free Surface	3.618	0.423	0.373	0.352	0.394	1.235	1,375,746.867	No	0.352	3.618
	NMS 14-NMS 13	NMS_14	NMS_13	10.000	89.260 0	009 512,999	157,499.941	Free Surface	3.772	0.410	0.352	0.342	0.394	1.312	1,456,163.333	No	0.342	3.772
╗	NMS 15-NMS 14	NMS_15	NMS_14	10.000	119.200 0	10 512,999	157,499.941	Free Surface	3.935	0.397	0.332	0.331	0.394	1.394	1,543,284.642	No	0.331	3.935
=	NMS 16-NMS 15	NMS_16	NMS_15	10.000	374.790 0	007 512,999	157,499.941	Free Surface	3.443	0.439	0.399	0.366	0.394	1.149	1,286,027.298	No	0.366	3.443
=	NMS 17-NMS 16	NMS_17	NMS_16	10.000	332.270 0	20 512,999	157,499.941	Free Surface	5.048	0.330	0.236	0.275	0.394	1.986	2,175,999.523	No	0.275	5.048
7	NMS_18-NMS_17	NMS_18	NMS_17	10.000	332.270 0			Free Surface		0.290	0.184	0.242	0.394	2.553	2,793,529.425	No	0.242	6.039
=	NMS 19-NMS 18	NMS_19	NMS_18	10.000	104.120 0			Free Surface		0.297	0.193	0.248	0.394	2.434	2,662,586.687	No	0.248	5.835
=	NMS 1-FMF9 1	NMS_1	FMF9 1	10.000	114.510 0			Free Surface		0.249	0.136	0.208	0.394	3.433	3,767,473.447	No	0.208	7.476
=	NMS 20-NMS 19	NMS_20	NMS_19	10.000	98.110 0			Free Surface		0.398	0.334	0.332	0.394	1.389	1,537,269.246	No	0.332	3.924
=	NMS 2-NMS-1	NMS_2	NMS 1	10.000		040 512,999		Free Surface		0.336	0.167	0.230	0.394	2.811	3,076,616.155	No	0.230	6.471
=	_			10.000	113.730 0			Free Surface		0.270	0.107	0.230	0.394	1.391	1,539,956.471	No	0.230	3.929
=	NMS_3-NMS_2	NMS_3	NMS_2										0.394		1,536,170.126		0.331	3.929
=	NMS_4-NMS_3	NMS_4	NMS_3	10.000		010 512,999				0.398	0.334	0.332		1.388		No		
	NMS_5-NMS_4	NMS_5	NMS_4	10.000		512,999		Free Surface		0.297	0.192	0.248	0.394	2.440	2,668,892.495	No	0.248	5.845
	NMS_6-NMS_5	NMS_6	NMS_5	10.000		30 512,999		Free Surface		0.297	0.192	0.248	0.394	2.437	2,666,397.603	No	0.248	5.841
	NMS_7-NMS_6	NMS_7	NMS_6	10.000		30 512,999		Free Surface		0.298	0.193	0.248	0.394	2.432	2,660,838.404	No	0.248	5.833
	NMS_8-NMS_7	NMS_8	NMS_7	10.000		010 512,999		Free Surface		0.398	0.334	0.331	0.394	1.390	1,538,131.757	No	0.331	3.926
	NMS_9-NMS_8	NMS_9	NMS_8	10.000	400.000 0	008 512,999	157,499.941	Free Surface	3.691	0.417	0.363	0.347	0.394	1.271	1,413,910.415	No	0.347	3.691
	OGF1_17-OGF1_18	OGF1_17	OGF1_18	10.000	85.519 0	0.00	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,932,538.745	No	0.000	0.000
	OGF1_18-OGF1_25	OGF1_18	OGF1_25	10.000	68.819 0	0.00	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,816,667.672	No	0.000	0.000
	OGF1_1-OGF1_2	OGF1_1	OGF1_2	10.000	389.725 0	0.00	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,579,556.344	No	0.000	0.000
	OGF1_25-OGF1_75	OGF1_25	OGF1_75	10.000	202.386 0	0.00	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,123,609.766	Yes	0.012	0.000
	OGF1 2-OGF1 3	OGF1_2	OGF1_3	10.000	76.361 0	0.00	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,099,236.929	No	0.000	0.000
╗	OGF1 3-OGF1 4	OGF1_3	OGF1_4	10.000	302.094 0	0.00	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	2,048,825.511	No	0.000	0.000
=	OGF1 4-OGF1 5	OGF1_4	OGF1_5	10.000	93.410 0	0.00	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,583,489.455	No	0.000	0.000
=	OGF1 5-OGF1 17	OGF1_5	OGF1 17	10.000	49.146 0	0.00	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,741,483.745	No	0.000	0.000
=	OGF1 69-OGF1 70	OGF1_69	OGF1 70	10.000		005 238,514		Free Surface		0.321	0.223	0.267	0.264	0.978	1,070,666.651	No	0.267	2.445
=	OGF1 70-OGF1 71	OGF1_70	OGF1 71	10.000		005 238,514		Free Surface		0.324	0.228	0.270	0.264	0.957	1,047,841.622	No	0.270	2.407
=	OGF1 71-OGF1 72	OGF1_71	OGF1_72	10.000		002 238,514		Free Surface		0.440	0.400	0.366	0.264	0.533	596,524.643	No	0.366	1.598
=	OGF1 72-OGF1 73	OGF1_72	OGF1 73	10.000		009 238,514		Free Surface		0.274	0.165	0.229	0.264	1.323	1,448,715.520	Yes	0.251	2.665
=	OGF1 73-OGF1 74	OGF1_72	OGF1_73	10.000	191.425 0			Free Surface		0.328	0.103	0.223	0.264	0.936	1,024,951.498	No	0.273	2.369
=			OGF1_74	10.000	100.813 0			Free Surface		0.320	0.255	0.273	0.264	1.328	1,453,305.584	Yes	0.273	2.820
=	OGF1_74-OGF1_75	OGF1_74																
	OGF1_75-TOE_2622	OGF1_75	TOE_2622	10.000	194.676 0			Free Surface		0.305	0.202	0.254	0.264	1.081	1,182,188.388	No	0.254	2.625
	OGF2_29-OGF2_31	OGF2_29	OGF2_31	8.000	229.146 0			Free Surface		0.172	0.064	0.115	0.135	1.376	884,315.641	No	0.115	2.203
	OGF2_31-OGF2_32	OGF2_31	OGF2_32	8.000	236.759 0	-		Free Surface		0.145	0.045	0.097	0.135	1.932	1,260,843.418	No	0.097	2.827
	OGF2_32-OGF2_33	OGF2_32	OGF2_33	8.000	236.902 0			Free Surface		0.148	0.047	0.099	0.135	1.854	1,207,535.197	No	0.099	2.742
	OGF2_33-OGF2_34	OGF2_33	OGF2_34	8.000	190.439 0	-		Free Surface		0.180	0.071	0.120	0.135	1.256	803,865.810	No	0.120	2.059
	OGF2_34-OGF2_46	OGF2_34	OGF2_46	8.000	282.567 0			Free Surface		0.180	0.071	0.120	0.135	1.259	805,885.247	No	0.120	2.063
	OGF2_46-OGF2_49	OGF2_46	OGF2_49	8.000	124.327 0	-		Free Surface		0.160	0.055	0.107	0.135	1.591	1,029,214.197	No	0.107	2.451
	OGF2_49-OGF2_50	OGF2_49	OGF2_50	8.000	119.294 0	57,000.		Free Surface		0.173	0.065	0.116	0.135	1.357	871,847.331	No	0.116	2.181
	OGF2_50-OGF2_65	OGF2_50	OGF2_65	8.000	185.079 0	002 57,000.	39 14,250.235	Free Surface	1.266	0.254	0.141	0.169	0.135	0.644	404,119.324	Yes	0.215	0.905
	OGF2_65-OGF2_68	OGF2_65	OGF2_68	10.000	168.652 0	003 238,514	63,400.296	Free Surface	1.986	0.373	0.297	0.311	0.264	0.729	803,297.351	No	0.311	1.986
	OGF2_68-OGF1_69	OGF2_68	OGF1_69	10.000	289.307 0	238,514	63,400.296	Free Surface	3.152	0.267	0.156	0.223	0.264	1.394	1,526,638.745	Yes	0.245	2.758
	OTF1_101-OTF1_102	OTF1_101	OTF1_102	12.000	360.260 0	0.00	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,263,957.034	No	0.000	0.000
=	OTF1_102-OTF1_103	OTF1_102	OTF1_103	12.000	415.146 0		0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	776,382.060	Yes	0.275	0.000
=	OTF1_103-TOE_2798	OTF1_103	TOE_2798	12.000	319.000 0			Free Surface		0.335	0.242	0.335	0.375	1.242	2,146,766.242	Yes	0.345	3.347
	OTF1_108-TOE_3005	OTF1_108	TOE_3005	16.000	25.799 0			Free Surface		0.109	0.025	0.146	0.400	7.228	27,512,267.951	Yes	0.446	2.626
Ħ	OTF1 30-OTF1 37	OTF1_30	OTF1_37	8.000	188.540 0		0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	505,707.818	No	0.000	0.000
=	OTF1_30-OTF1_37 OTF1_37-OTF1_43	OTF1_37	OTF1_43	8.000	385.010 0		0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	567,011.375	Yes	0.000	0.000
=				8.000				Free Surface		0.474			0.000		528,688.388	Yes	0.136	
-	OTF1_43-OTF1_44	OTF1_43	OTF1_44		466.022 0						0.457	0.316		0.816				2.242
=	OTF1_44-OTF1_65	OTF1_44	OTF1_65	8.000	469.331 0			Free Surface		0.490	0.483	0.327	0.284	0.766	499,939.787	No	0.327	2.197
	OTF1_46-OTF1_47	OTF1_46	OTF1_47	10.000	453.820 0	0.00	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	144,404.768	No	0.000	0.000

	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth	Adjusted Velocity
	OTF1_47-OTF1_48	OTF1_47	OTF1_48	10.000	474.640	0.004	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	978,277.047	No	0.000	0.000
	OTF1_48-OTF1_62	OTF1_48	OTF1_62	10.000	436.432	0.003	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	842,696.068	Yes	0.107	0.000
	OTF1_60A-OTF1_61A	OTF1_60A	OTF1_61A	24.000	31.746	0.004	2,326,551.242	952,038.362	Free Surface	3.944	0.332	0.238	0.665	0.664	0.999	9,764,428.122	No	0.665	3.944
	OTF1_61A-TOE_2825	OTF1_61A	TOE_2825	24.000	191.263	0.005	2,326,551.242	952,038.362	Free Surface	4.216	0.317	0.217	0.633	0.664	1.097	10,711,431.840	No	0.633	4.216
	OTF1_62-OTF1_64	OTF1_62	OTF1_64	10.000	483.405	0.003	111,997.398	27,999.349	Free Surface	1.566	0.257	0.144	0.214	0.179	0.708	775,872.865	No	0.214	1.566
	OTF1_64-OTF1_82	OTF1_64	OTF1_82	10.000	469.703	0.003	111,997.398	27,999.349	Free Surface	1.622	0.250	0.137	0.209	0.179	0.743	815,396.316	Yes	0.210	1.606
	OTF1_65-OTF1_80	OTF1_65	OTF1_80	8.000	484.534	0.004	241,426.929	64,337.736	Free Surface	2.356	0.464	0.440	0.309	0.284	0.850	549,097.814	Yes	0.311	2.344
	OTF1_80-OTF1_96	OTF1_80	OTF1_96	8.000	428.652	0.004	241,426.929	64,337.736	Free Surface	2.333	0.468	0.445	0.312	0.284	0.838	542,038.596	No	0.312	2.333
	OTF1_82-OTF1_87	OTF1_82	OTF1_87	10.000	444.471	0.003	111,997.398	27,999.349	Free Surface	1.589	0.254	0.141	0.212	0.179	0.723	792,524.443	Yes	0.242	1.321
	OTF1_87-OTF1_96	OTF1_87	OTF1_96	10.000	387.699	0.003	192,158.435	49,849.901	Free Surface	1.928	0.326	0.229	0.271	0.236	0.765	837,713.068	No	0.271	1.928
	OTF1_88-OTF1_89	OTF1_88	OTF1_89	8.000	321.471	0.015	66,798.695	16,699.674	Free Surface	2.602	0.171	0.064	0.114	0.146	1.631	1,048,414.908	Yes	0.667	0.296
	OTF1_89-OTF1_90	OTF1_89	OTF1_90	8.000	329.236	-0.007	66,798.695	16,699.674	Pressurized	0.296	1.000		0.667	0.000	0.064		No	0.667	0.296
	OTF1_90-OTF1_92	OTF1_90	OTF1_92	8.000	164.601	0.004	66,798.695	16,699.674	Free Surface	1.657	0.235	0.121	0.156	0.146	0.878	553,217.651	No	0.156	1.657
	OTF1_92-OTF1_93	OTF1_92	OTF1_93	8.000	20.322	0.005	66,798.695	16,699.674	Free Surface	1.745	0.226	0.112	0.151	0.146	0.943	595,084.768	No	0.151	1.745
	OTF1_93-OTF1_94	OTF1_93	OTF1_94	8.000	373.404	0.008	66,798.695	16,699.674	Free Surface	2.058	0.201	0.089	0.134	0.146	1.183	751,463.852	No	0.134	2.058
	OTF1_94-OTF1_95	OTF1_94	OTF1_95	8.000	179.276	0.023	66,798.695	16,699.674	Free Surface	2.991	0.155	0.052	0.104	0.146	1.971	1,278,202.011	Yes	0.184	1.317
	OTF1_95-OTF1_96	OTF1_95	OTF1_96	8.000	386.157	0.004	177,991.294	45,974.863	Free Surface	2.134	0.397	0.332	0.265	0.243	0.846	535,724.847	No	0.265	2.134
	OTF1_96-OTF1_97	OTF1_96	OTF1_97	12.000	9.000	0.033	520,284.568	160,162.500	Free Surface	5.975	0.228	0.114	0.228	0.375	2.628	4,566,521.855	No	0.228	5.975
	OTF1_97-OTF1_98	OTF1_97	OTF1_98	12.000	180.000	0.006	520,284.568	160,162.500	Free Surface	3.170	0.359	0.276	0.359	0.375	1.086	1,882,825.195	No	0.359	3.170
	OTF1_98-OTF1_103	OTF1_98	OTF1_103	12.000	300.000	0.007	520,284.568	160,162.500	Free Surface	3.485	0.335	0.242	0.335	0.375	1.242	2,146,751.017	No	0.335	3.485
	RMF1_114-RMF1_118	RMF1_114	RMF1_118	12.000	321.098	0.027	709,007.958	231,369.033	Free Surface	6.074	0.281	0.172	0.281	0.441	2.388	4,121,788.264	No	0.281	6.074
	RMF1_118-AIF1_119	RMF1_118	AIF1_119	12.000	371.334	0.005	709,007.958	231,369.033	Free Surface	3.346	0.435	0.392	0.435	0.441	1.025	1,807,858.922	No	0.435	3.346
	SCC_01	SCC_21	TOE_2948	15.000	100.000	0.002	1,640,162.735	627,943.444	Free Surface	2.846	0.682	0.809	0.853	0.638	0.573	2,028,108.090	Yes	1.034	2.338
	SCC_10	SCC_12	SCC_13	15.000	375.000	0.002	1,640,162.735	627,943.444	Free Surface	2.846	0.682	0.809	0.853	0.638	0.573	2,028,108.090	No	0.853	2.846
	SCC_11	SCC_11A	SCC_12	15.000	145.690	0.002	1,640,162.735	627,943.444	Free Surface	2.841	0.683	0.811	0.854	0.638	0.571	2,023,299.745	No	0.854	2.841
	SCC_12	SCC_11	SCC_11A	12.000	356.110	0.023	379,240.705	109,943.959	Free Surface	4.753	0.214	0.101	0.214	0.318	2.159	3,765,224.279	Yes	0.434	1.794
	SCC_13	SCC_10	SCC_11	12.000	490.000	0.004	379,240.705	109,943.959	Free Surface	2.513	0.338	0.246	0.338	0.318	0.891	1,541,006.959	No	0.338	2.513
	SCC_14	SCC_09	SCC_10	12.000	100.000	0.009	379,240.705	109,943.959	Free Surface	3.424	0.270	0.160	0.270	0.318	1.374	2,372,834.360	No	0.270	3.424
	SCC_15	SCC_08	SCC_09	12.000	413.000	0.010	362,472.724	104,244.441	Free Surface	3.545	0.255	0.143	0.255	0.311	1.467	2,537,263.705	No	0.255	3.545
	SCC_16	SCC_07	SCC_08	12.000	412.000	0.008	362,472.724	104,244.441	Free Surface	3.167	0.277	0.167	0.277	0.311	1.254	2,166,091.507	No	0.277	3.167
	SCC_17	SCC_06	SCC_07	10.000	375.000	0.007	333,054.618	94,245.085	Free Surface	3.099	0.344	0.255	0.287	0.314	1.192	1,307,562.782	No	0.287	3.099
	SCC_18	SCC_05	SCC_06	10.000	150.000	0.007	333,054.618	94,245.085	Free Surface	3.043	0.349	0.261	0.291	0.314	1.161	1,274,578.305	No	0.291	3.043
	SCC_19	SCC_04	SCC_05	10.000	200.000	0.007	333,054.618	94,245.085	Free Surface	3.064	0.347	0.259	0.289	0.314	1.173	1,286,893.357	No	0.289	3.064
	SCC_2	SCC_20	SCC_21	15.000	225.000	0.002	1,640,162.735	627,943.444	Free Surface	2.846	0.682	0.809	0.853	0.638	0.573	2,028,108.090	No	0.853	2.846
	SCC_20	SCC_03	SCC_04	10.000	220.000	0.007	333,054.618	94,245.085	Free Surface	3.099	0.344	0.255	0.287	0.314	1.192	1,307,617.610	No	0.287	3.099
	SCC_21	SCC_02	SCC_03	10.000	577.000	0.007	333,054.618	94,245.085	Free Surface	3.137	0.341	0.251	0.284	0.314	1.212	1,329,365.083	No	0.284	3.137
	SCC_22	SCC_01	SCC_02	8.000	443.000	0.011	187,936.195	48,695.022	Free Surface	3.156	0.310	0.209	0.207	0.249	1.439	901,253.048	No	0.207	3.156
	SCC_3	SCC_19	SCC_20	15.000	415.000	0.002	1,640,162.735	627,943.444	Free Surface	2.846	0.682	0.809	0.853	0.638	0.573	2,028,108.090	No	0.853	2.846
	SCC_4	SCC_18	SCC_19	15.000	485.000	0.002	1,640,162.735	627,943.444	Free Surface	2.834	0.685	0.813	0.856	0.638	0.569	2,017,626.841	No	0.856	2.834
	SCC_5	SCC_17	SCC_18	15.000	275.000	0.002	1,640,162.735	627,943.444	Free Surface	2.846	0.682	0.809	0.853	0.638	0.573	2,028,108.090	No	0.853	2.846
	SCC_6	SCC_16	SCC_17	15.000	513.000	0.002	1,640,162.735	627,943.444	Free Surface	2.851	0.681	0.807	0.851	0.638	0.575	2,032,057.671	No	0.851	2.851
	SCC_7	SCC_15	SCC_16	15.000	512.000	0.002	1,640,162.735	627,943.444	Free Surface	2.842	0.683	0.810	0.854	0.638	0.572	2,024,143.065	No	0.854	2.842
	SCC_8	SCC_14	SCC_15	15.000			1,640,162.735		Free Surface	2.846	0.682	0.809	0.853	0.638	0.573	2,028,108.090	No	0.853	2.846
	SCC_9	SCC_13	SCC_14	15.000	500.000	0.002	1,640,162.735	627,943.444	Free Surface	2.834	0.685	0.813	0.856	0.638	0.569	2,017,942.070	No	0.856	2.834
	SUN_10-SUN_11	SUN_10	SUN_11	8.000	402.750	0.024	224,841.521	,	Free Surface	4.369	0.279	0.170	0.186	0.274	2.110	1,321,950.703	No	0.186	4.369
	SUN_11-SUN_12	SUN_11	SUN_12	8.000	319.400	0.053	224,841.521		Free Surface	5.765	0.229	0.115	0.153	0.274	3.096	1,951,946.703	Yes	0.173	4.831
	SUN_12-SUN_13	SUN_12	SUN_13	8.000	400.080		224,841.521	,	Free Surface		0.440	0.401	0.294	0.274	0.875	561,059.875	No	0.294	2.349
	SUN_13-SUN_14	SUN_13	SUN_14	8.000	338.740				Free Surface		0.351	0.265	0.234	0.274	1.350	848,653.125	No	0.234	3.178
	SUN_14-SUN_15	SUN_14	SUN_15	8.000			224,841.521		Free Surface		0.282	0.174	0.188	0.274	2.067	1,294,902.337	No	0.188	4.305
	SUN_15-ECF1_44	SUN_15	ECF1_44	8.000			224,841.521		Free Surface		0.463	0.439	0.309	0.274	0.794	512,563.154	Yes	0.646	1.006
	SUN_1-SUN_2	SUN_1	SUN_2	8.000			224,841.521		Free Surface		0.305	0.202	0.203	0.274	1.776	1,112,216.324	No	0.203	3.861
	SUN_2-SUN_3	SUN_2	SUN_3	8.000			224,841.521		Free Surface		0.316	0.217	0.211	0.274	1.653	1,035,587.450	No	0.211	3.668
	SUN_3-SUN_4	SUN_3	SUN_4	8.000	397.140		224,841.521		Free Surface		0.374	0.298	0.249	0.274	1.198	755,521.919	No	0.249	2.921
	SUN_4-SUN_5	SUN_4	SUN_5	8.000			224,841.521		Free Surface		0.400	0.337	0.267	0.274	1.051	666,364.813	No	0.267	2.666
	SUN_5-SUN_6	SUN_5	SUN_6	8.000	334.880	0.005	224,841.521	58,999.658	Free Surface	2.399	0.433	0.390	0.289	0.274	0.902	577,144.885	No	0.289	2.399
	SUN_6-SUN_7	SUN_6	SUN_7	8.000	247.010	0.005	224,841.521	58,999.658	Free Surface	2.404	0.433	0.388	0.288	0.274	0.905	578,835.635	No	0.288	2.404
	SUN_7-SUN_8	SUN_7	SUN_8	8.000	269.850				Free Surface		0.433	0.389	0.289	0.274	0.903	577,374.239	No	0.289	2.400
	SUN_8-SUN_9	SUN_8	SUN_9	8.000			224,841.521		Free Surface		0.287	0.179	0.191	0.274	2.004	1,255,309.417	No	0.191	4.210
F	SUN_9-SUN_10	SUN_9	SUN_10	8.000	373.700	0.020	224,841.521	58,999.658	Free Surface	4.085	0.293	0.187	0.195	0.274	1.922	1,203,402.692	No	0.195	4.085

	ID	From ID	To ID	Diameter (in)	Length (ft) Slope	Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth	Adjusted Velocity
	TOE_2576-TOE_2577	TOE_2576	TOE_2577	18.000	282.794 0.005	1,355,387.386	500,421.412	Free Surface	3.919	0.342	0.252	0.514	0.547	1.127	5,370,802.322	No	0.514	3.919
F	TOE_2577-TOE_2578	TOE_2577	TOE_2578	18.000	270.433 0.015	1,355,387.386	500,421.412	Free Surface	5.655	0.263	0.151	0.394	0.547	1.881	8,957,466.948	No	0.394	5.655
F	TOE 2578-TOE 2579	TOE_2578	TOE_2579	18.000	293.969 0.015	1,355,387.386	500,421.412	Free Surface	5.647	0.263	0.152	0.395	0.547	1.877	8,939,632.045	No	0.395	5.647
F	TOE 2579-TOE 2981	TOE_2579	TOE_2981	18.000	91.682 0.009	1,355,387.386	500,421.412	Free Surface	4.742	0.298	0.194	0.447	0.547	1.472	6,999,656.252	No	0.447	4.742
F	TOE_2580-TOE_2978	TOE 2580	TOE 2978	18.000	103.702 0.005	1,355,387.386	500,421.412	Free Surface	3.703	0.357	0.273	0.536	0.547	1.039	4,964,591.669	No	0.536	3.703
Ħ	TOE_2581-TOE_2979	TOE_2581	TOE_2979	18.000		1,421,643.166		Free Surface	3.734	0.368	0.288	0.551	0.560	1.031	4,932,785.490	No	0.551	3.734
Ħ	TOE_2582-TOE_2980	TOE 2582	TOE 2980	18.000		1,421,643.166		Free Surface	3.784	0.364	0.283	0.546	0.560	1.051	5,024,681.737	Yes	0.553	3.717
Ħ	TOE 2583-TOE 2584	TOE_2583	TOE_2584	18.000		1,421,643.166				0.385	0.314	0.577	0.560	0.944	4,528,752.063	No	0.577	3.509
H	TOE 2584-CHF3A 15	TOE_2584	CHF3A_15	18.000		1,421,643.166				0.379	0.304	0.568	0.560	0.974	4,669,916.990	No	0.568	3.588
H	TOE 2585-CHF1A C1	TOE_2585	CHF1A C1	18.000		1,473,345.957	552.671.792			0.300	0.196	0.450	0.571	1.583	7,529,828.380	No	0.450	5.116
H	TOE_2586-TOE_2587	TOE 2586	TOE 2587	18.000		1,635,716.886		Free Surface		0.339	0.247	0.508	0.603	1.387	6,611,064.070	No	0.508	4.797
H	TOE_2587-TOE_2588	TOE_2587	TOE_2588	18.000		1,635,716.886		Free Surface		0.267	0.156	0.400	0.603	2.206	10,504,890.108	No	0.400	6.687
H		TOE_2588	TOE_2589	18.000		1,635,716.886	,-	Free Surface		0.254	0.142	0.382	0.603	2.419	11,530,311.680	No	0.382	7.145
	TOE_2588-TOE_2589									0.268							0.401	
	TOE_2589-TOE_2590	TOE_2589	TOE_2590	18.000		1,751,846.743					0.157	0.401	0.625	2.349	11,185,690.250	No		7.132
	TOE_2590-TOE_2591	TOE_2590	TOE_2591	18.000		1,751,846.743		Free Surface		0.209	0.096	0.314	0.625	3.797	18,266,219.977	Yes	0.701	3.345
	TOE_2591-TOE_2743	TOE_2591	TOE_2743	30.000		8,168,433.627				0.533	0.557	1.333	1.194	0.810	14,662,594.587	No	1.333	4.746
	TOE_2592-TOE_2593	TOE_2592	TOE_2593	8.000	52.704 0.006			Free Surface		0.347	0.258	0.231	0.235	1.036	650,612.893	No	0.231	2.419
	TOE_2593-GVF1_95	TOE_2593	GVF1_95	8.000	189.327 0.015			Free Surface		0.271	0.161	0.181	0.235	1.666	1,044,475.552	No	0.181	3.397
	TOE_2594-TOE_2595	TOE_2594	TOE_2595	15.000	178.668 0.003			Free Surface		0.408	0.350	0.510	0.463	0.830	2,538,906.603	No	0.510	2.916
Щ	TOE_2595-TOE_2596	TOE_2595	TOE_2596	15.000	210.662 0.002			Free Surface		0.463	0.438	0.579	0.463	0.651	2,024,920.664	No	0.579	2.469
	TOE_2596-TOE_2597	TOE_2596	TOE_2597	30.000	111.976 0.003			Free Surface		0.168	0.062	0.421	0.381	0.821	14,399,580.685	No	0.421	2.517
	TOE_2597-TOE_2598	TOE_2597	TOE_2598	30.000	103.462 0.001	887,581.330	302,350.926	Free Surface	2.077	0.192	0.081	0.481	0.381	0.632	10,964,496.126	No	0.481	2.077
	TOE_2598-TOE_2591	TOE_2598	TOE_2591	15.000	231.956 0.022	887,581.330	302,350.926	Free Surface	5.877	0.245	0.132	0.307	0.463	2.222	6,724,468.009	No	0.307	5.877
	TOE_2609-TOE_2747	TOE_2609	TOE_2747	18.000	443.041 0.002	1,074,330.451	379,477.297	Free Surface	2.585	0.392	0.325	0.588	0.485	0.688	3,305,231.616	No	0.588	2.585
	TOE_2610-TOE_2609	TOE_2610	TOE_2609	18.000	80.972 0.012	1,074,330.451	379,477.297	Free Surface	4.964	0.245	0.131	0.367	0.485	1.717	8,195,229.564	Yes	0.403	4.355
	TOE_2612-TOE_2610	TOE_2612	TOE_2610	18.000	148.443 0.013	1,074,330.451	379,477.297	Free Surface	5.083	0.240	0.127	0.361	0.485	1.774	8,473,788.030	No	0.361	5.083
M	TOE_2615-TOE_2619	TOE_2615	TOE_2619	30.000	285.463 0.002	8,251,975.609	4,297,646.702	Free Surface	4.090	0.608	0.685	1.519	1.200	0.638	12,051,538.778	No	1.519	4.090
Ħ	TOE 2619-TOE 2994	TOE_2619	TOE_2994	30.000	191.828 0.002	8,251,975.609	4,297,646.702	Free Surface	4.599	0.552	0.588	1.379	1.200	0.767	14,024,341.801	No	1.379	4.599
Ħ	TOE 2620-TOE 2989	TOE 2620	TOE_2989	12.000	238.521 0.004			Free Surface	2.315	0.257	0.144	0.257	0.251	0.955	1,651,578.715	No	0.257	2.315
Ħ	TOE_2621-TOE_2620	TOE_2621	TOE_2620	12.000	178.316 0.015	238,514.304	63,400.296	Free Surface		0.190	0.079	0.190	0.251	1.716	3,014,402.982	Yes	0.224	2.816
Ħ	TOE_2622-TOE_2621	TOE 2622	TOE 2621	12.000	277.449 0.005		63,400.296	Free Surface		0.243	0.129	0.243	0.251	1.065	1,845,198.621	No	0.243	2.505
H	TOE_2623-TOE_2622	TOE_2623	TOE 2622	10.000	399.765 0.025		0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	2,444,846.898	No	0.000	0.000
	TOE_2624-TOE_2623	TOE_2624	TOE_2623	10.000	400.696 0.026			Free Surface		0.000	0.000	0.000	0.000	0.000	2,458,872.660	No	0.000	0.000
H	TOE 2625-TOE 2624	TOE_2625	TOE_2624	10.000	334.859 0.016		0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	1,951,446.396	No	0.000	0.000
H	TOE 2626-OGF2 29	TOE 2626	OGF2 29	8.000	159.127 0.030		14,250.235	Free Surface		0.135	0.000	0.000	0.135	2.229	1,465,679.145	No	0.000	3.141
		TOE_2628	CSF1 C3A					Free Surface		0.133	0.039	0.030	0.459	0.938	4,462,273.317	No	0.475	3.121
H	TOE_2628-CSF1_C3A			18.000 15.000	133.826 0.004					0.358						No	0.475	
	TOE_2629-TOE_2628	TOE_2629	TOE_2628		253.572 0.006			Free Surface			0.274	0.447	0.485	1.167	3,534,157.522			3.799
	TOE_2630-TOE_2984	TOE_2630	TOE_2984	15.000	284.795 0.002			Free Surface		0.462	0.437	0.578	0.485	0.713	2,215,971.138	No	0.578	2.700
	TOE_2631-TOE_2630	TOE_2631	TOE_2630	15.000	274.927 0.006			Free Surface		0.361	0.278	0.451	0.485	1.149	3,481,166.216	Yes	0.464	3.609
	TOE_2635-TOE_2636	TOE_2635	TOE_2636	10.000	403.088 0.002		0.000	Free Surface		0.000	0.000	0.000	0.000	0.000	718,678.955	No	0.000	0.000
	TOE_2636-TOE_2639	TOE_2636	TOE_2639	10.000	391.446 0.001			Free Surface		0.000	0.000	0.000	0.000	0.000	532,974.852	Yes	0.136	0.000
	TOE_2637-TOE_2638	TOE_2637	TOE_2638	12.000	41.365 0.025			Free Surface		0.286	0.178	0.286	0.441	2.309	3,984,985.969	No	0.286	5.929
	TOE_2638-TOE_2639	TOE_2638	TOE_2639	12.000	49.033 0.014			Free Surface		0.332	0.237	0.332	0.441	1.729	2,988,489.806	No	0.332	4.823
	TOE_2639-RMF1_114	TOE_2639	RMF1_114	12.000	110.713 0.013			Free Surface		0.343	0.253	0.343	0.441	1.620	2,802,550.445	No	0.343	4.604
	TOE_2640-TOE_2637	TOE_2640	TOE_2637	12.000	271.203 0.018	,		Free Surface		0.313	0.213	0.313	0.441	1.927	3,327,509.254	Yes	0.474	2.987
	TOE_2646-ARF1_37	TOE_2646	ARF1_37	8.000	44.839 0.002			Free Surface		0.601	0.673	0.400	0.274	0.485	335,186.855	No	0.400	1.594
	TOE_2647-TOE_2646	TOE_2647	TOE_2646	8.000	316.906 0.005	225,620.011	59,250.218	Free Surface	2.456	0.427	0.379	0.285	0.274	0.932	595,196.711	No	0.285	2.456
	TOE_2648-TOE_2650	TOE_2648	TOE_2650	15.000	410.019 0.004	1,580,829.504	600,990.974	Free Surface	3.525	0.551	0.588	0.689	0.626	0.832	2,687,541.477	No	0.689	3.525
	TOE_2649-TOE_2648	TOE_2649	TOE_2648	15.000	133.522 0.004	1,580,829.504	600,990.974	Free Surface	3.557	0.547	0.581	0.684	0.626	0.843	2,719,066.029	No	0.684	3.557
	TOE_2650-TOE_2656	TOE_2650	TOE_2656	15.000	392.350 0.018	1,653,317.864	633,928.081	Free Surface	6.545	0.355	0.271	0.444	0.641	2.018	6,109,130.732	No	0.444	6.545
	TOE_2651-TOE_2652	TOE_2651	TOE_2652	15.000	16.899 0.004	1,653,317.864	633,928.081	Free Surface	3.794	0.539	0.566	0.674	0.641	0.909	2,918,726.550	Yes	0.689	3.691
F	TOE_2652-TOE_2653	TOE_2652	TOE_2653	15.000	381.367 0.004	1,653,317.864	633,928.081	Free Surface	3.594	0.563	0.608	0.704	0.641	0.836	2,718,097.714	No	0.704	3.594
F	TOE_2653-TOE_2654	TOE_2653	TOE_2654	15.000		1,653,317.864				0.564	0.611	0.706	0.641	0.832	2,707,267.370	No	0.706	3.583
f	TOE_2654-TOE_2655	TOE_2654	TOE_2655	15.000		1,728,326.206				0.422	0.372	0.528	0.656	1.514	4,645,683.290	No	0.528	5.426
F	TOE 2655-TOE 2745	TOE_2655	TOE_2745	30.000		5,647,906.661	2,736,488.570			0.471	0.452	1.178	0.985	0.709	12,505,252.071	Yes	1.682	2.488
Ħ	TOE_2656-TOE_2651	TOE_2656	TOE_2651	15.000		1,653,317.864				0.324	0.226	0.404	0.641	2.420	7,301,159.433	Yes	0.439	6.652
H	TOE_2657-TOE_2659	TOE_2657	TOE_2659	8.000		388,704.998	113,160.917			0.434	0.391	0.289	0.365	1.555	994,603.317	No	0.289	4.138
	TOE_2659-TOE_2660	TOE_2659	TOE_2660	8.000		388,704.998	113,160.917			0.440	0.400	0.293	0.365	1.515	971,164.311	No	0.293	4.065
H	TOE 2660-TOE 2661	TOE_2660	TOE_2661	8.000		388,704.998	113,160.917			0.440	0.449	0.233	0.365	1.338	865,777.808	No	0.293	3.734
	10L_2000-10E_2001	10L_2000	10L_2001	0.000	002.400 0.010	000,704.990	113,100.317	i ide dullate	3.734	0.470	0.449	0.515	0.000	1.556	000,111.000	INU	0.515	3.134

	ID	From ID	To ID	Diameter	Length	Slope	Total Flow	Peakable Flow	Flow Type	Velocity	d/D	q/Q	Water Depth	Critical	Froude	Full Flow	Backwater	Adjusted	Adjusted
m-1	TOE 0004 TOE 0000			(in)	(ft)		(gpd)	(gpd)		(ft/s)			(π)	Depth	Number	(gpd)	Adjustment	Depth	Velocity
닖	TOE_2661-TOE_2663	TOE_2661	TOE_2663	8.000			388,704.998	113,160.917			0.471	0.451	0.314	0.365	1.330	861,076.924	No	0.314	3.719
닖	TOE_2662-TOE_2664	TOE_2662	TOE_2664	15.000			1,580,829.504	600,990.974			0.388	0.319	0.485	0.626	1.628	4,956,574.417	Yes	0.581	4.376
닖	TOE_2663-ECF4_135	TOE_2663	ECF4_135	8.000	379.848		388,704.998	113,160.917			0.437	0.395	0.291	0.365	1.537	983,940.543	Yes	0.459	2.349
닖	TOE_2664-TOE_2649	TOE_2664	TOE_2649	15.000			1,580,829.504	600,990.974			0.542	0.571	0.677	0.626	0.860	2,766,306.867	Yes	0.681	3.580
닖	TOE_2673-VRF1D_702	TOE_2673	VRF1D_702	10.000	248.890		529,279.220	163,450.018			0.359	0.276	0.299	0.400	1.743	1,915,504.132	No	0.299	4.644
닏	TOE_2710-TOE_2712	TOE_2710	TOE_2712	10.000	172.785		974,143.245	337,750.433			0.815	0.995	0.679	0.550	0.650	979,015.931	Yes	0.721	3.005
닏	TOE_2711-TOE_2715	TOE_2711	TOE_2715	10.000	182.798		974,143.245		Free Surface		0.718	0.865	0.598	0.550	0.848	1,126,213.727	Yes	0.791	2.818
닏	TOE_2712-TOE_2713	TOE_2712	TOE_2713	10.000	121.612		974,143.245	337,750.433	Pressurized	2.763	1.000	1.030	0.833	0.542	0.533	945,986.116	No	0.833	2.763
닏	TOE_2713-TOE_2714	TOE_2713	TOE_2714	10.000	90.763		974,143.245	337,750.433	Pressurized	2.763	1.000	1.006	0.833	0.548	0.533	968,703.910	No	0.833	2.763
닏	TOE_2714-TOE_2711	TOE_2714	TOE_2711	10.000	315.857		974,143.245	337,750.433	Pressurized	2.763	1.000	1.007	0.833	0.548	0.533	967,616.016	No	0.833	2.763
닏	TOE_2715-TOE_2716	TOE_2715	TOE_2716	10.000	176.202		974,143.245	337,750.433	Pressurized	2.763	1.000	1.213	0.833	0.498	0.533	802,803.628	No	0.833	2.763
닖	TOE_2716-TOE_2717	TOE_2716	TOE_2717	10.000	105.642		974,143.245		Pressurized	2.763	1.000	1.042	0.833	0.538	0.533	934,562.798	No	0.833	2.763
	TOE_2717-TOE_2718	TOE_2717	TOE_2718	10.000	389.846		974,143.245	337,750.433			0.492	0.487	0.410	0.550	1.753	1,999,814.376	Yes	0.480	4.630
	TOE_2718-TOE_2719	TOE_2718	TOE_2719	10.000	404.424	0.004	974,143.245	337,750.433			0.804	0.983	0.670	0.550	0.670	991,356.795	No	0.670	3.206
	TOE_2719-TOE_2720	TOE_2719	TOE_2720	10.000	399.685	0.009	974,143.245	337,750.433	Free Surface	4.415	0.600	0.671	0.500	0.550	1.203	1,451,641.644	No	0.500	4.415
	TOE_2720-TOE_2721	TOE_2720	TOE_2721	10.000	400.184	0.004	974,143.245	337,750.433	Free Surface	3.194	0.807	0.986	0.673	0.550	0.664	987,655.294	No	0.673	3.194
	TOE_2721-TOE_2722	TOE_2721	TOE_2722	10.000	267.435	0.026	974,143.245	337,750.433	Free Surface	6.572	0.437	0.396	0.364	0.550	2.199	2,459,871.545	No	0.364	6.572
	TOE_2722-TOE_2723	TOE_2722	TOE_2723	10.000	130.770	0.025	974,143.245	337,750.433	Free Surface	6.525	0.440	0.400	0.366	0.550	2.176	2,435,995.502	No	0.366	6.525
	TOE_2723-TOE_2724	TOE_2723	TOE_2724	10.000	402.800	0.029	974,143.245	337,750.433	Free Surface	6.848	0.424	0.374	0.353	0.550	2.334	2,601,206.353	Yes	0.371	6.419
	TOE_2724-TOE_2725	TOE_2724	TOE_2725	10.000	396.385	0.007	1,010,674.019	352,874.747	Free Surface	3.942	0.683	0.810	0.569	0.561	0.972	1,248,116.180	No	0.569	3.942
	TOE_2725-TOE_2726	TOE_2725	TOE_2726	10.000	403.987	0.007	1,010,674.019	352,874.747	Free Surface	4.084	0.662	0.776	0.551	0.561	1.033	1,303,194.099	No	0.551	4.084
	TOE_2726-TOE_2727	TOE_2726	TOE_2727	10.000	395.385	0.025	1,010,674.019	352,874.747	Free Surface	6.602	0.448	0.414	0.374	0.561	2.176	2,442,479.847	No	0.374	6.602
	TOE_2727-TOE_2728	TOE_2727	TOE_2728	10.000	165.621	0.048	1,010,674.019	352,874.747	Free Surface	8.359	0.375	0.300	0.313	0.561	3.060	3,372,033.353	No	0.313	8.359
Ħ	TOE 2728-TOE 2729	TOE_2728	TOE_2729	10.000	61.077	0.044	1,010,674.019	352,874.747	Free Surface	8.065	0.385	0.315	0.321	0.561	2.907	3,209,925.693	No	0.321	8.065
Ħ	TOE 2729-TOE 2730	TOE_2729	TOE_2730	10.000	275.532	0.024	1,010,674.019	352,874.747	Free Surface	6.456	0.456	0.426	0.380	0.561	2.106	2,369,718.404	Yes	0.386	6.332
Ħ	TOE_2730-TOE_2992	TOE_2730	TOE_2992	10.000	316.366	0.009	1,010,674.019	352,874.747	Free Surface	4.561	0.602	0.675	0.501	0.561	1.240	1,497,819.128	No	0.501	4.561
Ħ	TOE 2731-TOE 2960	TOE 2731	TOE 2960	8.000	328.578	0.016	307,562.755	85,623.808	Free Surface	4.070	0.369	0.290	0.246	0.323	1.682	1,059,992.645	Yes	0.299	3.136
Ħ	TOE 2732-TOE 2731	TOE 2732	TOE_2731	8.000	341.462	0.005	307,562.755	85,623.808	Free Surface	2.712	0.502	0.504	0.335	0.323	0.932	610,771.602	No	0.335	2.712
Ħ	TOE 2733-TOE 2732	TOE 2733	TOE_2732	8.000	191.801		307,562.755		Free Surface	2.807	0.489	0.481	0.326	0.323	0.981	639,516.219	No	0.326	2.807
Ħ	TOE_2734-TOE_2615	TOE_2734	TOE_2615	30.000				4,245,900.321	Free Surface		0.405	0.345	1.013	1.194		23,658,516.928	No	1.013	6.772
Ħ	TOE_2735-TOE_2734	TOE 2735	TOE 2734	30.000							0.543	0.573	1.357	1.194	0.783	14,257,598.474	No	1.357	4.646
Ħ	TOE_2736-TOE_2735	TOE_2736	TOE_2735	30.000				4,245,900.321			0.559	0.601	1.397	1.194	0.741	13,592,145.780	No	1.397	4.480
Ħ	TOE 2737-TOE 2905	TOE 2737	TOE_2905	30.000				4,245,900.321			0.548	0.583	1.371	1.194	0.768	14,020,712.700	Yes	1.428	4.361
H	TOE 2738-TOE 2737	TOE_2738	TOE_2737	30.000				4,245,900.321			0.605	0.681	1.513	1.194		11,997,131.701	No	1.513	4.067
H	TOE 2739-TOE 2738	TOE 2739	TOE 2738	30.000				4,245,900.321			0.561	0.604	1.402	1.194	0.735	13,513,742.914	Yes	1.458	4.254
H	TOE 2740-TOE 2739	TOE_2740	TOE_2739	30.000				4,245,900.321			0.578	0.633	1.444	1.194	0.695	12,899,064.525	No	1.444	4.303
H	TOE 2741-TOE 2740	TOE 2741	TOE 2740	30.000				4,245,900.321			0.600	0.673	1.501	1.194	0.645	12,143,367.452	No	1.501	4.106
H				30.000				4,245,900.321			0.552	0.590	1.381	1.194	0.757	13,844,924.620	Yes	1.391	4.503
H	TOE_2742-TOE_2741	TOE_2742	TOE_2741	30.000							0.332	0.390	1.222	1.194	0.757	16,970,973.773	Yes	1.252	5.140
H	TOE_2743-TOE_2742	TOE_2743	TOE_2742					4,245,900.321											
H	TOE_2744-TOE_2591	TOE_2744	TOE_2591	30.000				3,264,377.971		2.065	1.000	7.193	2.500	0.386	0.230	910,610.783	No	2.500	2.065
닖	TOE_2745-TOE_2744	TOE_2745	TOE_2744	27.000	198.412			2,736,488.570			0.445	0.409	1.002	1.017	1.028	13,806,136.114	Yes	2.250	2.198
닖	TOE_2746-TOE_2744	TOE_2746	TOE_2744	18.000			1,417,627.590	527,889.401			0.333	0.239	0.499	0.559	1.246	5,935,798.422	No	0.499	4.265
닖	TOE_2747-ECF5_204	TOE_2747	ECF5_204	18.000				472,062.062			0.319	0.221	0.479	0.533	1.227	5,837,719.525	No	0.479	4.105
닖	TOE_2748-TOE_2749	TOE_2748	TOE_2749	12.000			1,662,539.917				0.581	0.639	0.581	0.687	1.384	2,602,387.765	No	0.581	5.436
닖	TOE_2749-TOE_2750	TOE_2749	TOE_2750	12.000			1,662,539.917	638,151.600			0.611	0.691	0.611	0.687	1.256	2,407,531.959	No	0.611	5.117
	TOE_2750-TOE_2751	TOE_2750	TOE_2751	12.000			1,662,539.917				0.481	0.468	0.481	0.687	1.984	3,553,960.140	No	0.481	6.885
Щ	TOE_2751-TOE_2752	TOE_2751	TOE_2752	15.000			1,662,539.917				0.377	0.302	0.471	0.643	1.810	5,499,118.473	No	0.471	6.074
Щ	TOE_2752-TOE_2753	TOE_2752	TOE_2753	15.000				638,151.600			0.419	0.367	0.524	0.643	1.478	4,531,817.796	No	0.524	5.273
	TOE_2753-TOE_2754	TOE_2753	TOE_2754	15.000			1,662,539.917				0.405	0.345	0.507	0.643	1.577	4,818,135.047	No	0.507	5.515
	TOE_2754-TOE_2755	TOE_2754	TOE_2755	15.000				638,151.600			0.449	0.415	0.562	0.643	1.293	4,001,938.556	No	0.562	4.812
	TOE_2755-TOE_2759	TOE_2755	TOE_2759	15.000			1,662,539.917				0.424	0.374	0.529	0.643	1.448	4,445,843.679	No	0.529	5.200
	TOE_2756-TOE_2757	TOE_2756	TOE_2757	15.000				671,957.027	Free Surface	5.393	0.426	0.378	0.532	0.657	1.497	4,598,754.788	No	0.532	5.393
	TOE_2757-TOE_2760	TOE_2757	TOE_2760	15.000	417.818	0.015	1,736,205.929	671,957.027	Free Surface	6.181	0.384	0.313	0.481	0.657	1.822	5,542,104.941	No	0.481	6.181
	TOE_2758-TOE_2761	TOE_2758	TOE_2761	18.000	414.191	0.002	1,736,205.929	671,957.027	Free Surface	2.774	0.538	0.565	0.807	0.622	0.607	3,074,643.302	No	0.807	2.774
	TOE_2759-TOE_2756	TOE_2759	TOE_2756	15.000	315.756	0.011	1,736,205.929	671,957.027	Free Surface	5.479	0.421	0.369	0.526	0.657	1.532	4,698,940.442	No	0.526	5.479
F	TOE_2760-TOE_2817	TOE_2760	TOE_2817	15.000	413.357	0.019	1,736,205.929	671,957.027	Free Surface	6.803	0.358	0.275	0.448	0.657	2.089	6,324,722.609	No	0.448	6.803
	TOE_2761-TOE_2762	TOE_2761	TOE_2762	18.000	69.865	0.004	1,736,205.929	671,957.027	Free Surface	3.632	0.436	0.394	0.654	0.622	0.908	4,411,329.400	Yes	0.726	3.169
	TOL_2701-TOL_2702																		
	TOE_2762-TOE_2764	TOE_2762	TOE_2764	18.000		0.002	1,736,205.929	671,957.027			0.532	0.555	0.799	0.622	0.619	3,126,773.703	No	0.799	2.809

	ID	From ID	To ID	Diameter (in)	Length (ft) Slop	e Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth	Adjusted Velocity
	TOE_2764-TOE_2763	TOE_2764	TOE_2763	18.000	478.193 0.00	2 1,736,205.929	671,957.027	Free Surface	3.093	0.493	0.489	0.740	0.622	0.716	3,552,946.925	Yes	0.751	3.035
	TOE_2765-TOE_2766	TOE_2765	TOE_2766	18.000	164.304 0.00	1 1,736,205.929	671,957.027	Free Surface	2.553	0.575	0.629	0.863	0.622	0.534	2,759,106.316	No	0.863	2.553
	TOE_2766-TOE_2767	TOE_2766	TOE_2767	18.000		2 1,736,205.929		Free Surface		0.521	0.536	0.782	0.622	0.645	3,237,177.498	No	0.782	2.884
	TOE_2767-TOE_2768	TOE_2767	TOE_2768	18.000		5 1,736,205.929		Free Surface		0.393	0.326	0.589	0.622	1.108	5,326,808.805	No	0.589	4.170
	TOE_2768-TOE_2914	TOE_2768	TOE_2914	18.000		3 1,736,205.929		Free Surface		0.308	0.206	0.462	0.622	1.771	8,422,695.282	Yes	0.609	3.992
	TOE_2769-TOE_2770	TOE_2769	TOE_2770	18.000		2 1,736,205.929				0.501	0.501	0.751	0.622	0.696	3,464,114.064	Yes	0.754	3.021
	TOE_2770-TOE_2771	TOE_2770	TOE_2771	18.000		2 1,736,205.929		Free Surface		0.504	0.507	0.756	0.622	0.687	3,422,652.098	No	0.756	3.008
	TOE_2771-TOE_2772	TOE_2771	TOE_2772	18.000		6 1,743,795.314		Free Surface		0.386	0.316	0.580	0.623	1.149	5,514,173.479	Yes	0.656	3.635
	TOE_2772-TOE_2773	TOE_2772	TOE_2773	18.000		2 1,743,795.314		Free Surface		0.488	0.479	0.732	0.623	0.735	3,639,557.647	Yes	0.863	2.564
	TOE_2773-TOE_2774	TOE_2773	TOE_2774	18.000		4 1,743,795.314		Free Surface		0.428	0.381	0.642	0.623	0.943	4,574,583.703	Yes	1.421	1.558
	TOE_2774-TOE_2775	TOE_2774	TOE_2775	18.000		0 1,743,795.314		Pressurized	1.527	1.000	0.000	1.500	0.000	0.220	0.075.000.004	No	1.500	1.527
	TOE_2775-TOE_2776	TOE_2775	TOE_2776	18.000		2 1,743,795.314		Free Surface		0.562	0.606	0.843	0.623	0.561	2,875,663.264	Yes	0.904	2.426
	TOE_2776-TOE_2777	TOE_2776	TOE_2777	18.000		1 1,743,795.314		Free Surface		0.643	0.744	0.964	0.623	0.434	2,343,226.326	No	0.964	2.248
	TOE_2777-TOE_2778	TOE_2777	TOE_2778	18.000		1 1,743,795.314		Free Surface		0.626	0.716	0.938	0.623	0.457	2,437,004.677	Yes	0.950	2.287
	TOE_2778-TOE_2779	TOE_2778	TOE_2779	18.000		1 1,743,795.314		Free Surface		0.641	0.741	0.961	0.623	0.436	2,354,025.025	Yes	1.110	1.924
닖	TOE_2779-TOE_2780	TOE_2779	TOE_2780	18.000		1 1,743,795.314		Free Surface		0.646	0.749	0.968	0.623	0.430	2,327,876.216	Yes	1.362	1.601
닖	TOE_2780-TOE_2781	TOE_2780	TOE_2781	18.000		1 1,743,795.314		Free Surface		0.633	0.729	0.950	0.623	0.446	2,392,881.049	Yes	1.500	1.527
닖	TOE_2781-TOE_2782	TOE_2781	TOE_2782	18.000		0 1,743,795.314		Pressurized	1.527	1.000	1.405	1.500	0.522	0.220	1,241,461.108	No	1.500	1.527
	TOE_2782-TOE_2783	TOE_2782	TOE_2783	21.000		1 1,743,795.314		Free Surface		0.497	0.495	0.870	0.595	0.482	3,521,797.912	Yes	0.944	2.038
닖	TOE_2783-TOE_2786	TOE_2783	TOE_2786	21.000		2 1,743,795.314		Free Surface		0.418	0.365	0.732	0.595	0.672	4,775,511.323	Yes	1.417	1.293
	TOE_2784-TOE_2785	TOE_2784	TOE_2785	21.000		1 1,942,075.183		Free Surface		0.529	0.550	0.926	0.629	0.477	3,532,789.790	Yes	0.926	2.325
	TOE_2785-TOE_2788	TOE_2785	TOE_2788	21.000		1 1,942,075.183		Free Surface		0.529	0.550	0.927	0.629	0.476	3,528,657.765	Yes	0.997	2.124
닖	TOE_2786-TOE_2784	TOE_2786	TOE_2784	21.000		0 1,942,075.183		Pressurized	1.249	1.000	1.308	1.750	0.547	0.166	1,484,689.154	No	1.750	1.249
닖	TOE_2787-EVF4_46	TOE_2787	EVF4_46	21.000		0 1,942,075.183		Pressurized	1.249	1.000	1.373	1.750	0.534	0.166	1,414,443.287	No	1.750	1.249
닖	TOE_2788-TOE_2787	TOE_2788	TOE_2787	21.000		2 1,942,075.183		Free Surface		0.446	0.411	0.781	0.629	0.660	4,728,573.115	Yes	1.444	1.415
	TOE_2789-TOE_2791	TOE_2789	TOE_2791	24.000		1 2,326,551.242				0.493	0.488	0.986	0.664	0.468	4,769,872.434	Yes	0.995	2.306
	TOE_2790-TOE_2789	TOE_2790	TOE_2789	21.000		1 2,326,551.242				0.588	0.651	1.029	0.691	0.467	3,573,648.055	No	1.029	2.448
	TOE_2791-TOE_2792	TOE_2791	TOE_2792	24.000		1 2,326,551.242				0.502	0.504	1.005	0.664	0.452	4,616,077.651	No	1.005	2.278
	TOE_2792-TOE_2793	TOE_2792	TOE_2793	24.000		1 2,326,551.242				0.441	0.402	0.882	0.664	0.580	5,794,430.136	No	0.882	2.697
	TOE_2793-TOE_2794	TOE_2793	TOE_2794	24.000		2 2,326,551.242				0.408	0.349	0.816	0.664	0.673	6,659,926.961	Yes	0.873	2.730
	TOE_2794-TOE_2795	TOE_2794	TOE_2795	24.000		1 2,326,551.242				0.466	0.442	0.931	0.664	0.522	5,262,886.803	Yes	1.021	2.232
닖	TOE_2795-OTF1_60A	TOE_2795	OTF1_60A	24.000		1 2,326,551.242				0.555	0.595	1.111	0.664	0.373	3,909,765.156	No	1.111	2.009
닖	TOE_2798-TOE_2799	TOE_2798	TOE_2799	12.000		2 694,293.725	225,696.875			0.555	0.595	0.555	0.436	0.629	1,166,983.883	No	0.555	2.398
닖	TOE_2799-OTF1_108	TOE_2799	OTF1_108	16.000		2 694,293.725	225,696.875			0.359	0.276	0.478	0.400	0.708	2,519,550.956	No	0.478	2.384
닖	TOE_2800-TOE_2825	TOE_2800	TOE_2825	36.000		1 8,614,505.859				0.241	0.128	0.724	1.161	2.497	67,464,814.133	Yes	0.840	8.223
닖	TOE_2801-TOE_2612	TOE_2801	TOE_2612	18.000		6 1,074,330.451	379,477.297			0.229	0.115	0.343	0.485	1.956	9,366,308.345	No	0.343	5.458
닖	TOE_2802-TOE_2801	TOE_2802	TOE_2801	18.000		4 1,074,330.451				0.323	0.226	0.485	0.485	0.999	4,754,776.317	No	0.485	3.364
닖	TOE_2803-TOE_2802	TOE_2803	TOE_2802	18.000		4 1,074,330.451	379,477.297			0.337	0.245	0.505	0.485	0.921	4,389,857.843	No	0.505	3.176
닖	TOE_2804-TOE_2803	TOE_2804	TOE_2803	18.000		3 1,074,330.451				0.341	0.250	0.511	0.485	0.903	4,303,159.363	No	0.511	3.131
닖	TOE_2805-VPF1_718	TOE_2805	VPF1_718	18.000		0 1,325,402.121	487,251.177			0.290	0.183	0.435	0.540	1.523	7,240,963.795	No	0.435	4.827
닖	TOE_2806-TOE_2805	TOE_2806	TOE_2805	18.000		1 1,325,402.121				0.280	0.172	0.420	0.540	1.624	7,723,387.698	No	0.420	5.055
닖	TOE_2807-TOE_2806	TOE_2807	TOE_2806	18.000		4 1,325,402.121				0.355	0.270	0.533	0.540	1.027	4,903,668.343	No	0.533	3.647
닖	TOE_2808-TOE_2819	TOE_2808	TOE_2819	18.000		1 1,325,402.121				0.283	0.174	0.424	0.540	1.597	7,596,070.360	No	0.424	4.995
닖	TOE_2809-VRGC2_526	TOE_2809	VRGC2_526	10.000	56.047 0.03			Free Surface		0.306	0.203	0.255	0.425	2.669	2,920,079.797	No	0.255	6.497
	TOE_2817-TOE_2818	TOE_2817	TOE_2818	15.000		6 1,736,205.929		Free Surface		0.331	0.236	0.413	0.657	2.435	7,350,359.292	Yes	0.539	5.302
	TOE_2818-TOE_2758	TOE_2818	TOE_2758	18.000		3 1,736,205.929				0.443	0.406	0.665	0.622	0.879	4,279,919.147	Yes	0.736	3.115
	TOE_2819-TOE_2807	TOE_2819	TOE_2807	18.000		6 1,325,402.121				0.324	0.228	0.487	0.540	1.223	5,823,534.025	No	0.487	4.129
	TOE_2825-TOE_2826	TOE_2825	TOE_2826	36.000		5 10,113,756.776				0.386	0.315	1.157	1.262	1.183	32,111,628.908	Yes	1.228	5.747
	TOE_2826-TOE_2827	TOE_2826	TOE_2827	36.000		2 10,113,756.776				0.523	0.540	1.569	1.262	0.659	18,745,463.271	No	1.569	4.181
	TOE_2827-TOE_2828	TOE_2827	TOE_2828	36.000		3 10,113,756.776				0.431	0.386	1.294	1.262	0.954	26,183,894.176		1.323	5.208
	TOE_2828-TOE_2921	TOE_2828	TOE_2921	36.000		1 10,113,756.776				0.534	0.558	1.602	1.262	0.634	18,121,603.712		1.602	4.075
	TOE_2829-TOE_2830	TOE_2829	TOE_2830	36.000		3 10,113,756.776				0.436	0.393	1.307	1.262	0.936	25,723,528.003		1.376	4.946
	TOE_2830-TOE_2831	TOE_2830	TOE_2831	36.000		2 10,113,756.776				0.515	0.526	1.546	1.262	0.679	19,223,088.990	No	1.546	4.261
	TOE_2831-TOE_2832	TOE_2831	TOE_2832	36.000		2 10,113,756.776				0.533	0.557	1.599	1.262	0.636	18,173,766.148	No	1.599	4.084
	TOE_2832-TOE_2833	TOE_2832	TOE_2833	36.000		2 10,113,756.776				0.462	0.436	1.385	1.262	0.837	23,208,726.628	Yes	1.397	4.850
	TOE_2833-TOE_2834	TOE_2833	TOE_2834	36.000		2 10,113,756.776				0.520	0.534	1.559	1.262	0.668	18,949,299.698	No	1.559	4.215
	TOE_2834-TOE_2835	TOE_2834	TOE_2835	36.000		2 10,113,756.776				0.473	0.455	1.420	1.262	0.798	22,215,470.195	No	1.420	4.748
	TOE_2835-TOE_2836	TOE_2835	TOE_2836	36.000		2 10,113,756.776				0.492	0.486	1.475	1.262	0.742	20,807,629.358	No	1.475	4.522
	TOE_2836-TOE_2837	TOE_2836	TOE_2837	36.000	394.145 0.00	2 10,113,756.776	5,475,381.938	Free Surface	4.299	0.512	0.520	1.535	1.262	0.688	19,449,660.489	Yes	1.652	3.922

	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth	Adjusted Velocity
E	TOE_2837-TOE_2839	TOE_2837	TOE_2839	36.000		0.001		5,475,381.938	Free Surface	3.358	0.626	0.717	1.879	1.262	0.467	14,105,792.535	No	1.879	3.358
	TOE_2838-TOE_2840	TOE_2838	TOE_2840	36.000	279.046	0.002	10,113,756.776	5,475,381.938	Free Surface	4.083	0.533	0.557	1.599	1.262	0.636	18,166,539.006	No	1.599	4.083
	TOE_2839-TOE_2838	TOE_2839	TOE_2838	36.000	223.808	0.002	10,113,756.776	5,475,381.938	Free Surface	4.142	0.527	0.546	1.581	1.262	0.650	18,517,468.952	No	1.581	4.142
	TOE_2840-TOE_2841	TOE_2840	TOE_2841	36.000	262.834	0.002	10,113,756.776	5,475,381.938	Free Surface	4.621	0.484	0.472	1.451	1.262	0.766	21,420,316.629	No	1.451	4.621
	TOE_2841-TOE_2843	TOE_2841	TOE_2843	36.000	36.626	0.004	10,113,756.776	5,475,381.938	Free Surface	5.618	0.416	0.363	1.249	1.262	1.020	27,897,440.007	No	1.249	5.618
	TOE_2842-TOE_2844	TOE_2842	TOE_2844	36.000	444.636	0.003	10,113,756.776	5,475,381.938	Free Surface	5.217	0.440	0.401	1.321	1.262	0.916	25,221,921.417	No	1.321	5.217
	TOE_2843-TOE_2842	TOE_2843	TOE_2842	36.000	93.563	0.006	10,113,756.776	5,475,381.938	Free Surface	6.796	0.361	0.279	1.084	1.262	1.340	36,226,643.146	Yes	1.103	6.641
	TOE_2844-TOE_2845	TOE_2844	TOE_2845	36.000	17.372	0.020	10,113,756.776	5,475,381.938	Free Surface	10.399	0.266	0.154	0.797	1.262	2.432	65,508,663.780	Yes	1.353	5.060
	TOE_2845-TOE_2846	TOE_2845	TOE_2846	36.000	184.327	0.002	10,113,756.776	5,475,381.938	Free Surface	4.359	0.506	0.510	1.518	1.262	0.702	19,812,880.516	No	1.518	4.359
	TOE_2846-TOE_2847	TOE_2846	TOE_2847	36.000	229.186	0.002	10,113,756.776	5,475,381.938	Free Surface	4.623	0.483	0.472	1.450	1.262	0.767	21,429,504.184	No	1.450	4.623
	TOE_2847-TOE_2848	TOE_2847	TOE_2848	36.000	80.877	0.004	10,113,756.776	5,475,381.938	Free Surface	6.102	0.391	0.324	1.174	1.262	1.149	31,240,984.972	No	1.174	6.102
	TOE_2848-TOE_2849	TOE_2848	TOE_2849	36.000	459.682	0.005	10,113,756.776	5,475,381.938	Free Surface	6.287	0.383	0.311	1.148	1.262	1.199	32,541,157.345	No	1.148	6.287
	TOE_2849-TOE_2920	TOE_2849	TOE_2920	36.000	343.100	0.010	10,113,756.776	5,475,381.938	Free Surface	8.134	0.317	0.218	0.951	1.262	1.727	46,476,512.118	No	0.951	8.134
	TOE_2850-TOE_2851	TOE_2850	TOE_2851	36.000	249.280	0.009	10,113,756.776	5,475,381.938	Free Surface	7.870	0.325	0.228	0.974	1.262	1.649	44,388,011.310	Yes	0.996	7.634
	TOE_2851-TOE_2853	TOE_2851	TOE_2853	36.000	20.430	0.004	10,113,756.776	5,475,381.938	Free Surface	6.080	0.392	0.325	1.177	1.262	1.143	31,079,112.582	No	1.177	6.080
	TOE_2852-TOE_2860	TOE_2852	TOE_2860	36.000	359.537	0.002	10,311,215.524	5,602,882.370	Free Surface	4.293	0.520	0.535	1.561	1.275	0.679	19,287,627.371	No	1.561	4.293
	TOE_2853-TOE_2852	TOE_2853	TOE_2852	36.000	60.002	0.004	10,311,215.524	5,602,882.370	Free Surface	5.900	0.407	0.348	1.222	1.275	1.086	29,614,860.035	Yes	1.341	5.216
	TOE_2854-TOE_2853	TOE_2854	TOE_2853	12.000	398.579	0.004	429,452.694	127,500.432	Free Surface	2.623	0.359	0.275	0.359	0.340	0.900	1,559,749.936	No	0.359	2.623
	TOE_2855-TOE_2854	TOE_2855	TOE_2854	12.000	386.083	0.002	429,452.694	127,500.432	Free Surface	2.047	0.432	0.387	0.432	0.340	0.630	1,109,717.588	No	0.432	2.047
	TOE_2856-TOE_2855	TOE_2856	TOE_2855	12.000	226.541	0.003	429,452.694	127,500.432	Free Surface	2.336	0.391	0.323	0.391	0.340	0.763	1,329,421.551	No	0.391	2.336
	TOE_2857-TOE_2856	TOE_2857	TOE_2856	12.000	76.848	0.003	429,452.694	127,500.432	Free Surface	2.385	0.385	0.314	0.385	0.340	0.786	1,368,340.727	No	0.385	2.385
	TOE_2858-TOE_2857	TOE_2858	TOE_2857	12.000	348.353	0.011	429,452.694	127,500.432			0.277	0.168	0.277	0.340	1.485	2,563,756.376	No	0.277	3.749
	TOE_2859-TOE_2858	TOE_2859	TOE_2858	12.000	396.442		429,452.694	127,500.432			0.346	0.257	0.346	0.340	0.966	1,671,256.976	No	0.346	2.758
	TOE_2860-TOE_2861	TOE_2860	TOE_2861	36.000	403.356			5,602,882.370			0.539	0.566	1.616	1.275	0.636	18,209,827.948	No	1.616	4.109
	TOE_2861-TOE_2862	TOE_2861	TOE_2862	36.000	62.240	0.006	10,311,215.524	5,602,882.370	Free Surface	6.947	0.361	0.278	1.082	1.275	1.371	37,066,579.448	Yes	1.513	4.466
	TOE_2862-TOE_2863	TOE_2862	TOE_2863	36.000				5,602,882.370			0.591	0.656	1.772	1.275	0.533	15,716,935.916	No	1.772	3.670
	TOE_2863-TOE_2864	TOE_2863	TOE_2864	36.000	205.062	0.002	10,311,215.524	5,602,882.370	Free Surface	4.804	0.476	0.460	1.429	1.275	0.804	22,417,712.211	No	1.429	4.804
	TOE_2864-TOE_2865	TOE_2864	TOE_2865	36.000				5,602,882.370			0.435	0.393	1.306	1.275	0.955	26,243,125.882	Yes	1.386	4.997
	TOE_2865-TOE_2866	TOE_2865	TOE_2866	36.000				5,602,882.370			0.535	0.560	1.605	1.275	0.644	18,407,998.604	No	1.605	4.143
	TOE_2866-TOE_2867	TOE_2866	TOE_2867	36.000				5,602,882.370			0.534	0.559	1.603	1.275	0.645	18,447,596.010	No	1.603	4.150
	TOE_2867-TOE_2868	TOE_2867	TOE_2868	36.000				5,631,882.519			0.436	0.394	1.308	1.278	0.957	26,315,252.924	Yes	1.348	5.204
	TOE_2868-TOE_2869	TOE_2868	TOE_2869	36.000				5,631,882.519			0.510	0.516	1.529	1.278	0.710	20,061,486.848	No	1.529	4.426
	TOE_2869-TOE_2870	TOE_2869	TOE_2870	36.000				5,631,882.519			0.527	0.546	1.581	1.278	0.666	18,967,088.030	No	1.581	4.243
	TOE_2870-TOE_2871	TOE_2870	TOE_2871	36.000				5,631,882.519			0.520	0.534	1.560	1.278	0.683	19,389,949.386	No	1.560	4.314
	TOE_2871-TOE_2872	TOE_2871	TOE_2872	36.000				5,631,882.519			0.539	0.567	1.617	1.278	0.638	18,277,493.798	No	1.617	4.126
	TOE_2872-TOE_2873	TOE_2872	TOE_2873	36.000				5,631,882.519			0.499	0.499	1.497	1.278	0.738	20,770,239.554	Yes	1.565	4.296
	TOE_2873-TOE_2874	TOE_2873	TOE_2874	36.000	56.391			5,631,882.519			0.574	0.628	1.723	1.278	0.565	16,497,998.692	No	1.723	3.814
	TOE_2874-TOE_2875	TOE_2874	TOE_2875	36.000	68.032			5,631,882.519			0.503	0.506	1.510	1.278	0.726	20,469,178.536	No	1.510	4.494
	TOE_2875-TOE_2876	TOE_2875	TOE_2876	36.000	48.547			5,631,882.519			0.479	0.465	1.437	1.278	0.799	22,289,471.205	No	1.437	4.790
	TOE_2876-TOE_2877	TOE_2876	TOE_2877	36.000	329.140			5,631,882.519			0.499	0.498	1.496	1.278	0.740	20,809,040.903	Yes No	1.506	4.512
	TOE_2877-TOE_2878 TOE 2878-TOE 2879	TOE_2877	TOE_2878 TOE 2879	36.000				5,631,882.519 5,631,882.519			0.538	0.566	1.615	1.278 1.278	0.639	18,301,672.579 19,248,269.871	No	1.615 1.567	4.130
		TOE_2878 TOE_2879	_	36.000 36.000	361.008 33.270			5,631,882.519			0.522	0.538	1.567 1.623	1.278	0.677 0.633	18,152,727.646	No	1.623	4.290 4.104
	TOE_2879-TOE_2880 TOE_2880-TOE_2881	TOE_2880	TOE_2880 TOE_2881	36.000	195.334			5,631,882.519			0.541	0.570	1.623	1.278	0.926	25,515,851.106	Yes	1.623	4.104
		TOE 2881		36.000	209.365			5,631,882.519		4.081	0.544	0.575	1.631	1.278	0.627	18,018,305.840	No	1.631	4.081
	TOE_2881-TOE_2882 TOE_2882-TOE_2883	TOE_2882	TOE_2882 TOE 2883	36.000	151.038			5,712,382.809			0.544	0.550	1.588	1.276	0.627	19,050,775.400	No	1.588	4.061
H	TOE_2883-TOE_2884	TOE_2883	TOE_2884	36.000				5,712,382.809			0.529	0.527	1.548	1.286	0.701	19,868,163.099	No	1.548	4.407
	TOE_2884-TOE_2885	TOE_2884	TOE_2885	36.000				5,712,382.809			0.510	0.538	1.566	1.286	0.686	19,488,193.635	No	1.566	4.407
H	TOE_2885-TOE_2886	TOE_2885	TOE_2886	36.000				5,712,382.809			0.322	0.468	1.443	1.286	0.802	22,398,228.728	Yes	1.447	4.804
H	TOE 2886-TOE 2887	TOE_2886	TOE_2887	36.000				6,327,880.337			0.517	0.529	1.551	1.345	0.762	21,593,423.325	No	1.551	4.793
H	TOE_2887-TOE_2888	TOE_2887	TOE_2888	36.000				6,327,880.337			0.481	0.467	1.442	1.345	0.702	24,442,188.395	Yes	1.593	4.635
H	TOE_2888-TOE_2889	TOE_2888	TOE_2889	36.000				6,327,880.337			0.628	0.719	1.884	1.345	0.525	15,873,859.216	No	1.884	3.781
H	TOE 2889-TOE 2890	TOE_2889	TOE_2890	36.000				6,373,116.480			0.462	0.436	1.385	1.349	0.951	26,369,429.043	No	1.385	5.573
H	TOE_2890-TOE_2891	TOE_2890	TOE_2891	36.000				6,373,116.480			0.475	0.457	1.424	1.349	0.902	25,116,262.417	No	1.424	5.376
H	TOE_2891-TOE_2892	TOE_2891	TOE_2892	36.000				6,373,116.480			0.403	0.342	1.209	1.349	1.234	33,624,471.351	Yes	1.346	5.785
Ħ	TOE_2892-TOE_2893	TOE_2892	TOE_2893	36.000				6,373,116.480			0.578	0.633	1.733	1.349	0.620	18,146,591.314	No	1.733	4.203
H	TOE_2893-TOE_2894	TOE_2893	TOE_2894	36.000				6,373,116.480			0.506	0.510	1.517	1.349	0.799	22,532,603.400	No	1.517	4.957
H	TOE_2894-TOE_2895	TOE_2894	TOE_2895	36.000				6,373,116.480			0.533	0.556	1.599	1.349	0.723	20,647,696.857	No	1.599	4.640
Ħ	TOE 2895-TOE 2896	TOE_2895	TOE 2896	36.000				6,373,116.480			0.526	0.544	1.578	1.349	0.741	21,109,294.782	Yes	1.613	4.590
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ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth	Adjusted Velocity
TOE_2896-TOE_2897	TOE_2896	TOE_2897	36.000	403.174	0.002	11,489,476.858	6,373,116.480	Free Surface	4.216	0.576	0.631	1.728	1.349	0.623	18,213,943.362	No	1.728	4.216
TOE_2897-TOE_2898	TOE_2897	TOE_2898	36.000	409.240	0.005	11,489,476.858	6,373,116.480	Free Surface	6.618	0.405	0.345	1.216	1.349	1.221	33,302,844.467	Yes	1.397	5.514
TOE_2898-TOE_2899	TOE_2898	TOE_2899	36.000	347.870	0.002	11,489,476.858	6,373,116.480	Free Surface	4.405	0.556	0.596	1.668	1.349	0.667	19,284,262.044	No	1.668	4.405
TOE_2899-TOE_2900	TOE_2899	TOE_2900	36.000	334.864	0.002	11,489,476.858	6,373,116.480	Free Surface	4.943	0.507	0.512	1.521	1.349	0.796	22,454,145.401	No	1.521	4.943
TOE_2900-TOE_2901	TOE_2900	TOE_2901	36.000	38.258	0.003	11,489,476.858	6,373,116.480	Free Surface	5.550	0.463	0.438	1.389	1.349	0.945	26,224,849.365	Yes	1.406	5.464
TOE_2901-TOE_2902	TOE_2901	TOE_2902	36.000	295.270	0.002	11,489,476.858	6,373,116.480	Free Surface	4.973	0.504	0.508	1.513	1.349	0.803	22,636,020.216	No	1.513	4.973
TOE_2902-TOE_2903	TOE_2902	TOE_2903	36.000	388.341	0.002	11,489,476.858	6,373,116.480	Free Surface	4.720	0.526	0.544	1.577	1.349	0.742	21,119,930.531	No	1.577	4.720
TOE_2903-TOE_2904	TOE_2903	TOE_2904	36.000	413.543	0.002	11,489,476.858	6,373,116.480	Free Surface	4.449	0.551	0.588	1.654	1.349	0.678	19,538,514.789	Yes	1.974	3.604
TOE_2904-TOE_2951	TOE_2904	TOE_2951	36.000	71.017	0.002	17,738,053.708	10,687,655.816	Free Surface	4.782	0.757	0.922	2.271	1.694	0.564	19,248,349.176	Yes	2.403	4.523
TOE_2905-TOE_2906	TOE_2905	TOE_2906	30.000	394.000	0.001	8,168,433.627	4,245,900.321	Free Surface	3.589	0.674	0.796	1.686	1.194	0.516	10,258,167.458	No	1.686	3.589
TOE_2906-TOE_2736	TOE_2906	TOE_2736	30.000	373.680	0.002	8,168,433.627	4,245,900.321	Free Surface	4.412	0.566	0.613	1.415	1.194	0.723	13,323,799.684	No	1.415	4.412
TOE_2914-TOE_2769	TOE_2914	TOE_2769	18.000	286.272	0.002	1,736,205.929	671,957.027	Free Surface	3.014	0.503	0.506	0.755	0.622	0.689	3,431,902.076	No	0.755	3.014
TOE_2915-TOE_2977	TOE_2915	TOE_2977	8.000	33.639	0.014	213,269.634	55,624.299	Free Surface	3.504	0.315	0.215	0.210	0.266	1.583	992,018.765	No	0.210	3.504
TOE_2916-TOE_2915	TOE_2916	TOE_2915	8.000	94.519	0.030	213,269.634	55,624.299	Free Surface	4.619	0.258	0.146	0.172	0.266	2.327	1,460,098.057	No	0.172	4.619
TOE_2917-TOE_2916	TOE_2917	TOE_2916	8.000	398.787	0.034	213,269.634	55,624.299	Free Surface	4.831	0.250	0.137	0.167	0.266	2.475	1,555,054.568	No	0.167	4.831
TOE_2920-TOE_2850	TOE_2920	TOE_2850	36.000	73.831	0.009	10,113,756.776	5,475,381.938	Free Surface	7.940	0.322	0.225	0.967	1.262	1.669	44,938,739.234	Yes	0.971	7.905
TOE_2921-TOE_2829	TOE_2921	TOE_2829	36.000	174.848	0.003	10,113,756.776	5,475,381.938	Free Surface	5.582	0.418	0.366	1.255	1.262	1.011	27,657,927.613	No	1.255	5.582
TOE_2941-TOE_2942	TOE_2941	TOE_2942	12.000	359.851	0.010	438,630.099	130,749.071	Free Surface	3.695	0.284	0.176	0.284	0.343	1.443	2,491,257.696	No	0.284	3.695
TOE_2942-TOE_2943	TOE_2942	TOE_2943	12.000	401.258	0.023	438,630.099	130,749.071	Free Surface	4.989	0.229	0.116	0.229	0.343	2.186	3,797,565.592	No	0.229	4.989
TOE_2943-TOE_2944	TOE_2943	TOE_2944	12.000	199.566	0.022	438,630.099	130,749.071	Free Surface	4.879	0.233	0.119	0.233	0.343	2.120	3,679,975.286	No	0.233	4.879
TOE_2944-TOE_2945	TOE_2944	TOE_2945	15.000	219.323	0.003	956,843.088	330,633.956	Free Surface	2.777	0.448	0.414	0.560	0.482	0.747	2,311,912.994	Yes	0.599	2.545
TOE_2945-TOE_2946	TOE_2945	TOE_2946	15.000	379.787	0.001	956,843.088	330,633.956	Free Surface	2.217	0.535	0.560	0.668	0.482	0.534	1,710,026.283	No	0.668	2.217
TOE_2946-TOE_2947	TOE_2946	TOE_2947	15.000	248.186	0.002	956,843.088	330,633.956	Free Surface	2.449	0.494	0.490	0.618	0.482	0.621	1,952,390.266	Yes	0.649	2.300
TOE_2947-TOE_2948	TOE_2947	TOE_2948	15.000	228.183	0.002	956,843.088	330,633.956	Free Surface	2.353	0.510	0.517	0.638	0.482	0.584	1,850,658.630	Yes	0.929	1.513
TOE_2948-TOE_2949	TOE_2948	TOE_2949	18.000	340.001	0.001	2,386,019.854	981,077.391	Free Surface	2.459	0.792	0.968	1.188	0.734	0.390	2,465,361.598	No	1.188	2.459
TOE_2949-VPF1_1	TOE_2949	VPF1_1	18.000	305.002	0.001	2,386,019.854	981,077.391	Free Surface	2.754	0.709	0.852	1.064	0.734	0.489	2,800,940.995	No	1.064	2.754
TOE_2950-WWTP1	TOE_2950	WWTP1	36.000	82.011	0.002	17,738,053.708	10,687,655.816	Free Surface	4.644	0.779	0.951	2.338	1.694	0.531	18,643,236.672	No	2.338	4.644
TOE_2951-TOE_2950	TOE_2951	TOE_2950	36.000	215.000	0.001	17,738,053.708	10,687,655.816	Free Surface	4.507	0.804	0.982	2.411	1.694	0.497	18,065,131.090	No	2.411	4.507
TOE_2960-TOE_2748	TOE_2960	TOE_2748	12.000	375.067	0.016	1,662,539.917	638,151.600	Free Surface	6.353	0.512	0.521	0.512	0.687	1.759	3,192,365.157	No	0.512	6.353
TOE_2962-TOE_2960	TOE_2962	TOE_2960	12.000	141.655	0.002	1,010,674.019	352,874.747	Pressurized	1.991	1.000	1.025	1.000	0.524	0.351	985,693.500	No	1.000	1.991
TOE_2964-TOE_2960	TOE_2964	TOE_2960	12.000	14.142	0.021	626,383.849	199,653.045	Free Surface	5.367	0.281	0.172	0.281	0.413	2.110	3,642,905.269	Yes	0.426	3.035
TOE_2965-TOE_2964	TOE_2965	TOE_2964	12.000	260.000	0.004	573,681.088	179,866.012	Free Surface	2.927	0.410	0.353	0.410	0.395	0.929	1,626,880.922	No	0.410	2.927
TOE_2966-TOE_2965	TOE_2966	TOE_2965	12.000	274.110	0.026	573,681.088	179,866.012	Free Surface	5.648	0.254	0.142	0.254	0.395	2.343	4,053,687.141	Yes	0.282	4.879
TOE_2967-TOE_2966	TOE_2967	TOE_2966	12.000	400.000	0.005	573,681.088	179,866.012	Free Surface	2.994	0.403	0.342	0.403	0.395	0.960	1,677,847.751	No	0.403	2.994
TOE_2968-TOE_2969	TOE_2968	TOE_2969	12.000	29.106	0.017	573,681.088	179,866.012	Free Surface	4.854	0.283	0.175	0.283	0.395	1.899	3,278,251.079	No	0.283	4.854
TOE_2969-TOE_2967	TOE_2969	TOE_2967	12.000	121.875	0.007	573,681.088	179,866.012	Free Surface	3.435	0.364	0.283	0.364	0.395	1.168	2,026,442.109	No	0.364	3.435
TOE_2970-TOE_2971	TOE_2970	TOE_2971	12.000	280.000	0.004	573,681.088	179,866.012	Free Surface	2.750	0.430	0.384	0.430	0.395	0.849	1,494,744.776	No	0.430	2.750
TOE_2971-TOE_2972	TOE_2971	TOE_2972	12.000	245.041	0.004	573,681.088	179,866.012	Free Surface	2.991	0.403	0.342	0.403	0.395	0.958	1,675,804.058	No	0.403	2.991
TOE_2972-TOE_2968	TOE_2972	TOE_2968	12.000	140.000	0.006	573,681.088	179,866.012	Free Surface	3.266	0.378	0.303	0.378	0.395	1.087	1,890,719.351	No	0.378	3.266
TOE_2973-FMF4_4_4	TOE_2973	FMF4_4_4	12.000	88.704	0.003	431,189.730	128,115.312	Free Surface	2.497	0.373	0.296	0.373	0.340	0.837	1,454,573.210	No	0.373	2.497
TOE_2977-TOE_2733	TOE_2977	TOE_2733	8.000	117.630	0.033	255,520.276	68,873.734	Free Surface	5.037	0.276	0.167	0.184	0.293	2.446	1,532,743.993	Yes	0.255	3.220
TOE_2978-TOE_2581	TOE_2978	TOE_2581	18.000	246.826	0.006	1,421,643.166	529,672.121	Free Surface	4.121	0.342	0.252	0.513	0.560	1.186	5,652,198.509	No	0.513	4.121
TOE_2979-TOE_2582	TOE_2979	TOE_2582	18.000	266.276	0.005	1,421,643.166	529,672.121	Free Surface	3.755	0.366	0.286	0.549	0.560	1.039	4,971,130.152	No	0.549	3.755
TOE_2980-TOE_2583	TOE_2980	TOE_2583	18.000	370.537	0.004	1,421,643.166	529,672.121	Free Surface	3.652	0.374	0.297	0.560	0.560	0.999	4,784,926.938	No	0.560	3.652
TOE_2981-CHF3C_8	TOE_2981	CHF3C_8	18.000	183.500	0.009	1,355,387.386	500,421.412	Free Surface	4.742	0.298	0.194	0.447	0.547	1.472	7,001,296.122	No	0.447	4.742
TOE_2982-TOE_2983	TOE_2982	TOE_2983	18.000	41.744	0.020	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	10,460,971.448	Yes	0.064	0.000
TOE_2983-TOE_2576	TOE_2983	TOE_2576	18.000	147.819	0.030	1,355,387.386	500,421.412	Free Surface	7.314	0.219	0.105	0.329	0.547	2.682	12,866,766.566	Yes	0.361	6.399
TOE_2984-TOE_2629	TOE_2984	TOE_2629	15.000	239.270	0.010	968,433.703	335,401.794	Free Surface	4.600	0.311	0.210	0.389	0.485	1.528	4,607,657.122	No	0.389	4.600
TOE_2985-CFF1_31	TOE_2985	CFF1_31	12.000	328.016	0.007	433,406.789	128,900.111	Free Surface	3.237	0.310	0.208	0.310	0.341	1.205	2,080,710.568	No	0.310	3.237
TOE_2986-TOE_2985	TOE_2986	TOE_2985	12.000	26.296	0.009	433,406.789	128,900.111	Free Surface	3.575	0.288	0.181	0.288	0.341	1.384	2,389,490.090	No	0.288	3.575
TOE_2987-TOE_2991	TOE_2987	TOE_2991	12.000	403.065	0.004	324,683.336	91,399.646	Free Surface	2.524	0.301	0.197	0.301	0.294	0.955	1,648,076.623	No	0.301	2.524
TOE_2988-TOE_2987	TOE_2988	TOE_2987	12.000	399.995	0.005	324,683.336	91,399.646	Free Surface	2.616	0.293	0.187	0.293	0.294	1.004	1,732,883.867	No	0.293	2.616
TOE_2989-TOE_2988	TOE_2989	TOE_2988	12.000	398.629	0.005	324,683.336	91,399.646	Free Surface	2.639	0.291	0.185	0.291	0.294	1.016	1,753,840.209	No	0.291	2.639
TOE_2990-CCF6_614	TOE_2990	CCF6_614	8.000	138.317	0.012	253,583.000	68,250.214	Free Surface	3.546	0.354	0.269	0.236	0.292	1.500	943,244.669	No	0.236	3.546
TOE_2991-TOE_2986	TOE_2991	TOE_2986	12.000	401.146	0.006	324,683.336	91,399.646	Free Surface	2.805	0.279	0.170	0.279	0.294	1.107	1,910,305.541	No	0.279	2.805
TOE_2992-TOE_2962	TOE_2992	TOE_2962	10.000	403.999	0.010	1,010,674.019	352,874.747	Free Surface	4.740	0.583	0.642	0.486	0.561	1.319	1,573,887.284	Yes	0.649	3.431
TOE_2994-TOE_3005	TOE_2994	TOE_3005	30.000	7.270	0.041	8,251,975.609	4,297,646.702	Free Surface	13.029	0.254	0.141	0.634	1.200	3.421	58,496,005.541	Yes	0.690	11.578
TOE_2997-VPFE_717	TOE_2997	VPFE_717	10.000	165.628	0.009	642,893.033	205,950.162	Free Surface	4.086	0.458	0.429	0.381	0.443	1.330	1,497,533.844	No	0.381	4.086
TOE_3003-OGF1_1	TOE_3003	OGF1_1	10.000	177.139	0.023	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	2,342,920.940	No	0.000	0.000

	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth	Adjusted Velocity
	TOE_3005-TOE_2800	TOE_3005	TOE_2800	36.000		0.018		4,523,343.577	Free Surface	9.724	0.249	0.135	0.746	1.161	2.357	63,615,880.152	No	0.746	9.724
	VPF1_103-VPF1_15A	VPF1_103	VPF1_15A	21.000	270.656	0.005	3,932,806.715	1,778,569.250	Free Surface	5.124	0.495	0.492	0.866	0.909	1.096	8,000,391.679	No	0.866	5.124
	VPF1_11-VPF1_12	VPF1_11	VPF1_12	21.000	383.454	0.009	1,960,994.585	776,741.468	Free Surface	5.163	0.293	0.187	0.513	0.632	1.498	10,474,621.665	No	0.513	5.163
	VPF1_126-VPF1_127	VPF1_126	VPF1_127	8.000	217.056	0.021	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,220,115.230	No	0.000	0.000
	VPF1_127-VPF1_128	VPF1_127	VPF1_128	8.000	198.724	0.022	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,256,557.008	No	0.000	0.000
	VPF1_128-VPF1_129	VPF1_128	VPF1_129	8.000	186.503	0.004	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	565,925.610	No	0.000	0.000
	VPF1_129-VPF1_130	VPF1_129	VPF1_130	8.000	116.246	0.011	83,998.048	20,999.512	Free Surface	2.481	0.208	0.094	0.138	0.165	1.404	890,184.725	No	0.138	2.481
	VPF1_12-VPF1_13	VPF1_12	VPF1_13	21.000	277.540	0.005	1,960,994.585	776,741.468		4.322	0.333	0.240	0.583	0.632	1.168	8,177,844.604	No	0.583	4.322
	VPF1_130-ECF21_131	VPF1_130	ECF21_131	8.000	243.303		83,998.048	20,999.512	Free Surface	4.000	0.149	0.048	0.099	0.165	2.694	1,753,907.078	No	0.099	4.000
	VPF1_13-VPF1_14	VPF1_13	VPF1_14	21.000			1,960,994.585	776,741.468			0.278	0.169	0.487	0.632	1.655	11,576,833.934	Yes	0.599	4.173
	VPF1_14-VPF1_15	VPF1_14	VPF1_15	21.000	183.524		1,960,994.585	776,741.468			0.520	0.534	0.910	0.632	0.498	3,672,178.088	No	0.910	2.401
	VPF1_15A-VPF1_16	VPF1_15A	VPF1_16	21.000				1,819,319.795			0.528	0.548	0.924	0.918	0.987	7,314,011.896	No	0.924	4.812
	VPF1_15-VPF1_58	VPF1_15	VPF1_58	21.000			1,960,994.585	776,741.468			0.491	0.485	0.859	0.632	0.555	4,045,882.904	No	0.859	2.582
	VPF1_16-VPF1_17	VPF1_16	VPF1_17	24.000				1,819,319.795			0.278	0.169	0.557	0.881	2.424	23,675,095.698	Yes	0.743	5.835
	VPF1_17-VPF1_18A	VPF1_17	VPF1_18A	24.000				1,819,319.795			0.565	0.611	1.130	0.881	0.622	6,557,887.935	No	1.130	3.391
	VPF1_18A-VPF1_19A	VPF1_18A	VPF1_19A	24.000				1,819,319.795			0.519	0.533	1.038	0.881	0.731	7,524,934.513	No	1.038	3.765
	VPF1_19A-VPF1_20A	VPF1_19A	VPF1_20A	24.000				1,819,319.795			0.522	0.537	1.044	0.881	0.724	7,460,076.687	No	1.044	3.740
	VPF1_1-VPF1_58	VPF1_1	VPF1_58	18.000				981,077.391			0.639	0.738	0.958	0.734	0.600	3,233,695.771	Yes No	1.136	2.570
	VPF1_20A-VPF1_21A	VPF1_20A	VPF1_21A	24.000				1,819,319.795			0.533	0.557	1.066	0.881	0.695	7,202,514.822		1.066	3.642
	VPF1_21A-ECF21_22A	VPF1_21A	ECF21_22A	24.000 21.000				1,819,319.795 776.741.468			0.419	0.366	0.838	0.881 0.632	1.102	10,937,602.961	No No	0.838 0.443	4.970 6.347
	VPF1_32A-VPF1_11	VPF1_32A	VPF1_11				1,960,994.585	-,					0.443		1.995	13,988,184.722			
	VPF1_58-VPF1_103	VPF1_58	VPF1_103	21.000 18.000				1,778,569.250			0.660 0.342	0.772	1.154	0.909 0.655	0.633	5,092,850.578	No No	1.154 0.513	3.616 5.565
	VPF1_718-VPF1_7	VPF1_718	VPF1_7				1,919,890.751	757,416.675				0.252	0.513		1.601	7,633,266.557	No		
	VPF1_7-VPF1_8	VPF1_7	VPF1_8 VPFE_10A	18.000 18.000	430.730		1,919,890.751 1,919,890.751	757,416.675 757,416.675		4.075	0.335	0.242	0.502 0.647	0.655 0.655	1.668 1.025	7,944,680.409 4,974,554.461	No	0.502 0.647	5.727 4.075
	VPF1_8-VPFE_10A	VPF1_8	VPF1 32A	18.000			1,919,890.751	757,416.675			0.431	0.303	0.567	0.655	1.321	6,331,436.904	No	0.567	4.860
	VPFE_10A-VPF1_32A VPFE_717-VPF1_718	VPFE_10A VPFE_717	VPF1_32A VPF1_718	10.000	222.961		642,893.033	205.950.162			0.378	0.260	0.307	0.033	2.253	2,472,239.579	No	0.307	5.894
		VRF1D 702		10.000	264.156		529,279.220	163.450.018			0.348	0.200	0.290	0.443	2.659	2,909,236.636	No	0.290	6.272
H	VRF1D_702-VRF1D_703 VRF1D_703-VRF1D_704			10.000	273.597		529,279.220	163,450.018			0.209	0.102	0.272	0.400	2.104	2,304,210.739	No	0.272	5.307
H	VRF1D 704-VRF1D 705			10.000			529,279.220	163,450.018			0.328	0.233	0.272	0.400	2.077	2,274,792.718	No	0.272	5.257
H	VRF1D 705-VRF1D 707			10.000	128.235		529,279.220	163,450.018			0.324	0.228	0.270	0.400	2.123	2,325,003.942	No	0.270	5.341
H	VRF1D 707-VRF1D 708			10.000	101.257			163,450.018			0.342	0.251	0.285	0.400	1.921	2,106,963.549	No	0.285	4.975
H	VRF1D 708-VRF1D 709			10.000	114.157		529,279.220	163,450.018			0.414	0.359	0.345	0.400	1.327	1,475,150.080	No	0.345	3.840
	VRF1D 709-VRF1D 710			10.000	81.755		529,279.220	163,450.018			0.495	0.492	0.413	0.400	0.942	1,075,888.658	No	0.413	3.040
	VRF1D 710-VRF1D 711			10.000	135.900		529,279.220	163,450.018			0.494	0.490	0.412	0.400	0.946	1,079,993.881	No	0.412	3.048
	VRF1D 711-VRF1D 712			10.000			529,279.220	163,450.018			0.482	0.470	0.402	0.400	0.991	1,126,029.256	No	0.402	3.145
	VRF1D 712-VRF1D 713			10.000	119.736		529,279.220	163,450.018			0.505	0.508	0.420	0.400	0.909	1,042,469.353	No	0.420	2.969
Ħ	VRF1D 713-VRF1D 714			10.000	146.622	0.005	529,279.220	163,450.018	Free Surface	2.979	0.503	0.505	0.419	0.400	0.914	1,047,485.961	No	0.419	2.979
F	VRF1D 714-VRF1D 715			10.000	144.757	0.007	529,279.220	163,450.018	Free Surface	3.555	0.439	0.398	0.366	0.400	1.187	1,328,573.212	No	0.366	3.555
F	VRF1D 715-VRF1D 716			10.000	186.765	0.020	529,279.220	163,450.018	Free Surface	5.063	0.337	0.245	0.281	0.400	1.969	2,159,085.065	No	0.281	5.063
	VRF1D_716-TOE_2997	VRF1D_716	TOE_2997	10.000	174.246	0.011	642,893.033	205,950.162	Free Surface	4.303	0.440	0.400	0.367	0.443	1.435	1,606,160.052	Yes	0.374	4.192
	VRF1G_186-VRF1G_188	VRF1G_186	VRF1G_188	10.000	386.298	0.019	515,119.440	158,274.660	Free Surface	4.950	0.336	0.244	0.280	0.394	1.929	2,114,433.309	No	0.280	4.950
	VRF1G_188-VRF1G_204	VRF1G_188	VRF1G_204	10.000	200.334	0.007	515,119.440	158,274.660	Free Surface	3.500	0.435	0.392	0.363	0.394	1.175	1,313,083.968	No	0.363	3.500
	VRF1G_204-VRF1G_205	VRF1G_204	VRF1G_205	12.000	221.868	0.005	515,119.440	158,274.660	Free Surface	2.941	0.377	0.302	0.377	0.373	0.980	1,704,187.884	No	0.377	2.941
	VRF1G_205-VRGC2_206	VRF1G_205	VRGC2_206	12.000	209.684	0.004	515,119.440	158,274.660	Free Surface	2.892	0.382	0.309	0.382	0.373	0.957	1,665,730.837	No	0.382	2.892
	VRGC1_698-VRGC1_699			10.000	204.736	0.012	529,279.220	163,450.018	Free Surface	4.252	0.384	0.312	0.320	0.400	1.537	1,696,275.750	No	0.320	4.252
	VRGC1_699-TOE_2673	VRGC1_699	TOE_2673	10.000	399.007	0.019	529,279.220	163,450.018	Free Surface	4.961	0.342	0.252	0.285	0.400	1.914	2,098,929.430	No	0.285	4.961
	VRGC2_206-VRGC2_544			12.000			515,119.440	158,274.660			0.261	0.149	0.261	0.373	2.002	3,462,149.029	No	0.261	4.894
_	VRGC2_526-VRGC2_527			12.000			593,284.015	187,225.850			0.308	0.206	0.308	0.402	1.667	2,877,737.546	No	0.308	4.465
	VRGC2_527-VRGC2_543			12.000			781,949.951	259,976.062			0.311	0.210	0.311	0.464	2.159	3,726,120.442	No	0.311	5.810
	VRGC2_543-VRGC2_544			12.000			781,949.951	259,976.062			0.501	0.502	0.501	0.464	0.863	1,558,894.535	No	0.501	3.074
	VRGC2_544-VRGC2_545			12.000				418,250.723			0.454	0.423	0.454	0.572	1.555	2,758,815.575	No	0.454	5.206
	VRGC2_545-VRGC2_580			15.000				418,250.723			0.432	0.387	0.540	0.534	0.978	3,009,008.765	No	0.540	3.553
	VRGC2_580-VRGC2_581			15.000				418,250.723			0.407	0.348	0.509	0.534	1.096	3,349,445.450	No	0.509	3.843
	VRGC2_581-VRGC2_582			15.000				418,250.723			0.377	0.302	0.471	0.534	1.272	3,863,889.723	No	0.471	4.265
	VRGC2_582-VRGC2_583			15.000			1,325,402.121				0.370	0.293	0.463	0.571	1.493	4,530,794.078	No	0.463	4.959
	VRGC2_583-TOE_2808			18.000			1,325,402.121	487,251.177			0.224	0.110	0.337	0.540	2.504	12,001,043.659	No	0.337	6.917
	VRGC4_365-VRGC4_366			10.000			530,102.646	163,750.978			0.508	0.513	0.423	0.400	0.899	1,032,620.091	No	0.423	2.948
Ш	VRGC4_366-VRGC4_389	VRGC4_366	VRGC4_389	10.000	168.981	U.007	530,102.646	163,750.978	Free Surface	3.514	0.443	0.406	0.369	0.400	1.166	1,306,936.124	Yes	0.373	3.467

	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth	Adjusted Velocity
	VRGC4_389-VRGC4_415	VRGC4_389	VRGC4_415	10.000	189.101	0.007	530,102.646	163,750.978	Free Surface	3.421	0.452	0.421	0.377	0.400	1.121	1,260,514.724	No	0.377	3.421
_	VRGC4_415-VRGC4_416			10.000	398.517	0.004	530,102.646	163,750.978	Free Surface	2.843	0.523	0.539	0.436	0.400	0.851	983,702.686	No	0.436	2.843
	VRGC4_416-VRGC4_417	VRGC4_416	VRGC4_417	10.000	383.546	0.006	530,102.646	163,750.978	Free Surface	3.307	0.464	0.440	0.387	0.400	1.067	1,203,978.104	No	0.387	3.307
_	/RGC4_417-VRGC4_418			10.000	400.664	0.060	530,102.646	163,750.978	Free Surface	7.528	0.254	0.141	0.212	0.400	3.423	3,754,304.275	No	0.212	7.528
	VRGC4_418-VRGC4_419			10.000	405.006	800.0	593,284.015	187,225.850			0.456	0.427	0.380	0.425	1.236	1,390,518.069	No	0.380	3.788
	VRGC4_419-VRGC4_420			10.000	192.748		593,284.015	187,225.850		4.940	0.374	0.297	0.311	0.425	1.813	1,997,285.306	No	0.311	4.940
	VRGC4_420-TOE_2809		TOE_2809	10.000	333.343		593,284.015	187,225.850		4.996	0.370	0.292	0.309	0.425	1.843	2,028,905.449	No	0.309	4.996
	/RGC6_183-VRGC6_184			10.000	185.714		515,119.440	158,274.660			0.460	0.433	0.383	0.394	1.055	1,189,139.609	No	0.383	3.252
=	VRGC6_184-VRGC6_185			10.000			515,119.440	158,274.660		4.469	0.362	0.281	0.302	0.394	1.669	1,835,191.860	No	0.302	4.469
닏	VRGC6_185-VRF1G_186		VRF1G_186	10.000	172.691		515,119.440	158,274.660		5.350	0.318	0.219	0.265	0.394	2.152	2,355,518.068	No	0.265	5.350
Щ	WCR10_1-I25_23	WCR10	125_23	8.000			632,671.368	202,023.284		4.962	0.551	0.588	0.368	0.469	1.603	1,076,226.721	Yes	0.565	3.104
	WCR3_1	WCR3_80	TOE_2886	15.000			1,612,794.167	615,497.528		7.675	0.311	0.210	0.388	0.633	2.551	7,693,555.671	No	0.388	7.675
닏	WCR3_10	WCR3_86A	WCR3_86B	15.000			1,490,266.590	560,247.629		4.958	0.404	0.344	0.505	0.607	1.419	4,336,086.901	No	0.505	4.958
닏	WCR3_11	WCR3_87	WCR3_86A	15.000			1,490,266.590	560,247.629		4.938	0.406	0.346	0.507	0.607	1.411	4,311,121.273	No	0.507	4.938
닏	WCR3_12	WCR3_88	WCR3_87	15.000			1,490,266.590	560,247.629		4.920	0.407	0.347	0.508	0.607	1.404	4,290,297.352	No	0.508	4.920
닖	WCR3_13	WCR3_89	WCR3_88	15.000			1,490,266.590	560,247.629		4.929	0.406	0.347	0.508	0.607	1.407	4,300,756.138	No	0.508	4.929
닖	WCR3_14	WCR3_90	WCR3_89	15.000			1,490,266.590	560,247.629		6.012	0.350	0.264	0.438	0.607	1.868	5,652,464.771	No	0.438	6.012
닖	WCR3_15	WCR3_91	WCR3_90	15.000			1,490,266.590	560,247.629		4.373	0.445	0.408	0.556	0.607	1.183	3,654,629.780	No	0.556	4.373
川	WCR3_16	WCR3_92	WCR3_91	15.000			1,490,266.590	560,247.629			0.444	0.407	0.555	0.607	1.185	3,660,060.214	No	0.555	4.378
川	WCR3_17	WCR3_93	WCR3_92	15.000			1,490,266.590	560,247.629		4.404	0.442	0.404	0.553	0.607	1.195	3,689,681.258	No	0.553	4.404
닖	WCR3_18	WCR3_94	WCR3_93	15.000			1,490,266.590	560,247.629			0.323	0.226	0.404	0.607	2.187	6,598,520.663	No	0.404	6.722
닖	WCR3_19	WCR3_94A	WCR3_94	15.000			1,490,266.590	560,247.629		4.290	0.451	0.419	0.564	0.607	1.150	3,560,944.034	No	0.564	4.290
닖	WCR3_2	WCR3_81	WCR3_80	15.000			1,597,401.525	608,497.691			0.276	0.166	0.345	0.629	3.187	9,613,005.398	No	0.345	8.978
	WCR3_20	WCR3_95	WCR3_94A	15.000			1,361,576.854	503,144.451			0.410	0.352	0.512	0.579	1.264	3,866,044.802	No	0.512	4.450
	WCR3_21	WCR3_96	WCR3_95	15.000			1,361,576.854	503,144.451			0.423	0.372	0.528	0.579	1.192	3,657,549.957	No	0.528	4.273
	WCR3_22	WCR3_97	WCR3_96	15.000			1,361,576.854	503,144.451		4.275	0.422	0.372	0.528	0.579	1.193	3,660,503.753	No	0.528	4.275
	WCR3_23	WCR3_98 WCR3_99	WCR3_97	15.000 15.000			1,361,576.854	503,144.451 382,643.856		5.146 4.012	0.368	0.289	0.460	0.579 0.513	1.556 1.204	4,719,404.348	No No	0.460 0.466	5.146 4.012
	WCR3_24	WCR3_99 WCR3_100	WCR3_98				1,081,832.029 1,081,832.029	382.643.856			0.373		0.466	0.513		3,653,339.553		0.466	
H	WCR3_25		WCR3_99 WCR3_100	15.000 15.000			1,081,832.029	382,643.856		4.025	0.209	0.158 0.295	0.336 0.465	0.513	2.272 1.209	6,858,104.151 3,670,450.588	No No	0.336	6.310 4.025
H	WCR3_26	WCR3_100A	WCR3_100 WCR3_100A	15.000			1,081,832.029	382,643.856		4.023	0.372	0.295	0.466	0.513	1.209		No	0.466	4.025
H	_		_	15.000			1,081,832.029	382,643.856		4.018	0.373	0.295	0.466	0.513	1.204	3,655,666.350	No	0.466	4.014
H	WCR3_28	WCR3_101 WCR3_102	WCR3_100B WCR3_101	15.000			1,081,832.029	382,643.856		4.018	0.367	0.288	0.459	0.513	1.238	3,661,206.717 3,755,620.152	No	0.459	4.018
H	WCR3_29	WCR3_102	WCR3_101	15.000			1,597,401.525	608,497.691		4.443	0.463	0.438	0.439	0.629	1.172	3,643,391.080	No	0.439	4.443
H	WCR3_3 WCR3_30	WCR3_103	WCR3_01	15.000			1,081,832.029	382,643.856		5.039	0.403	0.436	0.375	0.513	1.661	5,009,549.547	No	0.395	5.039
H	WCR3_30 WCR3_31	WCR3_103	WCR3_102 WCR3_103	15.000			1,081,832.029	382,643.856		4.015	0.373	0.216	0.466	0.513	1.205	3,656,794.225	No	0.466	4.015
H	WCR3_31 WCR3_32	WCR3_I14	WCR3_105	15.000			1,081,832.029	382,643.856		4.916	0.321	0.224	0.402	0.513	1.604	4,839,268.180	No	0.402	4.916
H	WCR3_32 WCR3_33	WCR3 I13A	WCR3_113	15.000			1,081,832.029	382,643.856		4.803	0.327	0.231	0.409	0.513	1.553	4,685,873.845	No	0.409	4.803
H	WCR3 34	WCR3 I13	WCR3 I13A	15.000			1,081,832.029	382,643.856			0.426	0.377	0.532	0.513	0.933	2,866,383.922	No	0.532	3.361
H	WCR3 35	WCR3 I12	WCR3 I13	15.000			1,081,832.029	382,643.856		3.362	0.426	0.377	0.532	0.513	0.934	2,868,177.966	No	0.532	3.362
H	WCR3 36	WCR3 I11	WCR3 I12	15.000			1,081,832.029	382,643.856		5.328	0.303	0.200	0.379	0.513	1.796	5,414,662.181	No	0.379	5.328
H	WCR3 37	WCR3 I10	WCR3 I11	15.000	400.000		942,588.487	324.770.278		3.240	0.395	0.329	0.493	0.478	0.941	2,868,177.966	No	0.493	3.240
Ħ	WCR3 38	WCR3 19	WCR3 I10	15.000	400.000		942,588.487	324,770.278			0.395	0.329	0.493	0.478	0.941	2,868,177.966	No	0.493	3.240
H	WCR3 39	WCR3 18	WCR3 19	15.000	400.000		942,588.487	324,770.278			0.395	0.329	0.493	0.478	0.941	2,868,177.966	No	0.493	3.240
Ħ	WCR3 4	WCR3_83	WCR3_82	15.000	417.560		1,597,401.525	608,497.691		4.452	0.463	0.437	0.578	0.629	1.175	3,653,434.289	No	0.578	4.452
Ħ	WCR3 40	WCR3 17	WCR3 I8	15.000	400.000		942,588.487	324,770.278		3.514	0.371	0.294	0.464	0.478	1.057	3,206,720.452	No	0.464	3.514
Ħ	WCR3 41	WCR3 I6	WCR3 I7	15.000			942,588.487	324,770.278			0.371	0.294	0.464	0.478	1.058	3,210,003.073	No	0.464	3.517
Ħ	WCR3_42	WCR3_I5	WCR3_I6	15.000			787,385.645	262,144.701			0.337	0.245	0.421	0.435	1.064	3,214,358.542	No	0.421	3.350
Ħ	WCR3 43	WCR3_I4	WCR3_I5	15.000	314.500		787,385.645	262,144.701			0.258	0.146	0.323	0.435	1.784	5,388,368.141	No	0.323	4.850
Ħ	WCR3 44	WCR3-I_3	WCR3_I4	15.000	275.980		787,385.645	262,144.701			0.338	0.246	0.422	0.435	1.062	3,206,836.644	No	0.422	3.344
Ħ	WCR3 45	WCR3_I2	WCR3-I_3	15.000			787,385.645	262,144.701			0.338	0.246	0.422	0.435	1.061	3,205,318.432	No	0.422	3.343
Ħ	WCR3 46	WCR3_11A	WCR3_I2	15.000			787,385.645	262,144.701			0.357	0.273	0.446	0.435	0.952	2,883,409.647	No	0.446	3.097
Ħ	WCR3_47	WCR3_I1	WCR3_11A	15.000			787,385.645	262,144.701			0.329	0.234	0.412	0.435	1.113	3,359,566.322	No	0.412	3.458
Ħ	_	WCR3_H134	WCR3_I1	15.000			787,385.645	262,144.701			0.324	0.227	0.405	0.435	1.152	3,474,771.708	No	0.405	3.543
H	_	WCR3_H135		12.000			337,909.622	95,895.324			0.235	0.121	0.235	0.300	1.608	2,791,092.806	No	0.235	3.717
	_	WCR3_84	WCR3_83	15.000			1,597,401.525	608,497.691			0.462	0.437	0.578	0.629	1.177	3,656,511.879	No	0.578	4.455
H	WCR3 5																		
	WCR3_5 WCR3_50	WCR3_H136		12.000	283.570	0.006	337,909.622	95,895.324	Free Surface	2.907	0.280	0.171	0.280	0.300	1.145	1,976,071.522	No	0.280	2.907
	WCR3_50		WCR3_H135	12.000 12.000			337,909.622 337,909.622		Free Surface Free Surface		0.280 0.280	0.171 0.171	0.280 0.280	0.300 0.300	1.145 1.146	1,976,071.522 1,977,911.463	No No	0.280 0.280	2.907 2.909

	ID	From ID	To ID	Diameter (in)	(11)	Slope	Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth	Adjusted Velocity
	WCR3_53	WCR3_H139		12.000		0.006	337,909.622		Free Surface		0.282	0.173	0.282	0.300	1.130	1,950,247.003	No	0.282	2.880
	WCR3_54	WCR3_H140		12.000		0.011	337,909.622		Free Surface		0.243	0.129	0.243	0.300	1.506	2,609,441.060	No	0.243	3.544
	WCR3_55	WCR3_H141		12.000		0.004	337,909.622		Free Surface		0.311	0.210	0.311	0.300	0.932	1,609,638.959	No	0.311	2.510
	WCR3_56	WCR3_H146		10.000	257.260		155,995.637		Free Surface		0.191	0.079	0.159	0.212	1.764	1,965,314.469	No	0.159	3.331
_	WCR3_57	WCR3_H164		10.000	335.000		155,995.637		Free Surface		0.268	0.157	0.223	0.212	0.908	994,340.556	No	0.223	2.055
-	WCR3_58	WCR3_H165		10.000	120.000		155,995.637		Free Surface		0.268	0.157	0.223	0.212	0.907	992,859.780	No	0.223	2.053
	WCR3_59	WCR3_H171		10.000	285.000		155,995.637		Free Surface		0.280	0.171	0.233	0.212	0.832	911,110.620	No	0.233	1.931
=	WCR3_6	WCR3_85	WCR3_84	15.000	159.830		1,597,401.525		Free Surface		0.434	0.391	0.542	0.629	1.328	4,089,979.476	No	0.542	4.839
=	WCR3_60		WCR3_H171	10.000 10.000	293.160		155,995.637 0.000		Free Surface Free Surface		0.226	0.112	0.189 0.000	0.212	1.259 0.000	1,387,190.371 1,503,211.876	No No	0.189	2.604 0.000
=	WCR3_61	WCR3_H185		10.000	293.160		0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	2,254,817.814	No	0.000	0.000
=	WCR3_62 WCR3_63	WCR3_H187		10.000	51.940		0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	2,238,406.245	No	0.000	0.000
-	WCR3_63 WCR3_64	WCR3_H188		8.000	231.710		0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	682,553.736	No	0.000	0.000
-	WCR3_65	WCR3_H189		8.000	363.310		0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	717,648.209	No	0.000	0.000
-	WCR3_65 WCR3_66	WCR3_H109		8.000	195.020		0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	717,048.209	No	0.000	0.000
=	WCR3_60 WCR3_67	WCR3_H191		8.000	278.060		0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	678,741.415	No	0.000	0.000
=	WCR3_67 WCR3_68	WCR3_H191		8.000	256.990		0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	879,144.040	No	0.000	0.000
=	WCR3_66 WCR3_69	WCR3_H192A		8.000	280.180		0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	950,859.552	No	0.000	0.000
=	WCR3_69 WCR3_7	WCR3_H192A WCR3_86	WCR3_H192 WCR3_85	15.000	387.790		1,597,401.525		Free Surface		0.461	0.434	0.576	0.629	1.184	3,677,459.401	No	0.576	4.473
=	WCR3_7		WCR3_H192A	8.000	121.000		0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	1,335,769.582	No	0.000	0.000
=	WCR3_70 WCR3_71	WCR3_H194		8.000	327.200		0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	917,817.527	No	0.000	0.000
=	WCR3_71 WCR3_72	WCR3_H133		10.000	175.710		536,938.266		Free Surface		0.358	0.274	0.298	0.403	1.783	1,958,924.643	No	0.298	4.739
=	WCR3_72 WCR3_73	WCR3 H132		10.000	145.240		536,938.266		Free Surface		0.482	0.470	0.402	0.403	1.005	1.141.551.246	No	0.402	3.189
=	WCR3_73 WCR3_74	WCR3_H131		10.000		0.009	536,938.266		Free Surface		0.417	0.364	0.348	0.403	1.326	1,474,616.508	No	0.348	3.853
=	WCR3_74 WCR3_75	WCR3 H130		8.000	235.650		0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	1,003,891.681	Yes	0.074	0.000
=	WCR3_75 WCR3_76	WCR3 H129		8.000	300.000		0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	599,858.213	No	0.000	0.000
=	WCR3_70 WCR3_77	WCR3 H128		8.000	348.630		0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	592,387.233	No	0.000	0.000
=	WCR3 78	WCR3 H127		8.000	232.240		0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	787,245.331	No	0.000	0.000
=	WCR3 79	WCR3_H126	_	8.000	111.860		0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	555,708.217	No	0.000	0.000
=	WCR3 8	WCR3 86C	WCR3_86	15.000	192.490		1,597,401.525		Free Surface		0.410	0.353	0.513	0.629	1.481	4,529,211.774	No	0.513	5.216
=	WCR3 80	WCR3 H125		8.000	163.480		0.000		Free Surface		0.000	0.000	0.000	0.000	0.000	600,811.475	No	0.000	0.000
Ħ	WCR3 9	WCR3 86B	WCR3 86C	15.000			1,597,401.525	608,497.691			0.422	0.371	0.527	0.629	1.402	4,301,936.044	No	0.527	5.022
Ħ	WCR5 10-WCR5 11	WCR5_10	WCR5 11	12.000			1,302,017.644	477,057.420			0.431	0.386	0.431	0.606	1.914	3,371,276.495	No	0.431	6.214
=	WCR5 11-WCR5 12	WCR5_11	WCR5_12	12.000			1,309,473.325	480,307.499			0.433	0.389	0.433	0.608	1.912	3,369,443.514	No	0.433	6.221
=	WCR5 12-WCR5 13	WCR5_12	WCR5 13	12.000			1,309,473.325	480,307.499			0.465	0.442	0.465	0.608	1.664	2,963,283.964	No	0.465	5.657
=	WCR5 13-WCR5 14	WCR5_13	WCR5_14	12.000			1,309,473.325	480,307.499			0.519	0.532	0.519	0.608	1.352	2,460,284.883	No	0.519	4.922
=	WCR5 14-WCR5 15	WCR5_14	WCR5 15	12.000			1,309,473.325	480,307.499			0.496	0.492	0.496	0.608	1.476	2,659,206.292	No	0.496	5.218
=	WCR5 15-WCR5 16	WCR5_15	WCR5_16	12.000			1,309,473.325	480,307.499	Free Surface	5.921	0.449	0.416	0.449	0.608	1.779	3,150,987.534	No	0.449	5.921
=	WCR5 16-WCR5 17	WCR5_16	WCR5 17	12.000			1,477,150.768	554,375.311	Free Surface	5.621	0.514	0.524	0.514	0.647	1.553	2,820,746.567	No	0.514	5.621
=	WCR5 17-WCR5 18	WCR5_17	WCR5_18	12.000	346.280	0.011	1,477,150.768	554,375.311	Free Surface	5.369	0.533	0.556	0.533	0.647	1.449	2,654,390.210	No	0.533	5.369
=	WCR5_18-WCR5_19	WCR5_18	WCR5_19	12.000			1,477,150.768	554,375.311			0.451	0.418	0.451	0.647	1.994	3,533,228.658	No	0.451	6.649
=	WCR5_19-WCR5_20	WCR5_19	WCR5_20	12.000			1,477,150.768	554,375.311	Free Surface	5.758	0.504	0.507	0.504	0.647	1.611	2,912,664.328	Yes	0.508	5.704
	WCR5_1-WCR5_2	WCR5_1	WCR5_2	10.000	1,986.790	0.004	684,293.211	221,854.956	Free Surface	2.997	0.617	0.701	0.514	0.458	0.800	976,028.614	No	0.514	2.997
	WCR5_20-WCR5_21	WCR5_20	WCR5_21	12.000	399.480	0.007	1,477,150.768	554,375.311	Free Surface	4.539	0.612	0.692	0.612	0.647	1.113	2,134,740.756	No	0.612	4.539
=	WCR5_21-WCR5_22	WCR5_21	WCR5_22	12.000	1,025.410	0.015	1,513,446.022	570,625.705	Free Surface	6.091	0.492	0.486	0.492	0.655	1.731	3,113,575.077	Yes	0.599	4.771
	WCR5_22-WCR5_23	WCR5_22	WCR5_23	15.000	441.760	0.002	1,529,772.883	577,950.982	Free Surface	2.830	0.645	0.747	0.806	0.615	0.597	2,046,935.507	No	0.806	2.830
	WCR5_23-WCR5_24	WCR5_23	WCR5_24	15.000	660.870	0.009	1,529,772.883	577,950.982	Free Surface	4.950	0.413	0.357	0.516	0.615	1.400	4,284,933.502	No	0.516	4.950
	WCR5_24-WCR5_25	WCR5_24	WCR5_25	15.000	866.430	0.006	1,584,055.644	602,446.813	Free Surface	4.253	0.476	0.460	0.595	0.627	1.103	3,445,040.731	No	0.595	4.253
	WCR5_25-WCR5_26	WCR5_25	WCR5_26	15.000	411.850	0.005	1,584,055.644	602,446.813	Free Surface	4.009	0.499	0.498	0.623	0.627	1.010	3,183,864.549	No	0.623	4.009
	WCR5_26-WCR5_27	WCR5_26	WCR5_27	15.000	353.460	0.005	1,584,055.644	602,446.813	Free Surface	4.007	0.499	0.498	0.623	0.627	1.010	3,181,856.484	No	0.623	4.007
	WCR5_27-WCR5_28	WCR5_27	WCR5_28	15.000	231.180	0.005	1,584,055.644	602,446.813	Free Surface	3.997	0.500	0.500	0.625	0.627	1.006	3,170,590.774	No	0.625	3.997
	WCR5_28-WCR5_29	WCR5_28	HWY52_5	15.000	1,193.690	0.015	1,584,055.644	602,446.813	Free Surface	5.976	0.368	0.289	0.460	0.627	1.806	5,476,835.631	Yes	0.539	4.843
	WCR5_2-WCR5_3	WCR5_2	WCR5_3	10.000	539.910	0.011	684,293.211	221,854.956	Free Surface	4.378	0.456	0.426	0.380	0.458	1.429	1,607,899.348	No	0.380	4.378
	WCR5_3-WCR5_4	WCR5_3	WCR5_4	10.000	1,192.000	0.015	684,293.211	221,854.956	Free Surface	4.918	0.417	0.363	0.347	0.458	1.693	1,883,292.112	Yes	0.498	3.115
	WCR5_4-WCR5_5	WCR5_4	WCR5_5	12.000	580.040	0.003	1,302,017.644	477,057.420	Free Surface	3.196	0.748	0.910	0.748	0.606	0.661	1,431,508.715	No	0.748	3.196
	WCR5_5-WCR5_6	WCR5_5	WCR5_6	12.000	871.120	0.003	1,302,017.644	477,057.420	Free Surface	2.979	0.803	0.982	0.803	0.606	0.569	1,326,447.964	No	0.803	2.979
	WCR5_6-WCR5_7	WCR5_6	WCR5_7	12.000	443.620	0.003	1,302,017.644	477,057.420	Free Surface	2.981	0.803	0.981	0.803	0.606	0.570	1,327,686.733	No	0.803	2.981
							4 000 047 044			= 0.10	0.440	0.440	0.440	0.000	4 705	0 475 470 500			
=	WCR5_7-WCR5_8	WCR5_7	WCR5_8	12.000	490.120	0.016	1,302,017.644	477,057.420	Free Surface	5.946	0.446	0.410	0.446	0.606	1.795	3,175,473.560	No	0.446	5.946

	ID	From ID	To ID	Diameter (in)	Length (ft)	Slope	Total Flow (gpd)	Peakable Flow (gpd)	Flow Type	Velocity (ft/s)	d/D	q/Q	Water Depth (ft)	Critical Depth	Froude Number	Full Flow (gpd)	Backwater Adjustment	Adjusted Depth	Adjusted Velocity
E	WCR5_9-WCR5_10	WCR5_9	WCR5_10	12.000	822.970	0.022	1,302,017.644	477,057.420	Free Surface	6.638	0.410	0.353	0.410	0.606	2.106	3,688,762.390	No	0.410	6.638
E	WCR7_10-WCR7_11	WCR7_10	WCR7_11	8.000	541.220	0.007	361,078.922	103,770.681	Free Surface	3.194	0.501	0.501	0.334	0.351	1.099	720,126.831	No	0.334	3.194
	WCR7_11-WCR7_12	WCR7_11	WCR7_12	8.000	386.680	0.005	361,078.922	103,770.681	Free Surface	2.763	0.562	0.607	0.375	0.351	0.881	594,654.285	No	0.375	2.763
	WCR7_12-WCR7_13	WCR7_12	WCR7_13	10.000	582.070	0.010	763,360.156	252,675.265	Free Surface	4.377	0.496	0.493	0.413	0.485	1.356	1,548,573.905	No	0.413	4.377
	WCR7_13-WCR7_14	WCR7_13	WCR7_14	10.000	686.300	0.009	763,360.156	252,675.265	Free Surface	4.114	0.521	0.535	0.434	0.485	1.235	1,426,141.262	No	0.434	4.114
	WCR7_14-WCR7_15	WCR7_14	WCR7_15	10.000	269.660	0.007	763,360.156	252,675.265	Free Surface	3.815	0.553	0.591	0.461	0.485	1.100	1,291,106.520	No	0.461	3.815
	WCR7_15-WCR7_16	WCR7_15	WCR7_16	10.000	495.150	800.0	763,360.156	252,675.265	Free Surface	4.019	0.531	0.552	0.442	0.485	1.191	1,382,468.177	No	0.442	4.019
	WCR7_16-WCR7_17	WCR7_16	WCR7_17	10.000	307.790	0.006	763,360.156	252,675.265	Free Surface	3.596	0.581	0.638	0.484	0.485	1.003	1,195,701.456	Yes	0.492	3.520
	WCR7_17-WCR7_18	WCR7_17	WCR7_18	10.000	565.400	0.003	763,360.156	252,675.265	Free Surface	2.804	0.721	0.870	0.601	0.485	0.658	877,454.384	No	0.601	2.804
	WCR7_18-I25_36	WCR7_18	125_36	10.000	1,385.670	0.011	1,277,638.857	466,430.224	Free Surface	4.988	0.682	0.809	0.568	0.631	1.230	1,579,387.657	Yes	0.833	3.624
E	WCR7_1-WCR7_2	WCR7_1	WCR7_2	8.000	799.050	0.022	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,269,705.921	No	0.000	0.000
	WCR7_2-WCR7_3	WCR7_2	WCR7_3	8.000	815.360	0.020	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,184,642.934	No	0.000	0.000
	WCR7_3-WCR7_4	WCR7_3	WCR7_4	8.000	766.230	0.016	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,057,200.871	No	0.000	0.000
	WCR7_4-WCR7_5	WCR7_4	WCR7_5	8.000	477.510	0.012	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	942,971.089	No	0.000	0.000
	WCR7_5-WCR7_6	WCR7_5	WCR7_6	8.000	442.930	0.018	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,132,947.029	No	0.000	0.000
	WCR7_6-WCR7_7	WCR7_6	WCR7_7	8.000	234.100	0.017	0.000	0.000	Free Surface	0.000	0.000	0.000	0.000	0.000	0.000	1,094,952.309	Yes	0.081	0.000
E	WCR7_7-WCR7_8	WCR7_7	WCR7_8	8.000	1,045.230	0.017	361,078.922	103,770.681	Free Surface	4.397	0.392	0.325	0.262	0.351	1.754	1,110,156.458	No	0.262	4.397
E	WCR7_8-WCR7_9	WCR7_8	WCR7_9	8.000	308.600	0.013	361,078.922	103,770.681	Free Surface	3.938	0.426	0.378	0.284	0.351	1.496	954,891.495	No	0.284	3.938
	WCR7_9-WCR7_10	WCR7_9	WCR7_10	8.000	479.290	0.012	361,078.922	103,770.681	Free Surface	3.896	0.430	0.384	0.286	0.351	1.473	941,218.444	No	0.286	3.896